Project Title

Improving Care for Long stayers

Project Lead and Members

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Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health, Healthcare Administration

Applicable Specialty or Discipline

Healthcare Administrators

Project Period

Start date: 2021

Completed date: Dec 2022

Aims

Our aim was a 30% reduction in total bed-days of longstayers within the Medicine department by Dec 2022. This would lead to better patient outcomes, optimize bed occupancy rate (BOR) and reduce Average length of stay (ALOS) for the hospital.

Background

Prolonged hospital stays are associated with poorer hospital outcomes due to an increased risk of deconditioning and hospital-acquired infections. At our hospital, longstayers (LOS>21 days) were occupying 1 in 4 beds, with 74% under the care of the Medicine department. A multi-disciplinary project team was set up in 2021 to redesign the care of longstayers and to reduce unnecessary prolonged hospital stays.

Methods

See poster appended/below

Results

Upon successful implementation of the interventions,

- Total bed-days of patients in the longstayers ward was 34% lower compared to all other General Medicine (control) wards.
- 525 bed-days were saved each month as a result.
- Results continued to be sustained in the control phase in 2023.

Conclusion

See poster appended/below

Project Category

Care Continuum

Rehabilitative Care,

Care & Process Redesign

Value Based Care, Length of Stay

Keywords

Dementia, Palliative Care, Community Health, Caregivers, Early Caregiver Training

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IMPROVING CARE FOR LONGSTAYERS

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BACKGROUND

Prolonged hospital stays are associated with poorer hospital outcomes due to an increased risk of deconditioning and hospital-acquired infections. At our hospital, longstayers (LOS>21 days) were occupying 1 in 4 beds, with 74% under the care of the Medicine department.
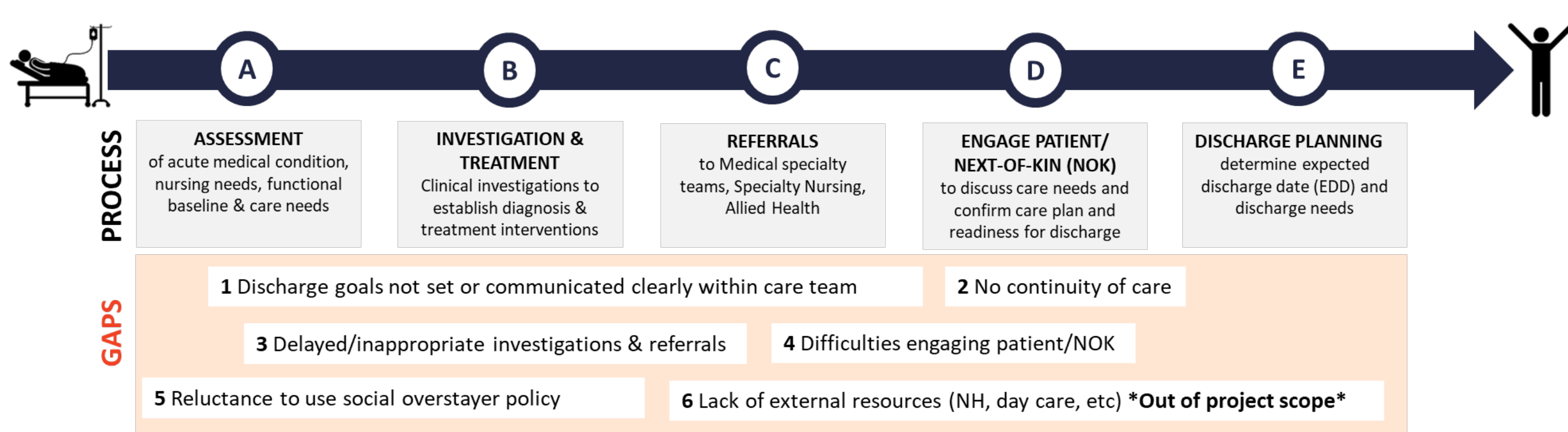
A multi-disciplinary project team was set up in 2021 to redesign the care of longstayers and to reduce unnecessary prolonged hospital stays. Our aim was a 30% reduction in total bed-days of longstayers within the Medicine department by Dec 2022. This would lead to better patient outcomes, optimize bed occupancy rate (BOR) and reduce Average length of stay (ALOS) for the hospital.
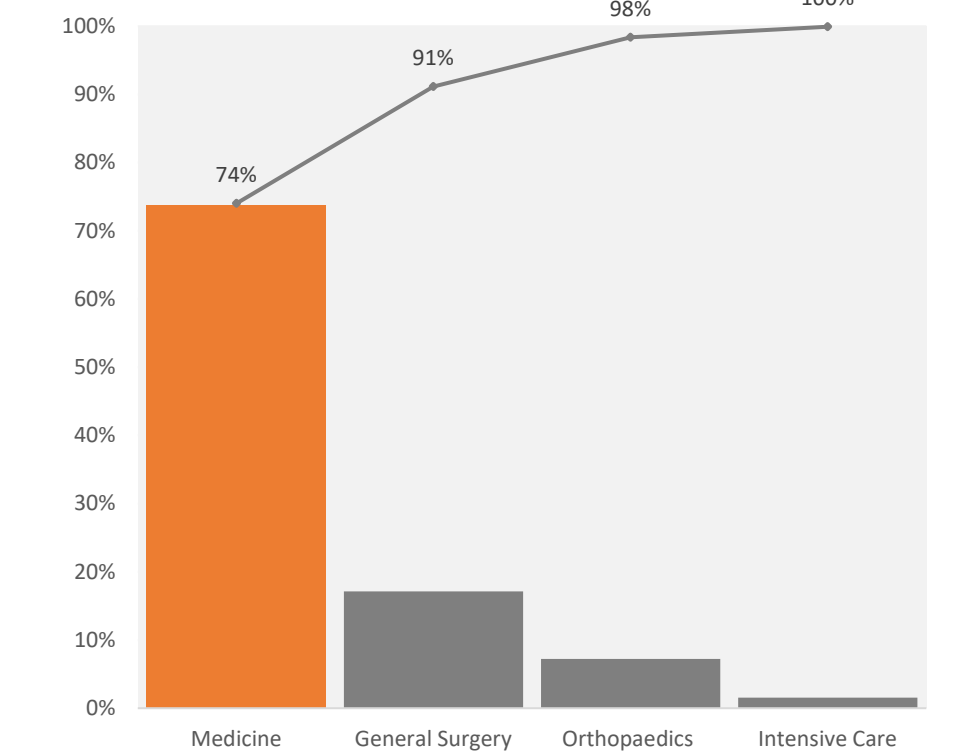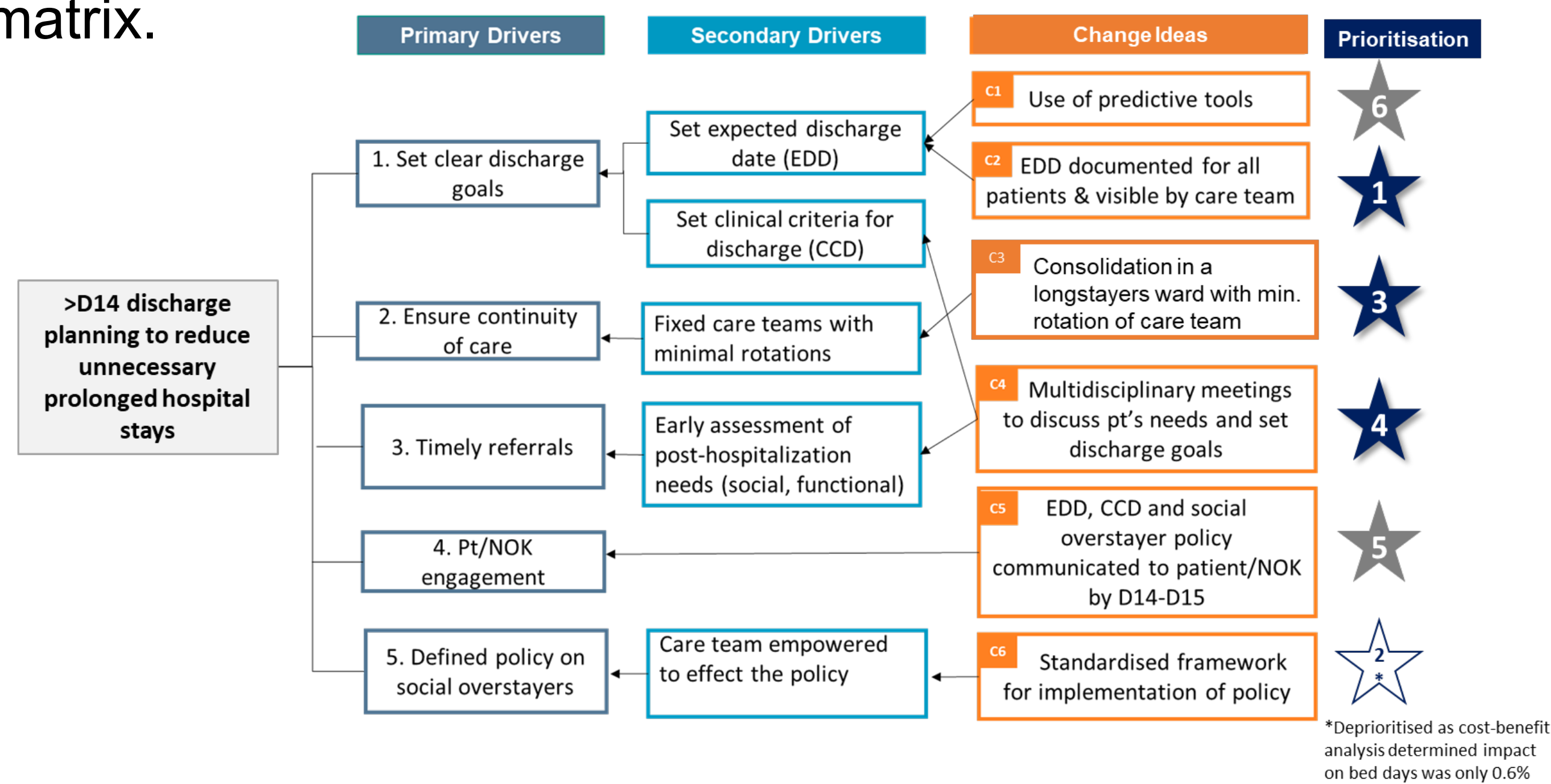
74% of our Longstayers were from the Medicine Department

REDESIGNING CARE

The project team mapped the longstayers patient journey and process gaps were identified.

PROCESS

A	B	C	D	E
ASSESSMENT of acute medical condition, nursing needs, functional baseline & care needs	INVESTIGATION & TREATMENT Clinical investigations to establish diagnosis & treatment interventions	REFERRALS to Medical specialty teams, Specialty Nursing, Allied Health	ENGAGE PATIENT/ NEXT-OF-KIN (NOK) to discuss care needs and confirm care plan and readiness for discharge	DISCHARGE PLANNING determine expected discharge date (EDD) and discharge needs

GAPS

1 Discharge goals not set or communicated clearly within care team
2 No continuity of care
3 Delayed/inappropriate investigations & referrals
4 Difficulties engaging patient/NOK
5 Reluctance to use social overstayer policy
6 Lack of external resources (NH, day care, etc) *Out of project scope*

Change ideas were generated to address the gaps and these ideas were prioritised using the impact vs ease of implementation matrix.

Primary Drivers	Secondary Drivers	Change Ideas	Prioritisation
>D14 discharge planning to reduce unnecessary prolonged hospital stays	1. Set clear discharge goals — Set expected discharge date (EDD)	C1 Use of predictive tools	6
		C2 EDD documented for all patients & visible by care team	1
	Set clinical criteria for discharge (CCD)		
	2. Ensure continuity of care — Fixed care teams with minimal rotations	C3 Consolidation in a longstayers ward with min. rotation of care team	3
	3. Timely referrals — Early assessment of post-hospitalization needs (social, functional)	C4 Multidisciplinary meetings to discuss pt's needs and set discharge goals	4
	4. Pt/NOK engagement	C5 EDD, CCD and social overstayer policy communicated to patient/NOK by D14-D15	5
	5. Defined policy on social overstayers — Care team empowered to effect the policy	C6 Standardised framework for implementation of policy	2

*Deprioritised as cost-benefit analysis determined impact on bed days was only 0.6%

KEY INTERVENTIONS

C2. Expected Discharge Date (EDD) Documentation
- A pilot was started in 3 wards with the most longstayers.
- All doctors in these wards were asked to document EDD by Day 5 as this provides the care team with a common discharge goal.
- 70% compliance was achieved in the pilot with a demonstrated reduction in total bed days compared to other General Medicine wards (control).
- This was spread to all doctors within the Medicine department and a doctors' team bonus was used to incentivise changes in practice on the ground.

C3. Longstayers Virtual Ward
- Recognising that longstayers have more complex needs which require more focused care, a longstayers virtual ward was set up. Beds were ringfenced for longstayers in the 3 pilot wards, and the care team was rotated less frequently to ensure longstayers had more dedicated care.
- A pull workflow was used by the project team to review patients (LOS>14 days) on a weekly basis and to transfer potential longstayers to this virtual ward.
- This evolved into a push & pull workflow where all doctors could refer patients to the project team for review & transfer to the longstayers virtual ward.
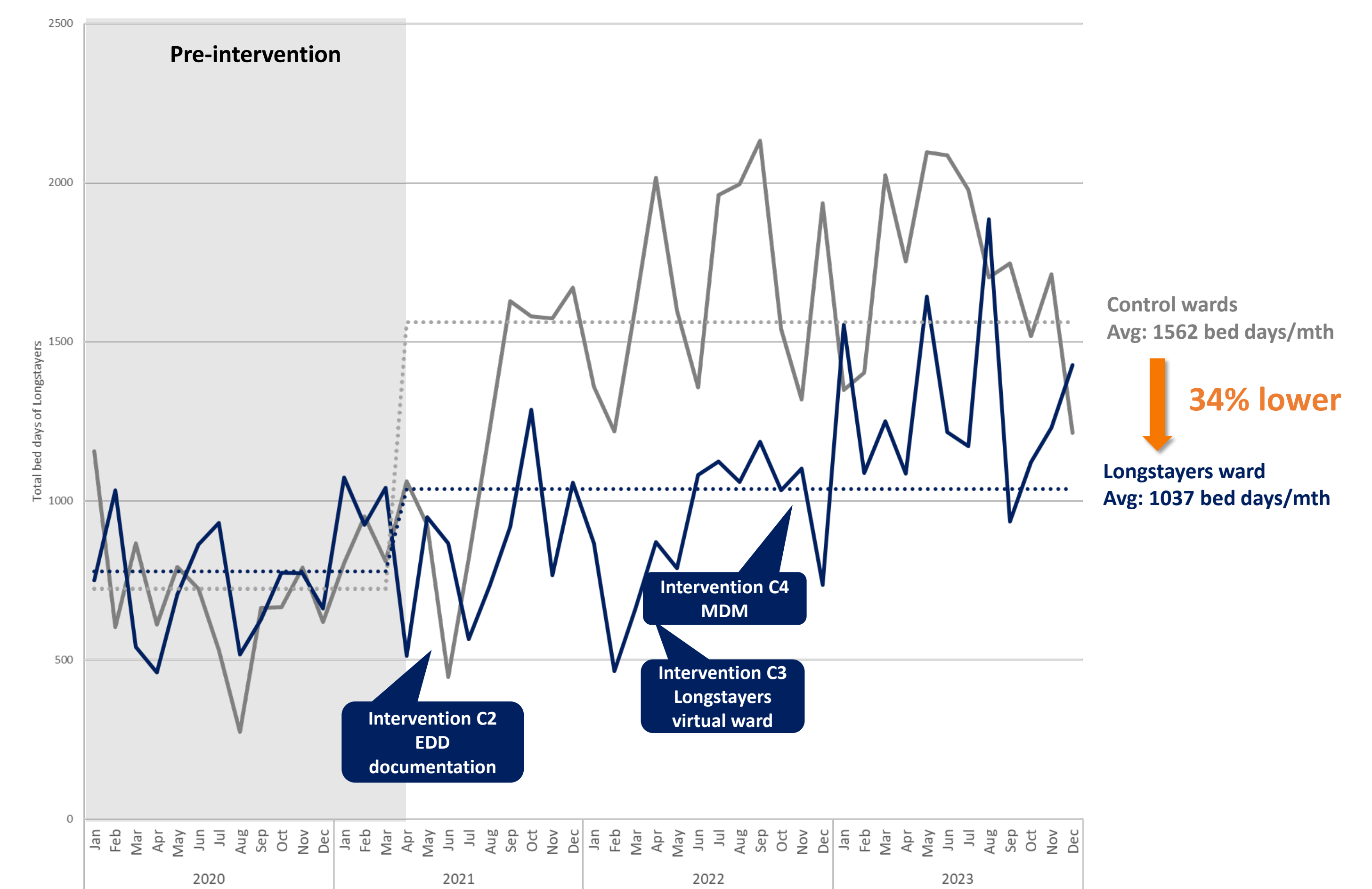
C4. Multi-disciplinary Meetings (MDM)
- Weekly MDMs were conducted by the care team (doctors, nurses, case managers & allied health professionals) to discuss each patient's discharge plan and to resolve any bottlenecks encountered.
- Upon carrying out case reviews, it was observed that patients who were frequent re-admitters did not readmit after discharge from the longstayers ward as the MDM helped to ensure patients' discharge needs were met.

*These 3 interventions has been scaled up and are now part of Business-as-Usual (BAU) operations within the hospital.

RESULTS

Upon successful implementation of the interventions,
- Total bed-days of patients in the longstayers ward was **34% lower** compared to all other General Medicine (control) wards.
- **525 bed-days** were saved each month as a result.
- Results continued to be **sustained** in the control phase in 2023.

Pre-intervention

Control wards Avg: 1562 bed days/mth

34% lower

Longstayers ward Avg: 1037 bed days/mth

Intervention C2 EDD documentation

Intervention C3 Longstayers virtual ward

Intervention C4 MDM

LEARNING POINTS

Begin with the end in mind
The team was mindful to create *system level changes* (e.g. creation of new workflows and processes) and to mainstream these interventions to ensure long term sustainability.

Change management
Large-scale change is always difficult to achieve. However, starting with small pilots and achieving quick wins helps to convince others of the benefit of the changes.

Visual Reminders in the Wards | Weekly Progress Reports | Weekly Text Reminders | Briefing at Medicine Doctors' Meeting

EDD by Day 5

Celebrating small wins

Teamwork makes a dream team
The success of this project can be attributed to having a multi-disciplinary team who believed in the goal of the project. Team members were open and willing to share their thoughts, and often challenged the status quo which led to better solutions.