



STATEMENT ON AMBULANCE RAMPING

1. PURPOSE

This document sets out the Australasian College for Emergency Medicine's (ACEM) position on ambulance ramping. ACEM recommends the use of key performance indicators (KPIs) for monitoring interactions between ambulance services and emergency departments (EDs).

2. SCOPE

This statement is applicable to all EDs in Australia and New Zealand. Also in scope are jurisdictional health system managers, and hospital executives and administrators.

3. DEFINITIONS

3.1 Ambulance ramping

Ambulance ramping occurs when ambulance officers and/or paramedics are unable to complete transfer of clinical care of their patient to the hospital ED within a clinically appropriate timeframe, specifically due to lack of an appropriate clinical space in the ED. (1) In some jurisdictions, ambulance ramping is also referred to as *off-stretcher time delays* or *ambulance turnaround delays*.

3.2 Emergency department overcrowding

Emergency department overcrowding refers to the situation where ED function is impeded because the number of patients exceeds either the physical or staffing capacity of the ED, whether patients are waiting to be seen, undergoing assessment and treatment, or waiting for departure. (1)

3.3 Access block

Access block refers to a total ED time (or length of stay) that exceeds eight hours for a patient who was admitted. This includes patients who were planned for an admission, but were discharged from the ED without reaching an inpatient bed, or transferred to another hospital for admission, or who died in the ED. (1)

3.4 Off-loading

*Ambulance off-loading*¹ refers to an agreed process between ambulance services and ED staff when transferring patients from the ambulance stretcher into an appropriate area within the ED.

¹ The practice of ambulance off-loading varies across jurisdictions. Where ambulance staff off-load the patient despite the ED not having an appropriate treatment space to accept the patient into, there is an increased risk to patient safety and to adverse care outcomes.

4. BACKGROUND

Ambulance plays a vital role in patient care by providing essential emergency response services that stabilise and transport patients to EDs. (4) In 2016/17, 25 per cent of Australian ED presentations arrived via ambulance, air ambulance or helicopter rescue service. Over the past five years, ambulance use for ED attendances in Australia has increased by 21 per cent, slightly more than overall ED attendances, which have risen by 18 per cent. (5) In New Zealand in 2016/17, there were about 332,000 Emergency Road Ambulance Service instances of responding, treating and transporting patients, representing 45 per cent of all ED events. (6-7)

In Australia, state and territory governments are primarily responsible for providing and managing ambulance services, with the exception of Western Australia and the Northern Territory. (8) This responsibility includes implementation of measures to reduce the prevalence of ambulance ramping, e.g. active monitoring and reporting of ramped ambulances at hospitals. (9-10)

Ambulance ramping challenges the traditional 'respond, stabilise and transport' focus of ambulance services. Ramping raises an ethical dilemma for paramedics, who are effectively being asked to continue to provide emergency medical care for the patient until transfer to the ED is complete. (4)

Ambulance ramping also indicates acute health care system challenges, whereby patient demand exceeds hospital capacity, and is evidenced by access block and ED overcrowding. (11-12) Ambulance ramping is a common occurrence throughout Australia and is on the increase in New Zealand. (13-18)

Adverse patient outcomes, poor patient experiences and higher health system costs are associated with ambulance ramping. Some of these include:

- Delayed access to definitive assessment and care because of slowed ambulance response times
- Delays in the timeliness of ambulance responses due to fewer crews available to cover the same geographic areas. These delays are captured in deteriorating response times for critical and emergent patients
- Ambulance workforce undersupply and a lack of investment in infrastructure to meet demand, with greater overtime costs
- Financial penalties on ambulance services and hospitals when KPIs for ambulance services and EDs are not met
- Adverse publicity leading to poor staff morale and negative public perceptions of the health system
- Increased stress and interpersonal conflict between patients, paramedics and ED staff. (19-20)

5. POSITION

ACEM believes that ambulance ramping, and its related policies and protocols, should not be allowed to occur. Where it does occur, it is an indicator of systemic health care dysfunction that reduces patient safety and increases the risk of adverse health outcomes.

Ambulance ramping provides a KPI to health system managers and hospital management of the prevalence of access block and ED overcrowding. When inpatient hospital services are unable to meet demand, patients remain in the ED, which reduces the capacity of the hospital to accept new patients, including ambulance arrivals. When this occurs, hospital management must respond.

ACEM calls for the establishment of nationally consistent:

- a) Data parameters for measurement of ambulance turnaround/off-stretcher times, particularly those times under the hospital's control
- b) Measures to capture specific ramping sites, causes and associated factors, and
- c) Measures to evaluate the effectiveness of ambulance ramping interventions.

ACEM calls for a research program that examines the causes, effects and solutions to ambulance ramping, with a focus on exploring the effectiveness of time-based targets on reducing ramping incidence.

6. RECOMMENDATIONS

ACEM recommends implementation of data collection to measure the prevalence and impact of ambulance turnaround times and patient care transfers.

6.1 Data collection parameters

ACEM defines the key components for data collection as follows:

a) Ambulance arrival at the ED

Ambulance arrival at the ED should be measured according to arrival at the designated entrance (i.e. the ramp) and the time that the ambulance crew stops their vehicle.

b) ED notification time

ED notification time should be measured when a paramedic with or without a patient comes through the ED entrance to the triage area and notifies the ED triage staff that their patient needs to be triaged. This is the start time for the ED off-stretcher/ambulance turnaround time.

c) Patient triage time:

Patient triage time should be measured when a triage assessment/record is started and the patient's details have been entered into the ED clinical administration system.

d) Patient entry to the ED:

Patient entry to the ED should be measured when the patient physically enters the ED triage area on the ambulance stretcher.² This may be the same time as (c) *Patient triage time* and should be when the triage area is free of delay.

e) Transfer of care:

Transfer of care should be measured when clinical handover to an appropriate ED clinician has occurred and the patient:

- Has been moved from the ambulance stretcher to an appropriate physical space in the ED, or
- Leaves the ED with the ambulance service for a clinically appropriate transfer to another health service.

f) Ambulance crew preparation time:

Ambulance crew preparation time should be measured from the time clinical handover has occurred until the ambulance crew notifies the ambulance dispatch service they are ready for another job.

This is the time following clinical handover of the patient, when ambulance crew activities such as cleaning, restocking and completion of paperwork may lead to further delays. These delays are distinct from ramping delays.

g) Ambulance ED egress time:

Ambulance ED egress time should be measured from the time that the crew leaves the hospital ambulance bay area, either for their next patient, or to await a job elsewhere.

6.2 Responsibility for data capture

ACEM considers that:

² This is not a two-way event, and any removal of patients back into ambulances due to reasons such as excessive crowding in triage area/s, should be reported as a sentinel event, other than to transfer the patient back home or to another institution after initial assessment at triage.

- The time recording for (a), (b), (d), (f) and (g) are the responsibility of the ambulance services
- Time (c) is the responsibility of the hospital and/or ED
- Time (d) and (e) should be recorded by both teams to allow for audit and avoid gaming
- The time from (b) to (e) is the time that is subject to ED related delays, and should be used in measuring ramping, or off-stretcher delays, or ED related ambulance turnaround delays.

These time measurements can provide useful performance indicators provided:

- Data are reliable, reproducible and recorded in a uniform manner across all jurisdictions
- Data are auditable – the data must be independently analysed, reported and available for public scrutiny
- Data collection is automated wherever possible (e.g. electronic buttons, electronic tagging or push buttons) to facilitate consistency in reporting and reduce the risks of gaming.
- Both hospitals and ambulance services agree to measure and audit in the same ways within jurisdictions.

6.3 Recommendations for KPIs

ACEM recommends a uniform approach to data definitions and capture for ambulance service and ED activities, as they relate to arrival and clinical handover of patients. ACEM also recommends using agreed KPIs across Australia and New Zealand for all patients, ambulance services and acute health systems. ACEM, ambulance services and health authorities should agree on uniform definitions, nomenclature and KPIs for ambulance delays.

This will ensure accurate measurement of ambulance service and ED performance. It will also ensure the efficacy of service improvement initiatives are accurately assessed and comparable, allowing better reproducibility and roll out of important initiatives.

6.4 Time to transfer of care

In a well-functioning system, with good access to cubicles and beds, the time interval of ambulance arrival to clinical handover should routinely occur within 15 minutes and never take more than 30 minutes.

6.5 Time to Clinical Handover (times (e) – (b))

- Within 15 minutes of arriving at an ED, 85% of patients should have their clinical handover completed.
- Within 20 minutes of arriving an ED, 95% of patients should have their clinical handover completed.
- Within 30 minutes of arriving an ED, 100% of patients should have their handover completed.

Routine delays over 30 minutes are symptomatic of significant system failures or severe ED overload and, if occurring regularly, should trigger a systematic review of the hospital and ED. Any episode over 60 minutes should initiate an incident review, where emergency physicians have a responsibility to inform hospital management that patient care could be compromised and hospital management has a responsibility to restore a safe working environment. The incident review should be undertaken by the Director of Emergency Medicine and/or hospital administrators, as well as appropriate ambulance service personnel.

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8. DOCUMENT REVIEW

Timeframe for review: Every five (5) years, or earlier if required.

8.1 Responsibilities

Authoring group: Hospital Overcrowding Subcommittee
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 Document implementation: Hospital Overcrowding Subcommittee
 Document maintenance: Department of Policy, Research and Advocacy

8.2 Revision History

Version	Date of Version	Pages Revised / Brief Explanation of Revision
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01	Nov 13	Original version
02	Nov 18	Whole of document revision.

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