health

Emergency Department Streaming Project 2011-12

Final Report

Aim

The project's aim was to explore opportunities for Victorian health services to promote:

- early assessment, fast tracking and early initiation of clinical care
- improvement in the patient journey and reduced waiting times
- new patient flow designs to improve both responsiveness and safety.

Overview

In 2011-12, the government committed $400,000 over four years to assist hospitals to improve the patient focus of their work practices (streaming initiatives) in emergency departments (ED). During 2011-12, three health services focused on improving ED access by implementing projects that aimed to streamline the patient journey from the ED to an inpatient bed. A number of strategies were used by health services that focused on the smooth flow of patients and a team care approach to improve treatment times and overall time in the ED as well as patient experience.

Key Improvements

Frankston Hospital, Latrobe Regional Hospital and Austin Hospital were funded to undertake streaming projects in the ED between March and September 2012. Detailed project information is attached.

The overall improvements resulting from the projects included:

- 4% decrease in length of stay in ED for patients presenting with chest pain
- 11 minute decrease in time to treatment for patients presenting with chest pain
- 2.26 hour decrease in short stay unit (SSU) average length of stay.

Transferable solutions

Key changes implemented include:

- Early assessment and development of treatment plans to facilitate early discharge from ED to SSU
- Standardised processes for triage, assessment and treatment for different patient cohorts
- Establishment of an acute assessment cubicle
- Process established for early senior clinician decision making
- Single bed card usage within the SSU
- Discharge chair in SSU to facilitate patient flow
- Standardised patient flow processes, communication tools and expectations for nurses in charge in the ED, ward and bed management, and discharge practices
- Real time patient flow data available to clinicians and operational managers
- Assessment cubicle near triage dedicated to moderate risk chest pain patients
- Portable phones to enhance communication.

Results at a glance

Project aims:
Improve ED patient flow and streamline the patient journey

Duration:
Six-month projects will be funded over four years commencing 2011-12

Cost:
$400,000 over four years

Project sites:
2011-12
Austin Hospital
Frankston Hospital
Latrobe Regional Hospital

2012-13
Bendigo Hospital
Box Hill Hospital
St Vincent's Hospital

Supporting activities:
Redesign Network Meeting – 3 December 2012

Austin Hospital

Improving access to the Short Stay Unit

health

Overview

Austin Health is the main provider of tertiary health services, health professional education and research in the northeast of Melbourne. Between 2010 and 2011 ED presentations have increased by 10 per cent from 64,050 to 69,648. Of the total number of ED presentations, 8.5% are managed via the SSU. The primary focus of the streaming project was to decrease the average length of stay (LOS) in the SSU.

Summary of outcomes

Reduce average LOS

Patients with dual inpatient bed cards were found to increase average SSU LOS by 50 per cent due to delayed assessment and decision-making. To address this, dual bed cards were removed and an Acute Assessment Unit (AAU) was established to expedite care for these patients.

Exclude long-stay DRGs

DRGs with LOS most suitable for treatment in the SSU were documented to maximise SSU usage and to limit admission of long-stay patients.

Maximise discharge opportunities

To promote early SSU discharge, a 6.00am medication and breakfast round was implemented. A number of chairs were established in the SSU for patients awaiting discharge medications and/or pick up by relatives.

Standardise patient journey from ED to ward

The roles responsible for managing patient flow from the ED to inpatient wards did not have a standardised and documented approach. Redesign methodologies were utilised to standardise:

- processes for logging patient movement needs
- handover communication processes
- expectations and minimum standards.

Monitor patient flow performance data

Data pivot tables were established to provide real time patient flow data including:

- time from entry to bed request
- time from bed request to bed allocation
- time from bed allocation to ward transfer
- performance of wards, units and shifts of staff.

Learnings

	Challenges	Change in Approach
1	Identifying opportunities for improvement in busy ED environment.	Staff and patient feedback collected.
2	Identifying exactly how much of a difference specific interventions made.	Undertake PDSA cycles on implemented changes whilst looking at the overall unit performance.
3	Creating and maintaining standards throughout multiple wards and shifts of staff.	Invite Nurse Unit Managers to create and lead on patient flow minimum standards. Leadership is needed throughout the organisation.

Results at a glance

Primary Objective:
Reduce average LOS in the SSU

Significant Results:
2.26 hour reduction in average SSU LOS

Supporting activities:
Dual inpatient bed cards for SSU were removed

List of most suitable SSU DRGs developed

6.00am medication and breakfast round implemented

Standardised approach to patient flow from ED to ward

Portable phones supplied for all acute wards

Regular dissemination of patient flow performance data

Key project contacts:
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Director, Redesign

Dr Pascal Gelperowicz
Staff Specialist,
Emergency Medicine

Frankston Hospital

Reducing average ED LOS for patients with chest pain

health

Overview

Peninsula Health provides integrated patient-centred healthcare to residents of the Frankston and Mornington Peninsula region.

The project's objective was to develop a new pathway for patients presenting to the ED with low to moderate risk chest pain. The process included early assessment and development of a treatment plan to result in early transfer from the ED to the SSU. The primary focus of the project was to decrease the average ED LOS for chest pain patients.

Summary of outcomes

Increase SSU access for ED patients presenting with chest pain

Prioritised admission of chest pain patients was standardised through training for triage staff. Extended hours of SSU operation was implemented over the winter period (from 14.5 hours/ day to 24 hours). New SSU operating guidelines and admission criteria were developed and implemented.

Decrease time to be allocated to a cubicle for chest pain patients

An assessment cubicle for chest pain patients was established to facilitate the rapid assessment of these patients following triage.

Decrease time to be seen by a doctor for chest pain patients

Moderate risk chest pain evaluation guidelines were developed to ensure consistency in assessing chest pain patients. A senior doctor was appointed to attend to triage category 2 patients at triage (2.00pm to 10pm weekdays). Portable phones were purchased to facilitate this. The new process was communicated to all staff regularly.

Decrease time to treatment for chest pain patients

Agreed priorities for improving patient flow were established to reduce communication delays between triage nurses and doctors. These priorities were printed on laminated lanyard tags for all staff.

Learnings

	Challenges	Change in Approach
1	Identifying and isolating ED issues and collecting a large enough sample of baseline data.	Involvement of front line staff and clinical leaders in root cause analysis of barriers and strategy development to overcome barriers.
2	Implementing the new streaming process amongst a large and evolving staff base.	Awareness raising through: • discussion of streaming process at each shift handover • discussion at staff meetings • nursing staff workshops.

Results at a glance

Primary Objective:
Reduce average LOS in the ED for patients with moderate risk chest pain

Significant results:
4% decrease in average ED LOS

Supporting activities:
Extended hours of SSU operation over peak winter period

SSU operating guidelines and admission criteria developed

Assessment cubicle for chest pain patients established

Chest pain evaluation guidelines developed

Senior doctor rostered to attend triage on arrival of triage category 2 patients

Agreed priorities for improving ED patient flow published on lanyard tags

Portable phones for doctor assigned to triage category 2 patients

Key project contacts:
Ms Naomi Winter
Redesign Lead

Mr Paul Ormrod
ED Nurse Unit Manager
and Redesign

Latrobe Regional Hospital

Increased utilisation of SSU

health

Overview

Latrobe Regional Hospital (LRH) is the designated regional health service for the Gippsland region.

The project aimed to increase utilisation of the Short Stay Unit (SSU) to improve ED flow and reduce ED waiting times. A secondary objective of the project was to assist LRH in meeting the 4 hour National Emergency Access Target (NEAT).

A new process was implemented whereby patients presenting with conditions meeting SSU criteria would get streamlined to the SSU for further assessment and treatment on arrival. Appropriate patients would be admitted directly from triage to SSU for assessment and treatment.

The primary objective of the project was to increase the utilisation of the SSU. The project resulted in a 52% increase in SSU bed utilisation.

Summary of outcomes

Increased awareness of SSU as an option for transfer of patient

A dedicated project champion organised education for ED consultants and triage nurses to increase awareness of the SSU. A medical resident was rostered Monday to Friday from 8am – 5pm to care for patients in the SSU.

Increase clinical pathway options

New treatment pathways for additional conditions were developed to increase the scope of conditions able to be managed in the SSU.

Learnings

	Challenges	Change in Approach
1	Increasing utilisation of SSU with no improvement in NEAT performance	Investigate the reasons behind an improvement in SSU utilisation rates without a correlating improvement in meeting the overall NEAT.
2	Finding suitable patients who satisfy the criteria of treatment pathways	Utilise new SSU clinical pathways and maintain the use of the SSU.
3	After hours and on weekends, patients eligible for treatment in the SSU less likely to be treated in the ED due to lack of medical resident cover.	Consider a restructure of rostering to provide more medical resident cover for the SSU.
4	Improved performance negated by increased numbers.	Look for new ways to meet NEAT targets despite increasing patient numbers.

Results at a glance

Primary Objective:
To improve SSU utilisation

Significant results:
52% increase in SSU utilisation

Supporting activities:
Increased staff awareness of SSU

Medical resident rostered in SSU on weekdays

Development of new treatment pathways

Increased scope of conditions managed in SSU

Key project contacts:
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