

Contrasts in acute medicine: a comparison of the British and Australian systems for managing emergency medical patients

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The pressure on hospitals from emergency medical admissions has risen inexorably over recent years, resulting in overcrowded emergency departments (EDs) and associated adverse effects on efficiency, safety and quality of care.^{1,2} In response, hospitals worldwide have introduced new systems for managing patients who require unscheduled medical admission.^{3,4} In the United Kingdom, a new medical specialty of acute medicine has been developed and acute medical units (AMUs) have been established. These have been defined by the Royal College of Physicians of London (RCP) as “specialised area[s] of an acute hospital where patients suffering from acute medical illness can be assessed and initially admitted”.⁵ While these initiatives have undoubtedly met with some success, the evidence base for their overall benefit remains elusive.⁶⁻⁸ Since its advent in the UK in 2004, the “4-hour rule” mandating the maximum length of stay for patients in EDs has also reduced overcrowding in EDs, but without evidence for overall benefit to quality of care.⁹ A seminal report from the RCP in 2007 made many recommendations for the further development of acute medical services and emphasised the need for collaboration between medical specialties, critical care, acute medicine and emergency medicine.⁵

An opinion has been voiced that the introduction to Australia of a model similar to that in Britain would be beneficial,¹⁰ but there is no substantive evidence to support this. In Australia and New Zealand, some hospitals have established medical assessment units for clinical assessment of medical patients admitted from the ED, before they are either transferred to medical wards or discharged home.¹¹

We describe key aspects of the recent establishment of acute medical services in Britain and discuss the relevance of these experiences to Australia.

Learning from previous experience — adaptation is superior to cloning

In the UK, at the time of the Emergency Services Collaborative (which ran from October 2002 to September 2004), hospitals were brought together to share examples of good practice in acute medical care. The value of this experience was clearly improved by the realisation that adaptation of existing models of care to meet local demands was superior to simply adopting, or cloning, an existing model, and this mantra became a key message from the subsequent UK Department of Health report.¹² A system that functions well in one environment may not thrive in a hospital where local demands and resources are different.^{13,14} Successful UK AMUs developed acute medical services based on local functional needs rather than simply attempting to copy the physicality of another unit.^{7,15} This argues for caution when making international comparisons between the UK and Australia — especially considering the very different infrastructure of acute care in the two countries.

Australia and Britain — a comparison of general and acute medical services

In Britain in 2004, the RCP recognised the need to develop a specialty of acute medicine with specific training of a group of physicians skilled in managing acutely unwell and physiologically unstable

ABSTRACT

- Increasing numbers of patients are presenting for unscheduled medical admission to hospitals worldwide, prompting clinical redesign of “front-door” emergency medical services.
- In the United Kingdom, there has been considerable investment in the establishment of acute medical units (AMUs) and the training of acute medicine physicians. Some centres in Australia have established similar medical assessment units. While these initiatives have undoubtedly met with some success, the evidence base for their overall benefit remains elusive.
- We describe key aspects of the recent establishment of acute medical services in Britain and discuss the relevance of these experiences to Australia.
- Successful models of care in acute medicine have often been shared with other centres. The adaptation of existing models of care to meet local demands is superior to simply adopting an existing model.
- Once the desired clinical functionality of a service is determined, informed decisions can be made on staffing requirements, skill mix, and the structure of any new clinical unit.
- The functionality of the acute medical service, rather than simply the physicality of an AMU, should drive service design.

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patients.¹⁶ This was within the context of a model of care where, as recently as 2000, acute general medical patients on the medical intake were the responsibility of on-call senior clinicians who had conflicting specialty and general medical duties — a conflict that often led to delayed review of these patients by consultants and inconsistent clinical leadership of acute care services.¹⁷ Since then, the British acute medicine curriculum for trainees has been developed to ensure a “fit-for-purpose” workforce. Also, the importance of skills in acute care of older people has been clearly recognised, and specialists in geriatric medicine contribute heavily in covering the general medical intake.^{18,19}

In contrast, the specialty of general medicine in Australia appears to be more focused on chronic disease management and the care of older patients.²⁰ The corollary to this is that unstable medical patients are preferentially cared for in EDs and critical care units in Australia, and exposure of Australian general physicians to acute medical problems is probably less as a result.²¹

Emergency medicine is highly developed in Australia. EDs are the major portal of entry to hospital for acute medical patients and there is a culture of both stabilising sick patients and continuing care for patients with uncertain diagnoses in the ED. In stark contrast, in the UK, up to 75% of such patients are admitted directly to AMUs.⁷ In recognition of this, the RCP has emphasised the need for close collaboration with critical care services and has recommended that AMUs incorporate an area where unstable patients (requiring single organ support but not mechanical ventilation) can be managed safely.⁵

In Australia, there appears to be a greater tendency for patients to be admitted to medical specialty units directly from the ED. When this is the case, an AMU will not be in a position to limit flow and manage a single emergency queue for hospital admission.

Strategic steps in developing an acute medical service — “form should follow function”

Some AMUs in the UK were developed by closely copying existing models. This meant that the selection of appropriate personnel to run the unit and operational decisions on the overall functionality of the service were at risk of becoming secondary issues dependent on the structure that had already been put in place. Further, the resulting services did not always meet local needs. A more successful approach was for form to follow function, together with a basic understanding that the acute unit would be part of an acute service rather than being a single goal to be achieved. Once the required clinical needs have been identified, informed decisions can be made on the required staffing complement and skill mix and, finally, on the appropriate structure, size and location of any additional units that are required. The following are basic tactical steps suggested as the strategy for function dictating form.

What roles are required of the service? Is the service to provide time-mandated care — for example, 48 hours? Alternatively, are patients to be managed until they are physiologically stable and with clear management plans in place? These different functionalities will have fundamental implications for both staffing (complement and competencies) and unit design. Similarly, if patients are to be admitted directly from the community rather than after a period of investigation and stabilisation in the ED, a considerably enhanced AMU infrastructure will be essential.

What patient groups will present to the service? The relative proportions of patients in cohorts with differing clinical needs impact fundamentally on the demands placed on an AMU. For example, if the acute medical intake largely comprises older patients with multiple comorbidities, optimal service design will differ from that needed to cope safely with an intake predominantly comprising patients with acute, correctable illness.

What strengths exist in the system and how can these be realised optimally? The existing strengths in Australia and the UK are different and will influence the ultimate best acute medical service design. In the UK, close collaboration between acute medicine and intensive care specialties (both clinically and for mutual registrar training) has been highly successful in a number of centres. In Australia, the high quality of emergency medicine is an obvious strength on which to capitalise.

Summary

Caring for emergency medical patients demands a comprehensive acute medicine service. The AMU is a crucial part of this service, but only if it supports particular local demands and is supported in turn by an appropriate staffing infrastructure. AMUs developed in hospitals in the UK have manifested considerable heterogeneity of form and function. This isn't necessarily a bad thing; indeed, if form follows function and function varies from site to site then a certain amount of heterogeneity is inevitable. One size and shape will not fit all. The inherent risk in not recognising functionality as the starting point for designing an acute medical service will be realised if an attempt is made to clone an existing system that proves to be inappropriate for local demands. Perhaps this is the biggest lesson that the evolving acute medical services in Australia can learn from the British experience of the past decade.

Competing interests

None identified.

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