

Project Title

One Stop Geriatric Care in the A&E

Project Lead and Members

Project lead: Dr Adriel Rao Kailing, Consultant

Project members:

- Dr Harold Lo Wui Foh, Senior Consultant
- Ratnasari Yawieriin, Nurse Manager
- Michael Ho Chee Weng, Manager
- Daryl Ng Joo Guan, Executive
- Benjamin Ethan Lim, Senior Executive
- Lee Tuan Khong, Senior Manager
- Melissa Heng Zhi Yan, Senior Physiotherapist

Organisation(s) Involved

Khoo Teck Puat Hospital

Project Period

Start date: October 2018

Completed date: Ongoing

Aims

To ensure better care for Geriatric patients in the Acute and Emergency Care Centre (A&E) at Khoo Teck Puat Hospital.

Background

See poster attached/ below

Methods

See poster attached/ below

Results

See poster attached/ below

Lessons Learnt

- The fast paced nature of the Acute Geriatric Assessment Unit (AGAU) and the close working relationship between the multi-disciplinary teams also meant that it has become a place where mutual learning and better communication is fostered among the various teams.
- The team decided to start fast and start small by implementing a 4-bedded unit to kick-start the project. This decision allowed teething problems like inappropriate referrals, conflicting rounding times to be teased out and addressed.

Conclusion

See poster attached/ below

Additional Information

- The AGAU is multi-disciplinary initiative which is in line with NHG River of Life (ROL) / Unified Care Model (UCM): Living With Frailty. It brings together various functional teams of the hospital to provide hassle-free healthcare for GRM patients in an emergency setting.
- Overall, AGAU has achieved the following:
 - Avoided unnecessary admissions and hence gained bed day savings
 - Reduced costs for patients discharged from AGAU
 - Improved utilization of community services
 - Upskilling of staff

Project Category

Care & Process Redesign

Keywords

Care & Process Redesign, Efficient Care, Cost Savings, Multi-Disciplinary Team, Geriatric Medicine, Emergency Medicine, Nursing, Khoo Teck Puat Hospital, Acute Geriatric Care Unit, NHG River of Life, Unified Care Model: Living with Frailty

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One Stop Geriatric Care in the A&E

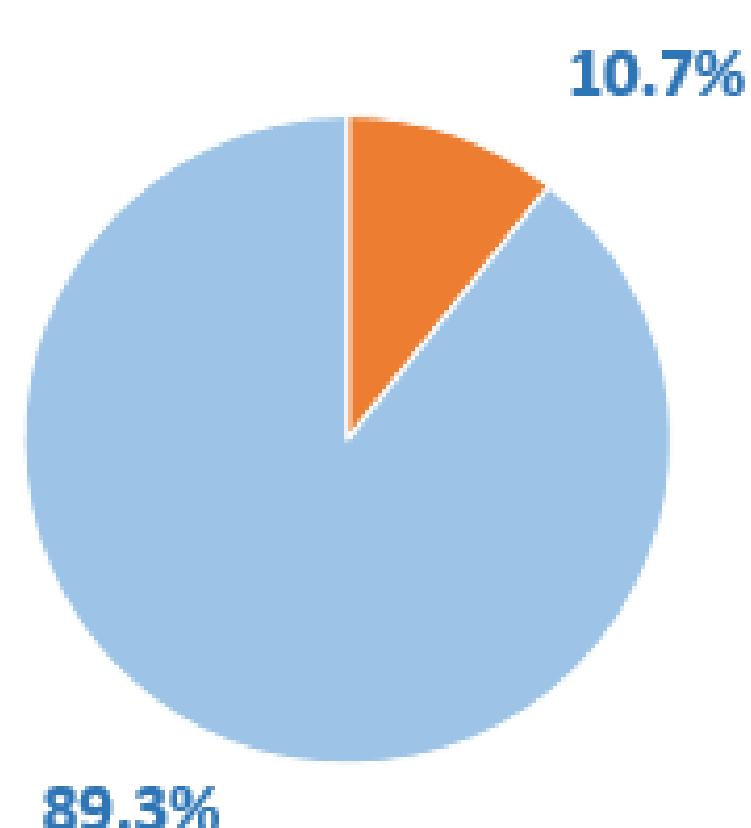
1Rao A.K, 2Loh W.F., 1Yawieriin R., 4Ho C.W., 4Ng D.J.G., 4Lim B.E., 4Lee T.K., 3Heng M.Z.Y,
1Noribah, B.A.R., 2Seah A.S.T, 1Toh H.C.

1Acute and Emergency Care Center, 2Geriatric Medicine, 3Rehabilitation Services, 4Operations
Khoo Teck Puat Hospital

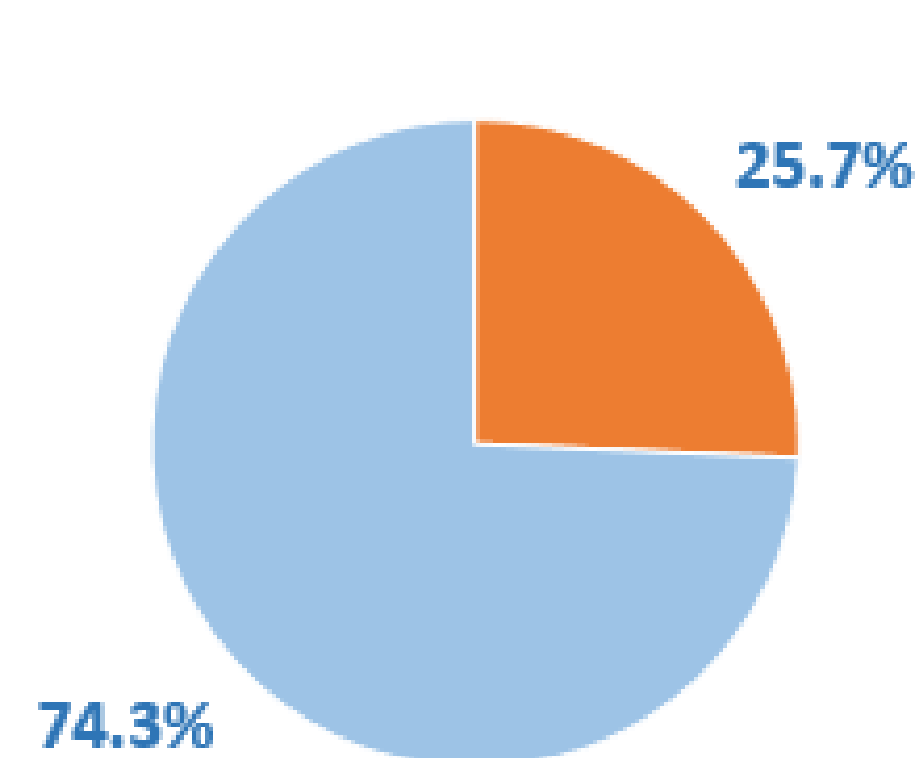
BACKGROUND

- Khoo Teck Puat Hospital's (KTPH) A&E faces a catchment area of **15,000** residents aged **75** and above.
- Geriatric patients make up an estimate 10.7% of all attendances at the A&E. In turn, Geriatric patients make up **25.7%** of all admissions

GRM Attendance at A&E



GRM Admission from A&E



- What the project team aimed for was for Geriatric patients to receive safe and hassle-free care within the ED setting in order to prevent unnecessary admissions, thus the Acute Geriatric Care Unit (AGAU) was born.

METHODOLOGY

- After inter-departmental discussions, it was accepted that if borderline cases of admission could be screened by a multi-disciplinary team, unnecessary admissions will be prevented



- **Comprehensive patient history** will be taken by the Geriatric Emergency Medicine Nurse (GEM) and screen the patient for geriatric issues such as, among other things, frailty and delirium. This valuable set of information will be made available to the Geriatric consultant rounding in the AGAU with an A&E Medical Officer (MO).

- **In line with Geriatric principles of multi-disciplinary care**, allied health partners and care coordinators were brought on board to ensure that patient gets the care necessary for a safe discharge

RESULTS

- Since the implementation of the project in October 2018, as of 31 Jan 2020, there has been a total of 966 patients admitted to AGAU. Out of this 966 patients, **70.5%** (681 patients) were discharged after assessment and treatment. **If not for the AGAU, all 966 patients would otherwise have been admitted** to the Inpatient wards

Type of disposition	Discharge	Admission
Number of AGAU cases	681	285

Using an average length of stay of 7.8 days for GRM patients, this means a total of **5312 inpatient bed days were saved**

- On a month to month comparison, **there has been an 18% average monthly decrease in GRM patients staying less than 72 hours** in the inpatient wards. This in turn suggest a decrease in inappropriate GRM admissions.

PROJECT IMPACT SUMMARY

Indicator	Impact
Inpatient Bed Day Savings	5312 inpatient bed days saved or \$3,452,670 in bed day savings (at \$650 per day)
Patient Cost Savings	At an average of \$413 per patient, it is 62% reduction compared to Inpatient ward admission up to 3 days at \$1096
Referrals to Community Care Team (CCT)	146% increase from 86 referrals in 2018 to 212 referrals in 2019, where AGAU accounts for 71% of total referrals made
Trained Geriatric Emergency (GEM) Nurse	175% increase from 8 to 22 GEM nurses. Upskilling of these nurses has resulted in opportunistic screening for frailty and falls risk in the geriatric patient presenting to A&E

SUSTAINABILITY

- The AGAU initiative is still operational today, following temporary cessation from Feb to Nov 2020 due to COVID-19.
- The team reviews the unscheduled return rate of patients to ensure that the AGAU continues to be a safe initiative for the patients. The rate is currently 8.3% vs Inpatient rate at 10.2%

CONCLUSION

- The team decided to start fast and start small by implementing a 4-bedded unit to kick-start the initiative. This decision allowed teething problems like inappropriate referrals, conflicting rounding times to be teased out and addressed.
- The AGAU is multi-disciplinary initiative which is in line with NHG River of Life (ROL) / Unified Care Model (UCM): Living With Frailty . It brings together various functional teams of the hospital to provide safe and hassle-free healthcare for GRM patients in an emergency setting.