The future of acute care in New Zealand

Peter Freeman, Tim Parke

Picture this. An elderly male patient lies on a trolley in the corridor of the emergency department (ED). He is there because his GP is concerned about his sudden confusion and deterioration in mobility. The GP is suspicious the patient has had a stroke. He is waiting to see the medical registrar who has accepted him, but that registrar is busy seeing other patients. There are currently no medical beds available and ED staff have initiated care and commenced investigations.

At the same time, a similarly aged patient sits comfortably in an inpatient bed. She has recovered from a bout of severe pneumonia requiring intravenous antibiotics and is waiting for her discharge medications, clinical summary to be written and her family to pick her up. All this takes time. The ward is full and nursing staff are happy that one patient, at least, is not requiring heavy nursing care.

The first patient requires the facilities that the second patient occupies—but these are not available because of systems issues. These systems issues are ubiquitous in our public hospitals and the paper How to achieve New Zealand’s shorter stays in emergency departments health target ([http://www.nzma.org.nz/journal/123-1316/4152](http://www.nzma.org.nz/journal/123-1316/4152)) in this issue of the Journal by Prof Mike Ardagh examines some of these problems.

EDs are the ‘barometer’ of acute health care demand and availability. Like all barometers, they measure pressure, and pressure in the acute sector has been building through increasing ED attendances, increasing hospital bed occupancy, demographic changes, and advances in acute medical care.

The community relies on the ED to be there 24/7 to assess and treat acute patients some of which (~30%) will be deemed to require hospital-based care. Emergency physicians and nurses need to be available to resuscitate and manage the immediate care of the most sick. Once an ED is compromised by becoming a reservoir for acute inpatients (overcrowded), these functions become critically impaired, and Prof Ardagh’s paper highlights the resultant inefficiencies and risk that may result.

The recent epidemic of ‘ED overcrowding’ has highlighted the need to be smarter about admission and streaming into hospital-based care. Analysis of patient flows has identified distinct patient streams and queue theory has shown that by separating out the various needs of patients their care and journey can be improved.¹ ²

Patients attending ED requiring acute care fall into three main categories. In the first group, the sick, traumatised, compromised and often undifferentiated patients require urgent care which is undoubtedly best provided by specifically trained emergency physicians and nurses based in ED. Senior doctor input in patient care in the ED adds accuracy to disposition decisions, impacting on patient safety and improving department flow.³ This care can be provided soon after arrival of the patient as emergency medicine teams are rostered to work shifts in ED, generally have no
commitments outside of ED and have a broad skill set to deal with a wide range of serious illness, from critical care, orthopaedic trauma, medical, paediatric and psychiatric emergencies.

Emergency physicians and nurses are also well placed to treat another group of ED attendees which are the vast range of less serious acute conditions seen in ED many of whom will be able to return to the community after treatment (~70%). These patients may require a procedure, such as a lumbar puncture, wound closure, dislocation reduction or slit lamp examination, and some patients (especially poisoning and head injury) may require short-term (<24 hr) observation. The facilities and staff competencies found in ED make for a potentially efficient and cost-effective acute service for this group. It has been repeatedly shown that primary care appropriate patients are difficult to identify within an emergency department workload.\(^5\,6\)

Then there is the group of relatively stable patients who have received assessment either by a GP or emergency physician in ED and are deemed to require admission to hospital for specific care or ongoing assessment. This is the group that can receive inpatient attention in an ‘admission unit’ and these patients do not benefit from much or any time in ED. These units (APU, MAPU etc) have been introduced in the UK, NZ and Australia with measurable improvement in the patient journey by the reduction in ‘double handling’.\(^7\)

Decongesting ED for new arrivals has the potential to reduce ED length of stay by reducing corridor waits, improving efficiency and reducing the burden on the ED nurses. The additional benefit of these units is that they ‘keep the ED for emergencies’. The most prevalent comment from ED staff at Auckland City hospital when the new Adult ED and Admission and Planning Unit opened in 2003 was “at last we have the right patients in ED and no patients in corridors”. Interestingly the Auckland City Hospital model of care (AED & APU) has resulted in no patients managed in the ED corridors for the last 5 years. This is despite increasing volumes.\(^8\)

So what of the future?

Emergency physicians working in ED are hospital-based ‘general’ specialists. They are uniquely placed between the community and inpatient services to effect a change in the way hospital beds are used. However this can only happen with close liaison with our community-based colleagues and inpatient specialists.

A culture of realism needs to develop in understanding that health cannot continue as it has in the past. It cannot be driven by historical medical practices. Difficult ethical issues need to be addressed, such as how we can maintain the dignity of patients at the end of their life without subjecting them to futile hospital-based practices.

The burden of patients with chronic illnesses is going to be an increasing challenge to health care provision. More care for these groups will have to be delivered in the community and ways of achieving this must be addressed.

If the scarce and expensive inpatient hospital resource is to be made available to the acute patient waiting in the ED corridor, then the convalescing patient occupying a hospital bed will need to move back into the community as soon as acute care is complete. It will be argued that hospital length of stays are already short and by
shortening further will just cause more readmissions. However many readmissions are due to poor discharge planning and lack of chronic illness facilities in the community.

The health dollar must support an expansion of community-based care where end-of-life care, chronic illness and convalescing recovery can be delivered. The current model of a community care/hospital split needs to be changed. There needs to be a new concept of ‘intermediate’ care which occurs in the community in support of primary care and hospital-based acute care.

The status quo is not an option unless we are to witness a steady decline in standards of health care to our patients. Not only will we fail to look after our increasingly elderly population, but our emergency departments may not be able to provide the episodic urgent hospital-based care that the public rightly expects to be immediately and reliably available.

The new Ministry target and Professor Ardagh’s paper provide a stimulus and the tools to begin addressing the acute care crisis in our hospitals.

Competing interests: None.

Author information: Peter Freeman, Director of Emergency Medicine, Wellington Hospital, Wellington; Tim Parke, Director of Emergency Medicine, Auckland City Hospital, Auckland

References:
7. Personal communiqué (PF/TP).