



Council of Ambulance Authorities (CAA)
Views on Access to Care in Hospital Emergency Departments

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Access block and Emergency Department overcrowding have been identified as a major issue for emergency medicine in Australia which results in ambulance ramping and diversion¹. The Australian College for Emergency Medicine (ACEM) defines emergency department overcrowding as 'the situation where emergency department function is impeded primarily because the number of patients waiting to be seen, undergoing assessment and treatment, or waiting for departure exceeds either the physical bed and/or staffing capacity of the emergency department'. A marker of emergency department overcrowding includes the 'inability to offload ambulance patients and a resultant loss of capacity in the local emergency response in the community'². Access block is identified as the principle cause of overcrowding and is defined as 'the situation where patients are unable to gain access to appropriate hospital beds within a reasonable time frame, no greater than 8 hours'.

A review of access block and emergency department overcrowding literature found the main cause is a combination of increases in emergency department admissions and presentations with minimal increases in hospital resources including beds and staff to cope with the increasing demand³. In 2007/08 there were over 5.5 million reported public hospital emergency department presentations which have risen by over 28% since 2003-04. In 2007/08, 23.2% of patients arrived by ambulance, air ambulance or helicopter rescue service. The proportion of patients arriving by ambulance varies across the triage categories from 84% of Resuscitation patients to 4.4% of Non-urgent patients⁴.

What is ambulance ramping?

Australian and New Zealand ambulance services have identified that there is an increasing frequency of ambulance ramping occurring. Ambulance ramping is defined as 'the situation when an ambulance crew has arrived at the emergency department and the patient is unable to be transferred from the ambulance stretcher to the hospital emergency department in the usual handover time due to the lack of capacity of the emergency department which results in the paramedics being required to continue caring for the patient until the emergency department has the capacity to accept the patient'. The benchmark for usual hand over time varies across ambulance services ranging from 15-20 minutes.

¹ McCarthy, S., Fatovich, D.M., Richardson, D., & Joseph T. (2008). *Access block and overcrowding; a literature review*. ACEM. Accessed 24 July 2009

http://www.acem.org.au/media/media_releases/Access_Block_Literature_Review_08_Sept_3.pdf

² Australian College for Emergency Medicine. (2009). ACEM statement on emergency department overcrowding. Accessed 24 July 2009 http://www.acem.org.au/media/policies_and_guidelines/S57_-_Statement_on_ED_Overcr.pdf

³ McCarthy, S., Fatovich, D.M., Richardson, D., & Joseph T. (2008). *Access block and overcrowding; a literature review*. ACEM. Accessed 24 July 2009

⁴ Australian Institute of Health and Welfare. (2009). Australian hospital statistics 2007-08. Health Services Series No. 33. Cat no. HSE 71. Canberra: AIHW.

The delay caused by the extended time taken from the ambulance arrival at hospital emergency departments to the time when the patient is transferred off the ambulance stretcher is causing service delivery issues for most ambulance services. Ambulance ramping has a significant impact on ambulance services response capacity and performance as ramped crews are unable to respond to other incidents, and can also result in poor patient outcomes for those with time critical conditions^{5,6}. It has also been identified that excessive numbers of admitted patients remaining in the ED after completion of the emergency component of care are associated with adverse events, errors, delayed time to critical care, increased morbidity and excess deaths⁷.

This is not only an urban issue but affects the larger regional centres. In smaller regional hospitals ambulance availability is often delayed when paramedics assist with the care of a critically ill patient prior to the arrival of a medical officer. There is also the cost of lost productivity and the impact on response times and patient outcomes which can have economic implication on the health system.

What is ambulance diversion?

Ambulance diversion is 'the situation when a hospital emergency department is at capacity, is not accepting any further patients, and has an arrangement to notify the ambulance service so that patients can be transported to an alternative hospital emergency department during these times'. This system is in place in some states and still has a significant impact on both resources and patient outcomes as patients are usually transported to hospitals that are located a further distance than the closest hospital. There may also be situations where all hospitals are at capacity and diversion strategies cannot be used.

Ambulance diversion (to an alternative emergency department) is not a solution but is utilised by some ambulance which reduces the visible poor performance of 'ramping' but has the same affect as the patient's admission to the emergency department being delayed, by the lengthened transport, and paramedics have the patient in their care for additional time reducing their availability for the next case.

The Australian College for Emergency Medicine (ACEM) recommends that 'Health facilities must have systems that allow ambulance personnel to deliver and unload patients requiring emergency department care in a timely and efficient manner'⁸. ACEM have also developed a statement on ambulance diversion that recommends

⁵ Cameron, P.A., & Campbell, D.A. (2003). Access Block; problems and progress. *Med J Aust*; 178: 99-100.

⁶ Pepe P.E., Zachariah, B.S., Sayre, M.R., & Floccare, D. (1998). Ensuring chain of recovery for stroke in your community. *Prehosp Emerg Care*; 2: 89-95.

⁷ Australian College for Emergency Medicine. (2009). ACEM statement on emergency department overcrowding. Accessed 24 July 2009 http://www.acem.org.au/media/policies_and_guidelines/S57_-_Statement_on_ED_Overcr.pdf

⁸ Australian College for Emergency Medicine. (2009). ACEM statement on emergency department overcrowding. Accessed 24 July 2009 http://www.acem.org.au/media/policies_and_guidelines/S57_-_Statement_on_ED_Overcr.pdf

that Hospitals and Ambulance Services should have working agreements between themselves to optimize patient access to emergency care⁹.

Ambulance Service Strategies

Ambulance Services recognise that there are multiple factors which impact upon the incidence of ramping and diversion from both within hospitals and outside of hospitals and the importance of viewing the patient journey across health care providers and working with all aspects involved to ensure care is provided in a timely manner.

All ambulance services are reporting experiencing increasing delays at hospital emergency departments. This increases overall case times, reduces the availability of ambulance services to respond to emergencies and increases response times. The net effect is an increase in the time for patients to reach definitive care. Ambulance services are collaborating with hospitals in a number of jurisdictions on system strategies to minimise the impacts on patients. Strategies are continuing to evolve, but include systems for diversion and escalation.

Ambulance services are also using a number of strategies to assist in minimising unnecessary demand on emergency departments including public education; telephone triage and referral and expanded roles for paramedics. Public education strategies include campaigns to raise awareness of the role of ambulance as an emergency pre-hospital health care provider in order to reduce the numbers of inappropriate calls to ambulance services and subsequent unnecessary burden to emergency departments and to encourage the use of ambulance services for emergency health care.

Telephone triage and referral strategies are being used at the point of the call for patients that require health care advice but do not require an ambulance response. This includes referral services within the ambulance call centre or external services, for example the National Health Call Centre Network, a COAG initiative which provides the public with health care information and advice.

Paramedic roles are also being redesigned to treat and leave or refer patients at the point of contact rather than transport all patients to the emergency department. The extended role for paramedics provides a new model for the delivery of aspects of primary care, such as management of minor injury/illness, ordering of investigations, referrals and (potentially) some prescribing of medications. An important factor in the success of such models will be strengthened links between ambulance services and primary care providers. In addition to the demand management benefits, these models have significant potential to improve services for patients in relevant locations.

⁹ Australian College for Emergency Medicine. (2008). ACEM statement on ambulance diversion.

Accessed 24 July 2009

http://www.acem.org.au/media/policies_and_guidelines/S47_Statement_on_Ambulance_Diversion.pdf

Council of Ambulance Authorities

These strategies are primarily designed to assist in minimising the number of lower acuity patients being transported to the emergency department. However in 2007/08, 4.4 per cent of non urgent patients (categorised by the National Triage Scale) arrived at the emergency department by ambulance, air ambulance or helicopter rescue service¹⁰. The majority of non-urgent patients arrive at the emergency department by walking in, private transport, public transport, community transport or taxi. Therefore ambulance service strategies to minimise transport of lower acuity patients to emergency departments may only have a limited impact on access block issues.

A number of ambulance services are developing strategies that enable higher acuity patients to be directly admitted to specialist centre's bypassing the emergency department. Key examples include the role of ambulance in ensuring critically ill patients (e.g. trauma, acute coronary syndrome and stroke) are identified early and transported directly to hospitals or specialist centre's providing appropriate levels of care. This can reduce the time to definitive care, improving health system performance and patient outcomes whilst also reducing the burden on emergency departments.

National reporting

The AIHW annually reports statistics on Australia's public hospitals including a range of indicators reported against the National Health Performance Framework endorsed by the Australian Health Ministers. This includes emergency department waiting times which are also to be included in the National Healthcare Agreement indicators that are yet to be reported.

Emergency department waiting times for public hospitals are annually reported defined in the National Health Data Dictionary as 'the time elapsed for each patient from presentation in the emergency department to the commencement of service by a treating medical officer or nurse'. Time of presentation is defined as 'the earliest occasions of being registered clerically or triaged'. It is unclear if these measures would include ramped ambulance patients, as the hospital has not admitted the patients which could alter the results¹¹.

The National Health and Hospitals Reform Commission (NHHRC) Interim Report proposed a range of performance measures for hospitals including hospital bypass where ambulances are redirected away from busy hospitals. The CAA recommended that the NHHRC consider including an additional performance measure of ambulance ramping to assist in ensuring patients being transported by ambulance services receive emergency department care in an appropriate time frame¹².

¹⁰ Australian Institute of Health and Welfare. (2009). Australian hospital statistics 2007-08. Health Services Series No. 33. Cat no. HSE 71. Canberra: AIHW.

¹¹ Australian Institute of Health and Welfare. (2009). Australian hospital statistics 2007-08. Health Services Series No. 33. Cat no. HSE 71. Canberra: AIHW.

¹² Council of Ambulance Authorities. (2009). Submission Response to the National Health and Hospitals Reform Commission – Interim Report A Healthier Future for All Australians.

The NHHRC released a final report in June 2009 which recommended National Access Targets be developed to assess the timeliness of care across all health services including emergency departments and ambulance services. It is proposed that the access targets be used in association with triage and urgency classifications to assist health professionals¹³.

International developments

There are a number of international developments in this field driving system improvements. For example in the UK, in 2000 the NHS developed a plan to address access block issues by creating a rule that 90 per cent of people attending emergency departments be assessed, admitted or discharged within four hours. In 2004, the target was increased to 98 per cent of people to be assessed, admitted or discharged within four hours¹⁴.

WA Health implemented a four hour rule commencing in April 2009 based on the UK system and adapted to suit local conditions and community needs. A target has been set for 98 per cent of patients arriving at emergency departments are to be seen, admitted, transferred or discharged within a four hour timeframe unless they are required to remain within the emergency department for clinical reasons. This is to be introduced across WA Health in three stages and each hospital has two years to redesign processes and implement improvements in order to reach the target by mid 2012¹⁵.

Monitoring the issue

Ambulance services are willing to collect and monitor data (where available) to aid in analysis of the issue by hospitals and health authorities as a means to improving overall performance of the health system. It should be noted that current measures of emergency department performance do not appear to take into consideration patients who are not admitted and left in the care of paramedics.

Transfer of care time is currently collected by a number of ambulance services and is defined as 'the time interval commencing when the patient has arrived at the emergency department by ambulance to when the patient is transferred off the ambulance stretcher and admitted to the care of the hospital'.

Hospital key performance indicators need to incorporate patients that are not admitted to hospital due to access block and emergency department overcrowding and left in the care of paramedics. These key performance indicators will need to take into consideration the issue of shared responsibility across hospitals and

¹³ National Health and Hospitals Reform Commission. (2009). *A healthier future for all Australians – Final Report – June 2009*. Commonwealth of Australia.

¹⁴ NHS. (2000). *The NHS Plan: A plan for investment, a plan for reform*. Crown, Norwich.

¹⁵ Government of Western Australia, Department of Health. *Four Hour Rule Program*. Accessed 27 July 2009 at <http://www.health.wa.gov.au/fourhourrule/home/>
Council of Ambulance Authorities

ambulance services and could factor in triage standards such as the National Triage Scale¹⁶.

The Council of Ambulance Authorities recommends that:

- **State, Territory and Commonwealth Government and Health Departments recognise the impact of access block and emergency department overcrowding on ambulance services response and performance capacity.**
- **Ambulance Services are consulted in national strategies to minimise access block and emergency department overcrowding.**
- **National measures of hospitals and emergency departments incorporate patients that arrive at the emergency department by ambulance and are not transferred to the emergency department in a timely manner including measures of ambulance ramping and diversion.**

¹⁶ Australian Institute of Health and Welfare. (2009). Australian hospital statistics 2007-08. Health Services Series No. 33. Cat no. HSE 71. Canberra: AIHW.