International comparisons of selected service lines in seven health systems

ANNEX 9 – REVIEW OF SERVICE LINES: ACUTE MEDICINE

Evidence Report

October 27th, 2014

Executive summary for acute medicine

Acute medicine has emerged as a relatively new specialty in the UK. It sits at the interface of A&E and specialty or critical care. It is concerned with the immediate, emergency management of general medical patients and those that will ultimately be transferred to a specialist medical department. The UK has been at the forefront of the development of Acute Medicine as a defined service line, and the AMU (Acute Medicine Unit) as a defined department with specific standards and resources, within the hospital. While some other countries are exploring the Acute Medicine model, they are generally at a less mature stage of development than the UK and the approach to standards is less well developed.

- In **Australia, Sweden and the Netherlands, Acute Medicine is beginning to emerge as a distinct specialty** – for example with the first training posts being created in the Netherlands in 2012 – and there are some examples of hospitals operating an AMU model
- **In Sweden, many hospitals operate an Acute Unit (medical and surgical)** located adjacent to the A&E department and set up to care for acutely ill patients, not admitted directly to a specialist unit. There is no single standardised model in operation across Sweden, but the unit may often have dedicated nursing staff with physician input provided by specialists on rotation/on call from specialist departments within the hospital
- **In the US and Canada**, **care of acutely ill medical patients is managed by Emergency Medicine specialists in the Emergency Department before transfer to Critical Care or the relevant medical specialty**
- **In Germany, acutely ill medical patients are generally managed directly by specialists** in the Emergency Room and following hospital admission

Standards of care for this patient cohort and usually managed through generalised hospital accreditation requirements, which set out what level of emergency care must be available, and supported through disease or pathway specific clinical guidelines which would not normally have regulatory force

Acute medicine – Core NHS standards

NHS standards setting bodies

- NHS England, Keogh review "NHS Services, Seven Days a Week"
- Royal College of Surgeons
- Society for Acute Medicine
- Royal College of Physicians
- NCEPOD
- NICE
- College of Emergency Medicine
- Others

Core NHS standards

Access

- Consultant and MDT review <14hrs of arrival 24/7 and <6hrs from 8am-10pm
- Consultant review <1 hr where >10% mortality/high risk

Inputs

- Full diagnostics service 24/7:
  - <1hr for critical patients
  - <12 hrs for urgent patients
  - <24 hrs for non-urgent patients
- Consultant-led support services 24/7 (co-located or in formalised network):
  - Critical care
  - Interventional radiology
  - Interventional endoscopy
  - Emergency general surgery
  - Others[1]
- Psychiatric liaison 24/7 and <1hr for emergencies)
- Primary and community services 7 days/week
- Any hospital with a 24/7 emergency theatre must have 24/7 on-site anaesthetic cover from non-consultant hospital doctors (NCHD), with a minimum of 2 consultant anaesthetists on-call in hospitals with all three specialities and at least one consultant on-call in other hospitals

Process

- Full management plan <24 hrs
- All handovers led by senior decision-maker
- 2x daily consultant review of acute patients
- Patients with a predicted hospital mortality ≥5% should have active consultant input in the diagnostic, surgical, anaesthetic and critical care elements of their pathway.

Outputs

- Consistent patient experience 7 days/week

Additional context

- Keogh standards represent a synthesis of guidance and standards set by all the bodies listed
- Keogh standards are aspirational with full compliance expected within 3 years (by 2017)
- Detailed standards exist for many sub-pathways within these service lines which are not covered here
- Limited performance data is available for these standards but substantial evidence of sub-optimal quality of care linked to non-delivery of these standards (e.g. higher mortality at nights and weekends)

1 Additional requirements depend on the services offered, but may include renal replacement, PCI, cardiac pacing, thrombolysis, and urgent radiography

Acute medicine – International comparison

	Approach to service line delivery	Approach to standards
USA	▪ Care is delivered by Emergency Medicine specialists from ED before transfer to specialty care or Internal Medicine (General Adult Medicine)	▪ Hospital accreditation requirements – may be modified/reduced for 'critical access' facilities (rural/remote) ▪ Guidelines tied to certification
Canada	▪ Care is largely delivered by Emergency Medicine specialists from ED before transfer to specialty care or Internal Medicine	▪ Professional bodies publish guidelines for specific pathways/conditions ▪ Hospital accreditation requirements ▪ Payor-specific contractual requirements
Australia	▪ Emerging trend towards creating AMUs co-located with ED usually staffed by General Medicine team, some with sub-specialty training, and cardiologists	▪ "Loss of chance" legislation sets strong pressure for rapid diagnosis/treatment ▪ Some standards similar to UK: e.g. consultant review <12hrs; 24/7 services
Netherlands	▪ Access to care often direct to specialist ward (via GP referral) ▪ Dutch Acute Medicine society formed in 2012 and training posts being created	▪ Inspectie voor de Gezondheidszorg (main standards setting body) ▪ Payor-specific contractual requirements ▪ Guidelines from professional bodies
Sweden	▪ Many hospitals operate an Acute Unit located alongside A&E to manage acute (medical and surgical) patients not admitted directly to a specialist unit	▪ Regional payors define what types of activity hospitals are permitted to perform and minimum service standards often based on national guidance
Germany	▪ Specialists (consultants and support staff) based in the ED, plus specialists rotating through ED	▪ Professional bodies publish guidelines for specific pathways/conditions

SOURCE: Expert interviews conducted by research team