

Emergency Department Short Stay Unit (EDSSU)

also known as Emergency Medicine Unit (EMU)

Policy and operational features

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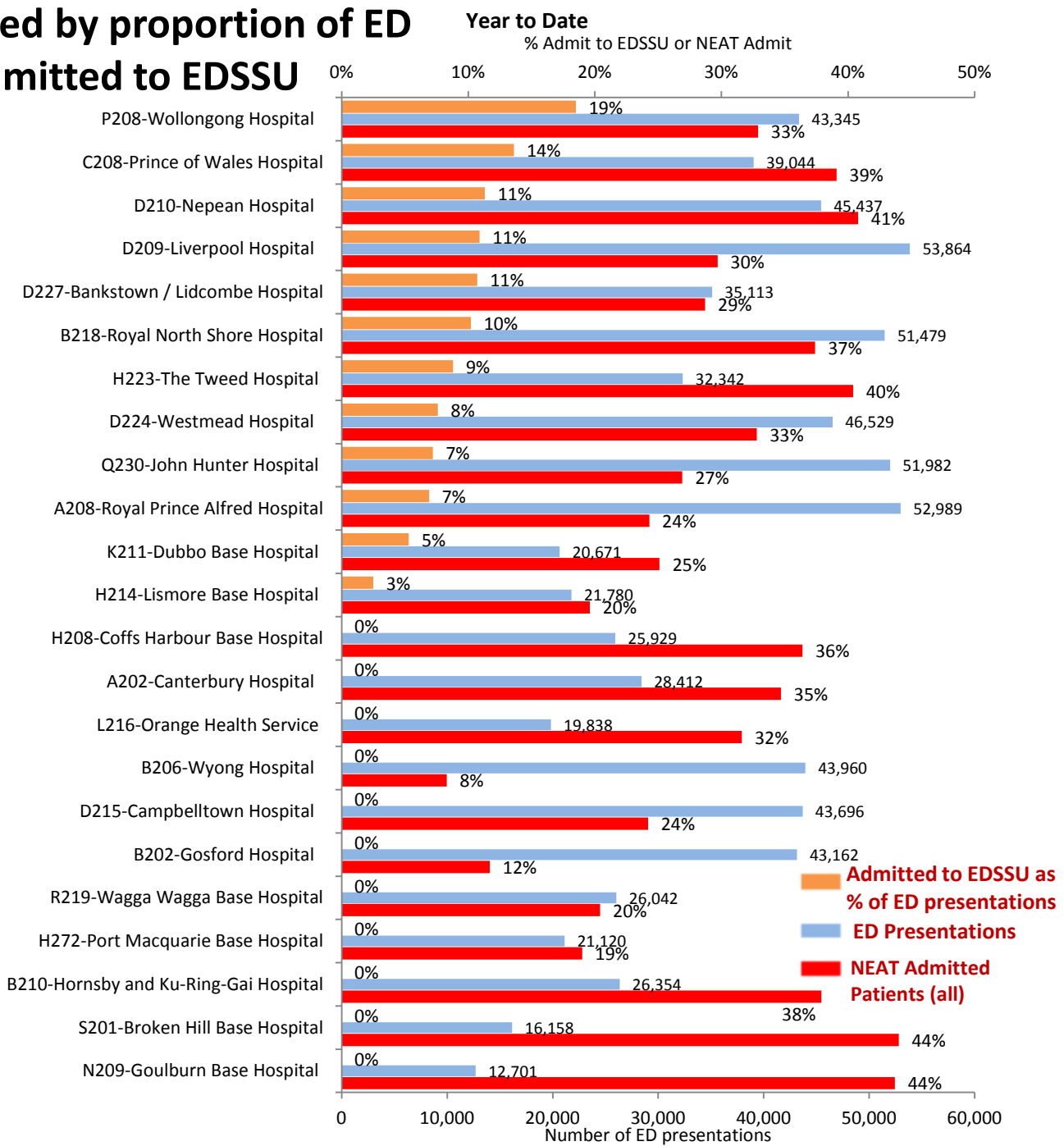
Version: Jne 2014

EDSSUs: Current status

- Presence of an EDSSU variable, and appears not to be related to ED demand
- High variability in EDSSU utilisation amongst sites that have one
 - Data suggests that individual sites may be compromising the efficiency of their ED and hospital by using EDSSU as a holding ward for admissions awaiting an inpatient bed
 - Data suggests that individual sites may be compromising the efficiency of their ED and hospital by under-utilising their EDSSU for appropriate ED patients
- High variability or not applying best practice regarding EDSSU admissions is likely to represent missed opportunities to *efficiently* and *safely* improve site NEAT performance and improve overall quality of care for patients

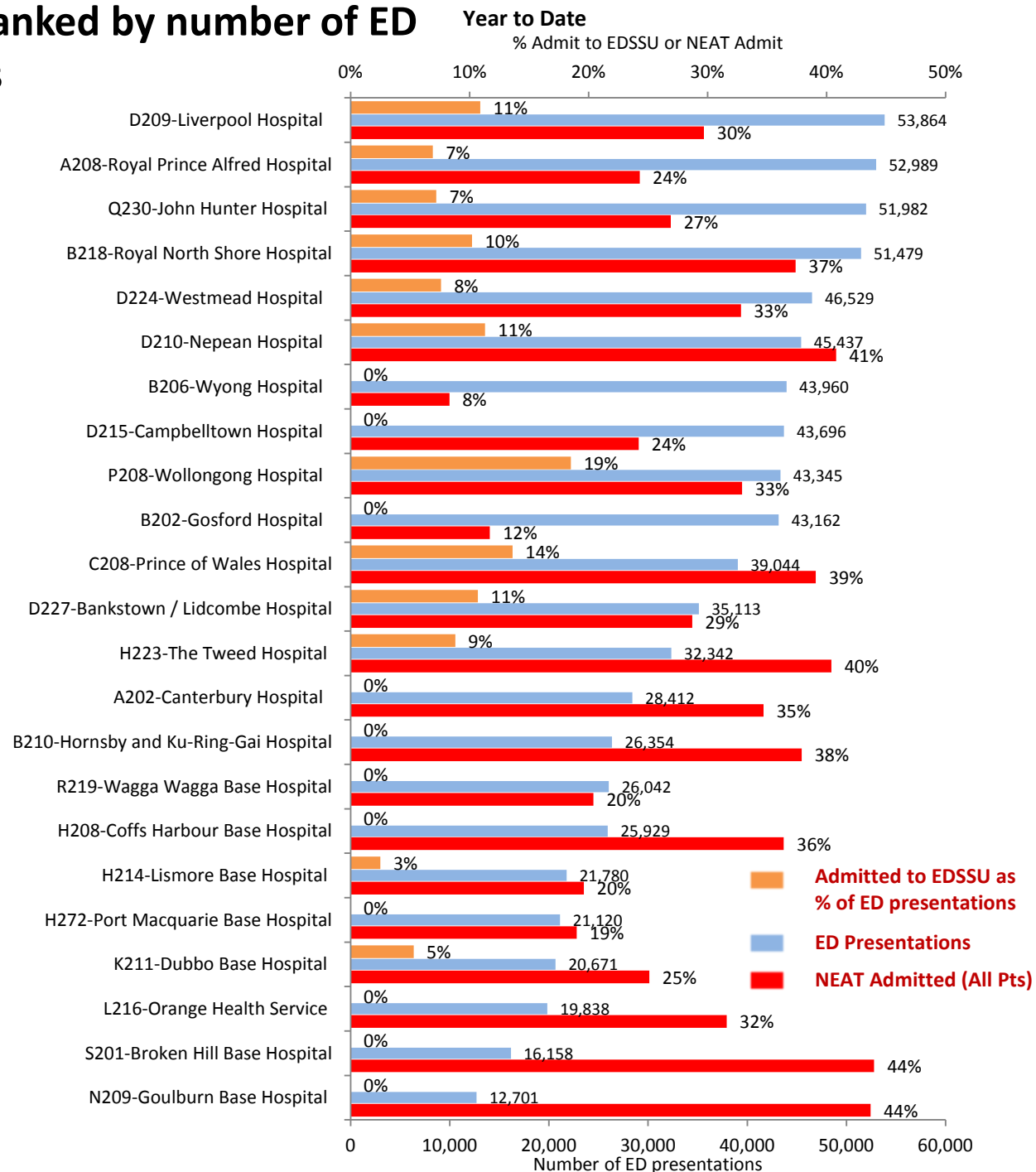
WOHP sites ranked by proportion of ED presentations admitted to EDSSU

From snapshot data
WE 29/9/13



WOHP sites ranked by number of ED presentations

From snapshot data
WE 29/9/13



Expert Panel Recommendation 9 for emergency medicine short stay units:

That the following definition of what constitutes a 'short stay unit' or equivalent, as proposed by the National Emergency Department Project Advisory Committee and recently considered by the Cross-Jurisdictional Clinical Advisory Group, be accepted and implemented:

Short Stay Units or their equivalent must have the following characteristics:

- designated and designed for the short term treatment, observation, assessment and reassessment of patients initially triaged and assessed in the emergency department;
- have specific admission and discharge criteria and policies;
- designed for short term stays no longer than 24 hours;
- physically separated from the emergency department acute assessment area;
- have a static number of beds with oxygen, suction and patient ablution facilities; and
- not a temporary emergency department overflow area nor used to keep patients solely awaiting an inpatient bed nor awaiting treatment in the emergency department.

Emergency Medicine Units

Emergency short-stay units (commonly called Emergency Medicine Units or EMUs in NSW) have been present in ED for several decades. Their purpose is to treat and observe patients who are likely to stay for a relatively short period and require non-intensive intervention.

Optimally configured, they have been shown to:

- reduce length of stay for certain diagnoses such as chest pain, asthma, and falls in aged care patients
- improve ED efficiency
- be cost-effective
- reduce the number of inpatient admissions to hospital
- to be associated with a high level of patient satisfaction, comparable to or greater than conventional treatment systems
- to improve bed utilization
- reduce ED overcrowding and inappropriate discharges from the ED.

Arendts, G., MacKenzie, J. and Lee, J. K. (2006), Discharge planning and patient satisfaction in an emergency short-stay unit. *Emergency Medicine Australasia*, 18: 7–14. doi: 10.1111/j.1742-6723.2006.00798.x

Emergency Medicine Unit: what proportion of EDSSU patients should subsequently be admitted into the hospital?*

- One local study showed an admission rate from the EDSSU into an acute hospital bed of 16.9%.
- An admission rate (from EDSSU into the hospital) of around 10% is considered “acceptable” ie. a balance of appropriate patient selection, cost effective resource utilisation, and optimisation of quality of patient care
- A subsequent admission rate from EDSSU of less than 10% might represent under utilization of the ED short stay unit, or even inappropriate EDSSU admission of patients who could have been discharged directly.

* This data not currently reported for WOHP sites

Chan, T., Arendts, G. and Stevens, M. (2008), Variables that predict admission to hospital from an emergency department observation unit. *Emergency Medicine Australasia*, 20: 216–220. doi: 10.1111/j.1742-6723.2007.01043.x

Likelihood of subsequent admission from the Emergency Medicine Unit

Factors which predict a 'failed' short stay (EDSSU) admission:

- **Patients unable to mobilize in the ED prior to EDSSU** transfer commonly fail to improve in the EDSSU within the short stay time frame and are three to five times more likely to require inpatient admission.
- **Active treatment in the EDSSU**
- **Subspecialty or multidisciplinary involvement** during the admission

Chan, T., Arendts, G. and Stevens, M. (2008), Variables that predict admission to hospital from an emergency department observation unit. *Emergency Medicine Australasia*, 20: 216–220.

doi: 10.1111/j.1742-6723.2007.01043.x

The effectiveness and safety of emergency department short stay units: a rapid review

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Table 2

Evidence-based interventions for emergency department (ED) overcrowding and clinical practice

Intervention	Systematic review	ED survey	Evidence
Fast track	✓	✓	++
Triage	✓	✓	Inconclusive
Diversion strategies	✓	✓	+
Short stay units	✓	✓	+
Staffing changes	✓	✓	+
Physician order entry	✓	X	Inconclusive
Specific processes: electronic tracking board, re-engineering of ED radiology services, admission system based on telephone consultation between ED physicians and in-house hospital staff, point-of-care testing, dedicated stat laboratory, implementing a satellite laboratory and research nurse in the ID for point-of-care testing, alternative care destination program, bedside registration	✓	X	+
Multi-faceted interventions: increased emergency physician coverage; designation of physician coordinators; new hospital policies regarding laboratory, consultation, and admission procedures	✓	✓	+
Interventions used by ED directors for which there is no evidence: float nurse pool, senior emergency physician flow shift, home care and community care	X	✓	Not available

Table 1

Comparative studies of short stay units

Study	Location	No. of patients; design	Evidence level	Authors' conclusions
Farkouh et al. 1998	Minnesota, US	424	I	An emergency department chest pain OU can be a safe, effective, and cost-saving alternative for patients at intermediate risk of cardiovascular events.
Rydman et al. 1998	Illinois, US	113	I	The emergency department OU was a lower cost and equally effective treatment alternative for refractory asthma.
Gouin et al. 1997	Canada	4227 Before vs after opening OU	II-1	An emergency department OU was associated with a significant reduction in admission of children with asthma; however, there was also a significant increase in the number of patients returning to the emergency department within 72 hours.
McDermott et al. 1997	US	222	I	Treatment of selected patients with asthma in an emergency diagnosis and treatment unit results in safe discharge of most such patients. Improved quality and cost-effectiveness can be achieved by the use of such units.
Gomez et al. 1996	Utah, US	100	I	The protocol ruled out myocardial infarction and unstable angina more quickly and cost-effectively than routine hospital care.
Bazarian et al. 1996	New York, US	1424 Before vs after opening OU	II-1	Reducing the number of admitted patients waiting in the emergency department for inpatient beds, in this case by establishing a short-stay unit, is associated with a decrease in the time that patients who are treated and released spend in the emergency department.
Hadden et al. 1996	Belfast, UK	214 Before vs after OU closure	II-1	The accident and emergency observation ward was more efficient than the general acute wards in dealing with short-stay patients.
Gaspoz et al. 1994	Massachusetts, US	Treatment, 529; control, 924	II-1	The coronary OU may be a safe and cost-saving alternative to current management for low-risk patients who require investigation to exclude acute myocardial infarction admitted from the emergency department. Replication in other hospitals is required.
Brillman and Tandberg 1994	New Mexico, US	1224 before vs after opening OU	II-1	Use of OU for patients with asthma reduces initial discharge rate without appreciably reducing eventual hospital admissions.
MacLaren et al. 1993	London, UK	405 OU open vs OU closed	II-1	Fewer patients with head injuries were discharged from the accident and emergency department when the short-stay ward was available.
Saunders and Gentile 1988	Denver, US	54 OU vs matched controls	II-2	Length of stay did not differ between patients with alcoholic pancreatitis in OU and those admitted directly to hospital.
Willert et al. 1985	Chicago, US	103	I	Children with asthma treated in the OU had lower costs, shorter length of stay and no increase in morbidity or returns to the hospital.

Adapted from Daly and colleagues (2003).¹⁷ Highlighting added with permission.

OU = observation unit.

5.4 Discharge Criteria from ED SSU

5.4.1 The ED Consultant/ ED SMO or ED Medical Officer in charge of shift after hours (2200-0800) shall authorise all discharges from the ED SSU.

5.4.2 If authorisation of discharge of a patient from the ED SSU is within four hours of admission to the ED SSU, the authorising clinician shall update the patient's clinical record with

- certification that an admission was appropriate

http://qheps.health.qld.gov.au/isa/docs/forms/corporate/Cert_patient.pdf

- details of the medical condition and treatment provided.

5.4.3 For any patient who has been in an ED SSU for 24 hours or more, the ED Consultant / ED SMO or ED Medical Officer in charge of shift after hours shall

- review the patient and
- document the management plan to expedite either discharge from the ED SSU,, admission to an inpatient unit or transfer to another facility

Emergency Medicine Short Stay Units

Appropriate use of EDSSUs is important for the following reasons:

ED, EDSSU and hospital operational efficiency

- To ensure maximum efficiency of the EDSSU, careful patient selection is important.
- Appropriate patient selection will also minimize hospital admission from the EDSSU.
- Efficient use of short stay or observation units has been found to decrease inpatient admissions without an adverse effect on representations

Financial bottom line

- Patients admitted to hospital from observation units have been shown to incur higher demands on resources than those patients admitted directly
- However, observation treatment reduces costs and length of stay for patients successfully discharged.

Emergency Medicine Unit Policy

Governance of the EDSSU resides in the ED, through the Medical Director of ED

In general the principles guiding admission to the EDSSU are:

- Clinically stable patients who require a period of *observation* which is less than 24 hours
- Clinically stable patients who require *treatment* by the Emergency Department for less than 24 hours prior to discharge home
- Patients *requiring satisfactory social and clinical support arrangements* prior to discharge home to manage their clinical condition, where these arrangements will take less than 24 hours to complete, may be accepted
- The patient is admitted under the care of the Emergency Physician

Emergency Medicine Short Stay Unit Policy

example from a tertiary ED

Admission Criteria

As a general rule patients are suitable for admission to EDSSU under the care of an Emergency Physician if they are:

Clinically stable AND Anticipated period of observation or treatment is less than 24 hours

And, have no exclusion criteria (see over)

Patients for observation:

Post minor head injury (defined as GCS 14-15)

Stable patients post lumbar puncture

Stable patients post conscious sedation for eg: shoulder dislocation

Stable patients with non-surgical, minor abdominal pain of unclear origin

Patients for short-term treatment:

Renal colic

Clinically stable asthmatics - expected to be discharged

Patients requiring short-term re-hydration

Stabilisation of acute pain management for minor trauma

Uncomplicated urinary tract infection

Patients waiting for Hospital-in-the-home assessment (Community Acquired Pneumonia, Cellulitis, DVT)

Patients requiring social and clinical support arrangements:

Where it would be unreasonable to send a patient home alone late at night (elderly, anxious, physically or mentally handicapped)

Acute situational crises (with no acute medical condition necessitating an admission as an inpatient) requiring social work/psychiatric/drug and alcohol input

Emergency Medicine Unit Policy

EDSSU exclusion criteria

- **Patients who are admitted as inpatients or whose care is under an inpatient team**
- **Patients transferred from another hospital awaiting admission at this hospital**
- Patients who re-present within 48 hours of discharge from an inpatient unit
- Complex medical problems , a patient with > 1 problem is not a good candidate
 - Active treatment in the EDSSU
 - Subspecialty or multidisciplinary involvement
- Patients unable to mobilize in the ED prior to EDSSU transfer
- Patients who are unlikely to be fit for discharge within 24 hours
- Psychotic, violent or disruptive patients
- Unstable patients
- Patients who present an excessive nursing load
- Transfers from inpatient areas within this hospital, including the operating theatre and mental health unit

Suggested site actions

- Review EDSSU policy to ensure it is in line with expert panel recommendations, and ensure EDSSU operational model is driving efficient practice in the whole hospital
- Monitor admission percentage to EDSSU as proportion of ED presentations: aim between 10-15%
- Monitor EDSSU admission rate into hospital: should not be greater than 15%