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IAEM position paper on Reconfiguration and/or Regionalisation of Emergency Services

Background

The Irish Association for Emergency Medicine is aware of the increasing imperative felt by the Health Service Executive (HSE) to reduce the number of hospitals providing the broad range of acute services and to centralise many specialised services in larger hospitals, with services being withdrawn from smaller units. This desire to rationalise services extends to limiting the number of hospitals providing the full range of emergency medicine services.

Whilst the IAEM is not opposed in principle to reconfiguration of services (and indeed would have argued for many years that this agenda needed to be furthered in a properly thought-out and coordinated way), our firm view is that there needs to be absolute transparency in the process of regionalisation and that the process needs to be done in such a way as to ensure the provision of high quality emergency care, during and after any reconfiguration.

Many of the acute hospital services in the regions apparently being considered for reconfiguration have major deficiencies. Services have been developed in individual hospitals, often without obvious thought having been given to best models of care. Furthermore, individual hospitals are often plagued by Emergency Department (ED) overcrowding, which limits the ability of an ED to function appropriately. As has been confirmed by the *Emergency Department Task Force Report* of June 2007 ⁽¹⁾, such ED overcrowding is a symptom of a failure of hospital and community services to adequately support the hospital's ED. The causes of this failure, as enumerated by the *Task Force*, need to be urgently addressed.

The IAEM believes that any hospital that is expected to provide 24 hour emergency care should have defined, acceptable standards of infrastructure, staffing and support services to allow them to carry out this function. The practice of hospitals being expected to provide traditional "Casualty" / "Accident and Emergency Services" without there being the necessary infrastructure in place is no longer professionally or medico-legally defensible.

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The international experience is that the cost of service provision does not necessarily decrease as a result of regionalisation of services ^(3, 4).

Does increased distance from hospital increase mortality?

Opponents of hospital reconfiguration argue that patients' lives will be put at risk if they have to travel longer distances to reach hospital. A recently published study from the United Kingdom appears to support that contention. Nicholl and colleagues studied 10,315 patients transported to hospital with life threatening problems ⁽²⁾. They reported a 1% increase in mortality for each additional 10km the patient had to travel to get to hospital. While these figures appear concerning, the authors acknowledge that their study had a number of limitations including the fact their results are based on data from 1997 to 2001 and therefore do not take account of any improvements in pre-hospital and hospital based care that have taken place in the intervening six years. Crucially, they acknowledge that they only looked at the sickest patients (the group most at risk of dying) and that their results could not be applied to the much larger group of less sick patients who make up the bulk of those transported to hospital.

Preliminary reports from a Scottish study of the relationship between death from acute myocardial infarction and distance to hospital suggest an association between death and distance between home and hospital ⁽³⁾. A further study, published in December 2007, reported that delays in reperfusion therapy for acute myocardial infarction are associated with higher 6-month mortality ⁽⁴⁾. These studies underscore the need for timely management of patients with acute coronary syndromes. Increasingly, the quickest way to institute such treatment is to implement it before the patient gets to hospital, whether by primary care practitioner or ambulance paramedic, with consultation with the regional emergency medicine service if so required, lessening the impact of increased distance from hospital.

The evidence for trauma care strongly supports regionalisation. A study published in the New England Journal of Medicine in 2006 compared mortality from trauma in patients treated in trauma centres with those treated in non-trauma centres ⁽⁵⁾. Death rates were 25% less in those treated at a trauma centre. **These data underscore the core philosophy behind regionalisation - taking the patient to the closest facility most appropriate to the particular patient's needs, rather than simply the closest facility.**

Taken in totality, the available evidence emphasises the need to provide timely emergency care to patients in an appropriate setting. The process of regionalisation coupled with enhanced pre-hospital (EMS) and community care can achieve that aim. Regionalisation without such enhancement may increase risk to patients.

Requirements

- All major reconfigurations require an appropriate lead-in time to ensure that substitute services are in place before individual services are withdrawn from outlying areas.
- There needs to be a significant up-skilling and improved provision of ambulance services, as patients will be transported over longer distances to reach the regional centre. The enhanced skill sets at both paramedic and advanced paramedic levels in the about-to-be-published Pre-hospital Emergency Care Council (PHECC) Clinical Practice Guidelines need to be put in place as a priority. Increased numbers of advanced paramedics, with appropriate medical oversight, will need to be deployed in those areas previously served by the reconfigured hospitals. Protocols need to be developed in conjunction with the EDs in the receiving regional centres to ensure that patients are transported to the hospital that best serves their needs, not necessarily the closest.
- Local GP services, particularly “out-of-hours” GP services, need to be more formally integrated into the emergency care network, with better links to both the Regional ED and the Ambulance Service.
- There needs to be a significant enhancement of the capacity of the ED in the Regional Hospital to cope with the expected increase in attendances. **The argument repeatedly put forward in both the UK and Ireland that many attendances to EDs are unnecessary and can or will be diverted away has proven not to occur with rationalisation elsewhere.**^(6, 7, 8, 9) There is no reason to suppose that the Irish public would behave differently than other populations. In addition and in spite of trialling a multiplicity of alternative models of care in the UK, none have been found to be any more cost-effective than care provided in EDs.⁽¹⁰⁾
- Properly-constituted clinical care networks need to be established, to ensure that both emergency and elective care is delivered across multiple sites in an integrated fashion. These networks need to be put in place for Acute Medicine, Acute General Surgery, Orthopaedic Surgery, Paediatrics, Obstetrics and Gynaecology, Psychiatry and any other regional services provided e.g. Oncology, Haematology, ENT Surgery, Ophthalmology etc.
- The development of care networks will necessitate the separation of acute and elective work, so that the Physician / Surgeon who is on-take on a given day or week will have no elective commitments which limit their or their team’s ability to respond to the needs of acute admissions⁽¹⁾.

- Those hospitals who lose their traditional ED services should be reconfigured as local supporting hospitals where outpatient facilities, Endoscopy Services, Day Surgery, Community Radiology, Physiotherapy etc are provided. Nurse-led Minor Injury Units (MIUs) may be provided.
- MIUs should be open 12 hours a day, 7 days a week, with a close well-defined working relationship to the Regional ED. Any such MIUs created must fulfil the minimum standards for such facilities previously published by the IAEM ⁽¹¹⁾. These will need to be supported with telemedicine and teleradiology support. Nurse-led Minor Injury Units, if provided, should be fully integrated within the emergency network with appropriate links to the Regional Centre.
- The impact of reconfigured services on training and continuing professional development for nurses, doctors and allied healthcare professionals must be considered.
- Clinical governance arrangements across the reconfigured services should be explicit and appropriately supported. Modern clinical information systems will be required to support clinical audit and quality assurance of services across the network.
- The implications of service reconfiguration on Major Incident Planning must be considered.

References

1. *Emergency Department Task Force Report*. Health Service Executive. June 2007.
<http://www.hse.ie/en/Publications/HSEPublicationsNew/AcuteHospitalReportsGuidelines/EDTaskForceReport/#d.en.7030>
2. Nicholl J et al. The relationship between distance to hospital and patient mortality in emergencies: an observational study. *Emerg. Med. J.*, Sep 2007; 24: 665 - 668.
3. Wei L, Lang CC, Sullivan FM et al. _Impact on mortality following first acute myocardial infarction of distance between home and hospital: Cohort study. *Heart*. 2007 Nov 5; [Epub ahead of print]
4. Nallomothu B, Fox KAA, Kennelly BM. Relationship of treatment delays and mortality in patients undergoing fibrinolysis and primary percutaneous coronary intervention. *The Global Registry of Acute Coronary events*. *Heart* 2007;93:1552-1555.

5. MacKenzie EJ, Rivara FP, Jurkovich GJ. A National Evaluation of the Effect of Trauma-Centre Care on Mortality. *N Engl J Med* 2006;354:366-378.
6. The reconfiguration of hospital services in England. The Kings Fund. November 2006.
http://www.kingsfund.org.uk/publications/briefings/the_2.html
7. Simpson A N, Wardrope J, Burke D. The Sheffield experiment: the effects of centralising accident and emergency services in a large urban setting. *Emerg Med J* 2001; 18:193-197.
8. House of Commons Public Accounts Committee. Department of Health: improving emergency care in England; Sixteenth Report of Session 2004-05. The Stationary Office Limited 30 March 2005.
9. Salisbury C & Munro J. Walk-in centres in primary care: a review of the international literature. *Br J Gen Pract.* 2003 January; 53(486): 53–59.
10. Cooke M, Fisher J, Dale J, McLeod E, Szczepura A, Walley P, Wilson S. Reducing attendances and waits in Emergency Departments: a systematic review of present innovations. A report to NHS Service & Delivery Organisation; London 2005.
11. *Standards for Urgent Care Centres and Minor Injuries Units in Ireland.* Irish Association for Emergency Medicine. January 2007.
<http://www.iaem.ie/ucc.pdf>