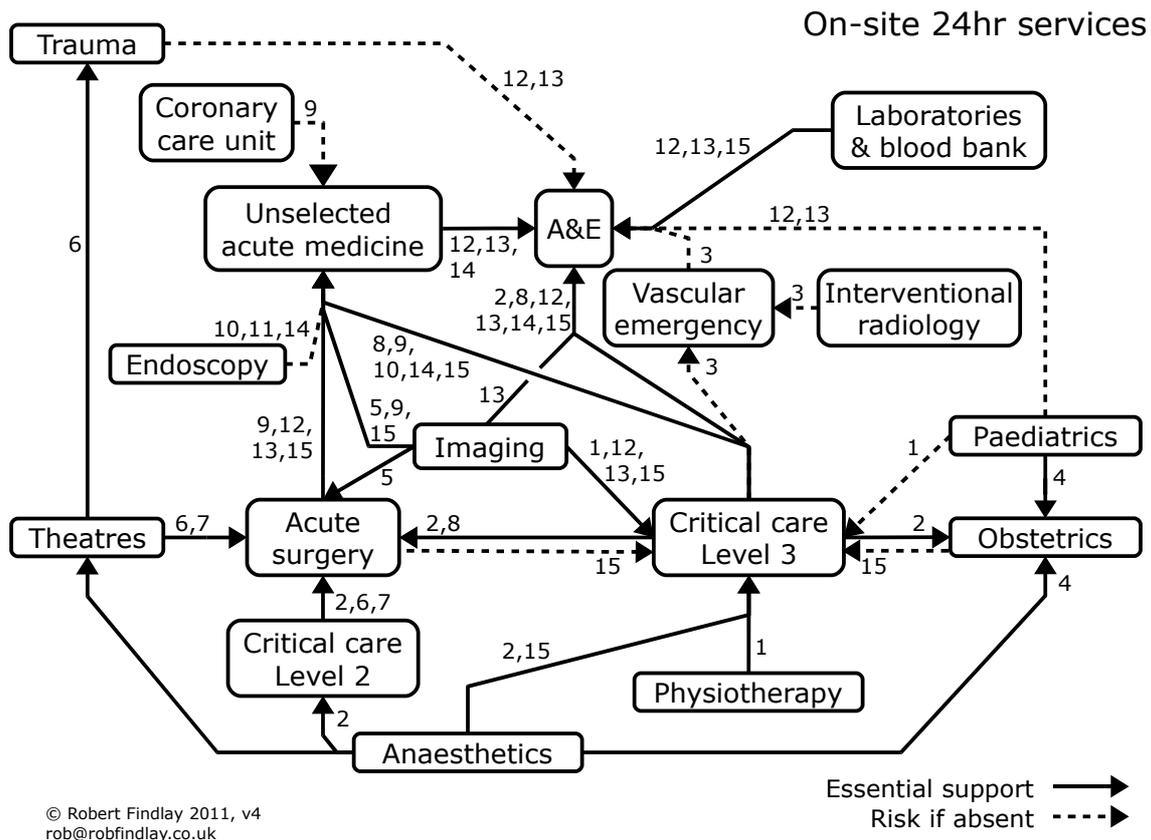


## Clinical linkages for 24-hour services



## References

1. "Where a full range of specialists is not available, a fully comprehensive intensive care service cannot be provided. In the UK, at present, PICUs [Paediatric Intensive Care Units] are uncommon and many general ICUs will be expected to admit a proportion of children. In the UK, children make up about 12% of admissions to adult units. Even in specialist units (e.g. neurosurgery) the availability of consultant paediatric advice is essential." (p.44)  
 "The services of a physiotherapist experienced in ICU work should be available on a 24-hour 7-day basis." ...  
 "The services of a radiographic team capable of mobile X-ray and ultrasound imaging should be available on a 24-hour, 7-day basis."  
*(Standards for Intensive Care Units, The Intensive Care Society, May 1997, pp.48-49)*
2. "Any site receiving unselected medical admissions must have at least level 2 plus short term level 3 stabilisation and transfer; and any site with open access full Accident and Emergency, major general surgery, consultant led obstetrics unit, or any of these must have full level 3 facilities."  
 "The Critical Care Unit should have dedicated medical cover present in the facility 24 hours per day, 7 days per week."  
*(Royal College of Anaesthetists, Guidelines for the Provision of Anaesthetic Services 2009. Chapter 9 Critical Care Services, Introduction 2nd page.)*
3. "4.1 ... Hospitals providing an emergency vascular service should be able to demonstrate arrangements for urgent vascular imaging and interventional radiology during the day and out of hours."  
 "4.3 A clinical network exists when two or more adjacent hospitals collaborate to provide a service to patients. That service might include both elective and emergency care or it might provide simply for emergencies. A number of models exist, according to the level of vascular service in the participating hospitals. These networks should provide a complete and coherent vascular service including surgery and vascular interventional radiology."

"4.4 Some smaller or more remote hospitals do not have the staff or facilities to provide a vascular service. These hospitals need a formal contractual arrangement with an adjacent hospital to provide emergency vascular cover, so that any patient presenting with a vascular emergency transfers without question or delay to the covering vascular emergency service in the network according to locally developed protocols. Very few hospitals are more than an hour by road from their neighbours and there is evidence that even with transfers of more than one hour, the patients' outcomes are improved substantially by transferring to a vascular unit."

"8.4 ... It is not appropriate to undertake emergency aneurysm surgery in a hospital without an intensive care facility and all such patients should be nursed in an ITU/HDU environment in the immediate post-operative period."

"9.3 Critical care. Each hospital needs clear agreements about the level of care designated for patients with emergency vascular conditions. While there is a clear need for intensive care after operation for leaking aortic aneurysms, hospitals may differ in their policies for other patients: for example patients having thrombolysis may be managed on a high dependency unit or on a specialist vascular surgical ward. The experience of the staff is the important determinant."

*(The Provision of Emergency Vascular Services 2007, The Vascular Society of Great Britain and Ireland)*

4. "3.5.7 When women choose epidural analgesia for pain relief in labour they should be able to receive it within a reasonable time. This means that obstetric units should be able to provide regional analgesia on request at all times. In such units the response time should not normally exceed 30 minutes and must be within 1 hour, except in exceptional circumstances."

"3.5.12 High-dependency care should be available on or near the labour ward, with appropriately trained staff. If this is unavailable women should be transferred to a general high-dependency unit in the same hospital."

"4.3.5 There must be a 'duty anaesthetist' immediately available for the obstetric unit 24 hours a day."

"4.4.1 Paediatrician staffing levels: The on-site clinicians must have access to senior colleagues who have advanced skills for immediate advice and urgent attendance (within 10 minutes) when required."

*(Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour (October 2007), Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Anaesthetists, Royal College of Paediatrics and Child Health)*

5. "Hospitals which admit patients as an emergency must have access to both conventional radiology and CT scanning 24 hours a day, with immediate reporting."

*(Emergency Admissions: A journey in the right direction? National Confidential Enquiry into Patient Outcome and Death, 2007, p.15)*

6. "All hospitals admitting emergency surgical patients must be of sufficient size to provide 24-hour operating rooms and other critical care services. There should also be sufficient medical staff to perform these functions. These provisions should be continuous throughout the year: trauma and acute surgical emergencies do not recognise weekends or public holidays."  
*(NCEPOD: Who Operates When? 1997)*

7. "Ensure that Strategic Health Authorities, together with NHS Trusts, collaborate to guarantee that all emergency patients have prompt access to theatres, critical care facilities and appropriately trained staff, 24 hours per day every day of the year.

Ensure that all essential services (including emergency operating rooms, recovery rooms, high dependency units and intensive care units) are provided on a single site wherever emergency/acute surgical care is delivered."

*(NCEPOD: Who Operates When? II 2003, p.13)*

8. "Hospitals admitting emergencies should normally have all levels of care available [i.e. up to Level 3 critical care], although in a limited number of cases, protocols may be agreed for safe transfer to an adjacent hospital for level 3 care."

*(Department of Health, Comprehensive Critical Care: A Review of Adult Critical Care Services 2000, p.10)*

9. Isolated acute medical services are those "which take acute medical admissions but which do not have, on-site and on a 24-hour basis, one or more of the following services: acute general surgery, an accident and emergency department taking unselected admissions, resident anaesthetic cover, an intensive care unit (ICU) or a cardiac care unit (CCU)" ...

"Hospitals which do not have critical care and diagnostic services should be reconfigured to provide intermediate or step-down care. Patients should be transferred to these hospitals only when a definite diagnosis has been confirmed, the patient's condition has been stabilised and a plan for further management has been formulated."

*(Isolated acute medical services: current organisation and proposals for the future (2002), Royal College of Physicians, pp.v,vi)*

10. "We have consulted widely across our acute specialties, and a range of senior clinicians at the College. There is a unanimous view that Level 3 Critical Care is essential for patient safety at any hospital where there are acute medical emergency admissions".

"In 1998 the Consultation Document *"Provision of Acute General Hospital Services"* highlighted the need for five consultants trained to provide an on call diagnostic and therapeutic GI endoscopy service. ... If this were not available unselected admission to that acute unit would be most unwise."

*(Royal College of Physicians' letter from Carol Black (2006) responding to Strengthening Local Services: The Future of the Acute Hospital (2006), The NHS National Leadership Network: Local Hospitals Project)*

11. "Emergency general medical care requires the support of upper gastrointestinal endoscopy, sigmoidoscopy, colonoscopy and bronchoscopy. Each acute general hospital must have a fully equipped endoscopy unit, staffed by experienced nurses or operating department assistants, with apparatus for continuous cardiorespiratory monitoring. There should be mobile equipment for use elsewhere in the hospital. The use of anaesthetic services must be provided for and built into contracts for this service.

Endoscopy should always be available within twelve hours of request. There should be a rota of available and experienced physician or surgeon endoscopists and experienced endoscopy assistants which identifies their 24 hour availability."

*(Working party report Provision of Endoscopy Related Services in District General Hospitals (2001), The British Society of Gastroenterology, p.9)*

12. "In the past Emergency Medicine has functioned well with on site support of the following "7 key services". We still view this as best practice.

- Critical care and 24 hour anaesthetic cover
- Acute general medicine (including coronary care)
- Orthopaedics
- Paediatrics
- General Surgery
- Imaging (X-ray/CT/Ultrasound)
- Laboratory services including blood bank

Where any of these services are not on site, patients may be exposed to increased clinical risk. ... The more of these supporting specialties that are not on site, the more difficult it will be to ensure that the clinical risk to patients is kept to an acceptable level. " ...

"Acute Medicine: This is essential. ...

If there is no on site emergency orthopaedic service, ideally the ED [Emergency Department] should not receive trauma ambulance cases. There should be clear protocols for the ambulance service that they should not take trauma cases to such a department." ...

"Level 3 critical care services are an essential back up to an Emergency Department.

EDs [Emergency Departments] will require increased levels of senior staffing to provide the necessary clinical back up in the absence of some of the "7 key services"."

*(Securing Local Services (Sept 2006), British Association for Emergency Medicine and The College of Emergency Medicine, pp.2,3,6)*

13. "It remains our view that the required support for the ED [Emergency Department] is provided by the 'seven key specialties'- Critical Care, Acute Medicine, diagnostic imaging,

laboratory services, Paediatrics, Orthopaedics and General Surgery. However, inpatient teams may not be able to sustain full services on all current sites. Therefore, there is a balance between having large numbers of patients travelling longer distances (with increased risks and environmental costs) with a small but finite risk to a small number of patients (for example, acute catastrophic haemorrhage if no general surgical service is available on site).

The College view is that an ED must have 24/7 support services from Acute Medicine, Intensive Care/Anaesthesia, diagnostic imaging (including 24-hour CT) and laboratory services, including blood bank.

Preferably Paediatrics, General Surgery and Orthopaedics should also be on site. If they are not on site, then robust and safe pathways should be in place for the management of severe illness or injury in these groups."

*(The Way Ahead 2008-12: Strategy and guidance for Emergency Medicine in the United Kingdom & the Republic of Ireland, December 2008, The College of Emergency Medicine, p.14)*

14. "We recommend the development of major acute hospitals serving local regions, providing the most intensive level of emergency and complex acute medical care. These hospitals should have major emergency departments co-located with the acute medical unit and critical care units, ideally as part of an emergency floor."

"We recommend that acute medicine services should be in close geographical proximity to the emergency department, to facilitate direct access to the AMU for differentiated acute medical problems for the community.

We recommend that all hospitals within an acute care network admitting patients with acute medical illnesses (even those without emergency departments) should establish AMUs as the focus for acute medical care.

We recommend that AMUs develop an augmented care area (up to level 2 care) and staff with competences to deliver this level of care. Safe transfer arrangements must be in place to ensure level 3 care when required.

We recommend that large acute hospitals dealing with complex acute medicine must have on-site access to level 3 critical care (ie intensive care units with full ventilatory support)."

"We recommend that there should also be 24/7 urgent access to 'life saving' interventions such as GI endoscopy within the emergency care network, ideally located on the same site as the AMU in large acute hospitals."

*(Acute Medical Care: The right person, in the right setting - first time. Report of the Acute Medicine Task Force, October 2007, Royal College of Physicians, Recommendations pp.xiii-xx)*

15. "Some local hospitals may not have 24-hour specialist paediatric services and specialist surgery. We would expect that some, though perhaps not all, local hospitals would continue to have 24-hour general surgery on-site. Where on-site surgery is not provided, the hospital should not accept unselected medical patients. In hospitals without emergency surgery it would be logistically difficult to staff junior and senior rotas to run an intensive care unit. This will require greater restrictions on the type of emergency medical patients that can be admitted.

Those local hospitals that have an accident and emergency department and accept medical cases must be supported by a continuous intensive care service as well as 24-hour imaging and laboratory services. Intensive care is currently provided predominantly by anaesthetists in most hospitals. If acute surgery and/or obstetric services were to be withdrawn, maintaining a intensive care service will become a problem as anaesthetists with critical care expertise are likely to move with the acute surgery and obstetrics services. Such a hospital needs enough doctors trained to the appropriate standards to support 24-hour intensive care provision."

(p.viii)

"Hospitals accepting unselected medical emergencies must have on-site surgery." (p.22)

"In hospitals without emergency surgery it would be difficult to justify a full rota of anaesthesia trainees on-call just to run an ICU." (p.A9)

*(Acute health care services: Report of a Working Party. September 2007. Academy of Medical Royal Colleges)*

Robert Findlay 2011, v4, rob@robfindlay.co.uk