The College of Emergency Medicine

The Way Ahead 2008-2012

Strategy and guidance for Emergency Medicine in the United Kingdom and the Republic of Ireland

December 2008
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The Emergency Department (ED) is the hub for the delivery of emergency care across the health economy. The College of Emergency Medicine is committed to ensuring that the highest quality of patient care is delivered 24/7. To achieve this goal, it is essential that the key role of the ED is recognised at local, regional and national levels.

Some policy makers believe that everyone is an expert in emergency care. It has been frustrating to see the focus shift away from the ED in flawed and misguided attempts to provide similar services elsewhere. This agenda has undoubtedly been fuelled by a lack of understanding and appreciation of the role of the ED and the immense benefits which would accrue for patients and the local health economy by focusing investment on the ED.

The aim of The Way Ahead 2008 is to inform strategy in delivering emergency care and provide detailed guidance for all involved in the planning of such services.

While the principles underlying the practice of Emergency Medicine are common throughout the United Kingdom and the Republic of Ireland, there are differences in the range of service and the way that service is delivered. Such differences have increased since devolution and this pattern is likely to continue. Some of the terminology used in the content of this document may not be directly applicable to practice in Scotland, Wales, Northern Ireland and the Republic of Ireland.

The document has been written by Officers of the College of Emergency Medicine and has undergone a wide-ranging consultation process. We would urge that The Way Ahead 2008 be discussed at the appropriate forum in your local health economy at the earliest opportunity to allow detailed planning for the future provision of emergency care to begin.

Jim Wardrope and John Heyworth
December 2008

Foreword
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The appendices to The Way Ahead 2008 are available in the web-based version at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/
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We are grateful to the Academy of Medical Royal Colleges for permission to use Figure 2 (Page 20).
The aim of the College of Emergency Medicine (the College) is to ensure the highest standards of emergency care for our patients. Patients and the public place great value, trust and confidence in their Emergency Department (ED).

1. The service

1.1 The ED is the hub of the emergency care system (page 20).

1.2 EDs are open 24 hours a day 7 days a week. They are the only consistent, reliable and always available source of urgent and emergency care.

1.3 Emergency Physicians (EPs) are specialists in delivering emergency care across the whole spectrum of emergency conditions, both illness and injury for patients of all ages (page 9).

1.4 The ED team of skilled and experienced doctors and nurses provides this care to all patients. The College recommends that workforce planning should ensure the presence of a senior ED doctor (ST4 or above) as a clinical decision maker 24/7.

1.5 Ambulatory patients who present at an ED should be triaged by ED staff. Many Primary Care Trusts are proposing ‘Urgent Care Centres’ at the front door of the ED. Patients should not have to pass any filtering system that would limit their choice to access ED care directly (page 19). The College has serious concerns over such ill-thought-out plans where there is no evidence base of clinical or financial effectiveness of such units.

1.6 Patients brought to hospital by emergency (999) ambulance should be seen in the ED, except for those few patients for whom there are specific care pathways and protocols in place, for example, direct transfer to the catheter laboratory for ST elevation myocardial infarction (STEMI) (pages 21, 51).

1.7 ED overcrowding remains a major challenge to providing high quality clinical care. Overcrowding is almost always due to ill patients waiting for admission, not ambulatory care patients. Hospitals should have enough inpatient capacity to ensure that patients are not kept waiting for admission to a hospital bed. In many EDs, the waiting time for admission to hospital has been improved significantly by the introduction of the four-hour access standard (see paragraph 1.8). However, this time standard does not apply to all parts of the United Kingdom and the Republic of Ireland. Patients spending prolonged periods on trolleys awaiting admission (access block) represent a poorer quality of patient care, with some evidence of increased mortality and morbidity. Work must continue to improve the patients’ experience of emergency care (pages 20, 21).

1.8 The current Department of Health (England) access standard is for 98% of ED patients to be admitted or discharged within four hours of their arrival. The standard that 95% of patients should be admitted or discharged within four hours has more clinical, operational and financial logic. It is more likely to be sustainable and Northern Ireland, Scotland and Wales are working towards this standard (page 23). The delay in introducing a meaningful standard in the Republic of Ireland is an ongoing concern.

2 The emergency care system

2.1 The ED is the hub of the emergency care system spanning the interface between the community and the hospital. Given its central role, the ED must lead organisation of the emergency care system.

2.2 Proper functioning of the ED depends on the coordinated organisation of the whole emergency care system (page 20).

2.3 Access to primary care and community services, especially during out-of-hours periods (OOH), needs to improve, especially for the frail older patient with complex needs and those patients with chronic illness (page 21).

2.4 The College welcomes much of the work undertaken by the NHS Review in England. However, the College has major reservations about Urgent Care Centres, imposed for financial reasons, especially if these are used to limit the choice of patients to present directly to the ED (page 19).
2.5 There is no single solution to the reorganisation of emergency care. In urban areas where EDs are close together (less than ten km apart) there may be advantages to amalgamating some services. At greater distances, there is evidence of increased risks to ill patients. There is a strong case for regionalisation of services for the treatment of serious trauma and ST elevation myocardial infarcts, although such patients represent a small minority of ED attendances. There are major challenges to providing emergency care to rural or isolated populations. The College will produce a report outlining possible solutions, drawing on experience from the whole of the British Isles (page 36).

2.6 The ED is the NHS frontline response to major incidents and to other events such as influenza epidemics. The resilience of the NHS to these sudden surges in demand is completely dependent on a coherent system of EDs.

3 Quality of care

3.1 The College is committed to a programme of continual quality improvement in EDs.

3.2 There have been many notable improvements in the quality of medical care in EDs. Much more needs to be done in this area. By 2012 all medium and large UK departments should have a minimum of one doctor trained in the specialty of Emergency Medicine (EM) to at least the level of ST4 present in the department 24 hours a day. Before leaving the ED, care plans for all patients with potentially serious problems, for example chest pain, abdominal pain or young children, should be agreed with a senior ED doctor (page 23).

3.3 There has been a large recruitment of trainees into EM specialist training programmes. This influx will provide a great opportunity to achieve increased direct patient care by consultants. The College will increase efforts to ensure a large expansion in the EM consultant workforce (page 37).

3.4 The College will set standards for continuous improvement in clinical care and in service provision. Such standards will be achieved by the development and implementation of evidence-based clinical guidelines and service delivery standards. These will be linked to methods of monitoring progress. The College will also explore methods of accreditation of EDs and systems of emergency care.

4 Training, education and research

4.1 The College will introduce a system for recertification of specialist practice in the UK. Recertification will be mandatory for all EPs on the Specialist Register and will be recommended for all career grade doctors working in EDs.

4.2 The College will continue to improve life-long learning through the Emergency Medicine Journal (EMJ), e-learning, continuing professional development (CPD) training, and scientific conferences. The College will work to expand EM research and increase the number of doctors undertaking academic training.

5 Other specialties

5.1 The specialties of EM and Acute Medicine are complementary but not interchangeable. For example, Acute Physicians do not have skills in the management of trauma or children which together comprise 75% of the ED workload. The benefits for patients are maximised in those acute hospital Trusts where the axis between the ED and in-hospital specialties, including Acute Medicine, is defined and the contributions of each specialty recognised to allow the required investment to occur.

6 Northern Ireland, Republic of Ireland, Scotland and Wales

6.1 Healthcare policies in Scotland, Wales and Northern Ireland are diverging from those in England. The Republic of Ireland has always had differences in its healthcare system. The College believes that the basic role and work of EDs is very similar across the British Isles. However, the National Boards of the devolved nations and the Republic of Ireland will develop additional documents reflecting EM policy within their jurisdictions.
Emergency Medicine: “Setting standards for high quality Emergency Care 24/7”

Emergency Medicine (EM) is the specialty which provides immediate care for patients of all ages presenting with illness and injury of all severities. This service is provided in Emergency Departments (EDs) 24 hours a day, every day of the year, by highly skilled and dedicated clinical teams committed to providing the highest quality of care.

EM in the United Kingdom and the Republic of Ireland has evolved rapidly over the past 40 years. Originally, the specialty was known as ‘Casualty’ and patients were seen in Casualty Departments. In the 1970’s, the name changed to Accident and Emergency (A&E) Medicine, provided in A&E Departments. During the past five years, the name of the specialty has changed to EM, and care is provided in the ED. This evolution reflects the modernisation of EM in the British Isles to a world class system of care.

Emergency Physicians (EPs) are the specialists in providing emergency medical care. Training for this role takes eight to ten years after medical school. EPs have a broad and in-depth knowledge of the full range of emergency conditions.

EDs are the hub of the emergency care system. Patients and the public place a high value in this service. It is estimated that one in four of the population will visit the ED in any year (Table 1).

EDs provide care for emergency conditions of all types and for patients of all ages. They serve as an essential safety net for all, and are especially important for disadvantaged groups. Staff in EDs see more children than paediatric departments, more patients with chest pain than cardiology departments, and more patients with injuries than orthopaedic departments (Figure 1).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Total number of attendances in Emergency Departments per annum (2006-2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>England</td>
</tr>
<tr>
<td>Patients</td>
<td>13,400,000</td>
</tr>
<tr>
<td>Departments*</td>
<td>195</td>
</tr>
</tbody>
</table>

*Type 1 (major ED) and Type 2 (specialist ED)

Figure 1

Typical case mix for a general ED
Services to the National Health Service (NHS), UK and Health Service Executive (HSE), the Republic of Ireland

Services in EDs are available 24/7. They provide:

- Emergency care for 200,000 patients per year with life-threatening illness or injury
- Initial assessment and treatment for 3,500,000 patients needing admission to hospital
- Assessment and treatment for 14,000,000 patients treated and discharged
- Training in the care of emergencies for more than half of all doctors in the UK and the Republic of Ireland
- The front line response for major incidents and disasters
- Advice and supervision for staff and 3,000,000 patients in Minor Injury Units (MIU)

What characterises Emergency Medicine?

Clinical

The ED is responsible for the reception, resuscitation, triage, assessment and treatment of patients of all ages presenting with emergency health problems across the full medical spectrum. It provides the initial care for all patients conveyed by emergency (999) ambulance and patients who self-present to the department (emergency ambulatory care).

The workload is unbounded. EDs do not close when they are busy or a certain number of patients have been seen in one day. ED staff are often most busy when other services such as primary care close, especially at nights, weekends and bank holidays. A key mission of EM is the commitment to 24/7 care.

EDs provide and co-ordinate high level critical care for the seriously ill and injured.

Patients who present with apparently “minor” conditions may have unexpectedly complex injuries or illness.* The College does not favour the use of the term ‘minor injury’ or ‘minor illness’ as we believe that all patients need adequate assessment. This ability to adjust the diagnostic process is a key aspect of the skill of EPs.

The ED provides a high quality assessment and initial management service, backed up by 24-hour diagnostic facilities.

EM provides ambulatory care and investigation for patients who previously may have needed hospital admission. Many of these cases can now be managed as outpatients. As part of the drive to improve patient care, many departments also run Clinical Decision Units (CDUs) to carry out more detailed investigations, observations and treatments that might take a few hours. These units allow more time to make decisions in patients where there is uncertainty about the diagnosis, with opportunities for review by senior clinicians.

Pre-hospital care is part of the training of EPs, who make extensive contributions to helicopter services and other immediate care schemes. They are often involved in advising and training ambulance services. EPs frequently provide medical cover for large public and sporting events.

Teaching and training

The ED is the environment where doctors from all specialties learn the immediate care of ill and injured patients. Half of all UK and Irish medical graduates will spend time training in the ED. EPs need to be excellent trainers; EM is one of the leading specialties in life support training.

Planning and prevention

Major disasters are rare. However, when they occur a high level of preparedness is essential. EPs are skilled in the design, implementation and training for major incident preparedness and provide leadership for hospitals in planning for this eventuality.

The prevention of illness and injury is one of the goals of EM. The protection of children and vulnerable adults is an essential skill of EPs. EM has championed a number of safety initiatives such as the compulsory use of seat belts. This area of work is an increasing priority, for example in trying to reduce harm from alcohol.

Research

EM has been at the forefront of the use of evidence, both for policy development and for patient treatment. EPs have training in Evidence-Based Medicine (EBM). The UK has led the way in publishing work on this subject.

EM is a young specialty with a growing national and international reputation for ‘real world’ research into conditions that affect the thousands of ill and injured patients that attend EDs every day.
The College of Emergency Medicine

The College is the single authoritative body for Emergency Medicine (EM) in the United Kingdom. The College was established by Royal Charter on 29 February 2008. It is a charity, with a Membership made up of doctors working in EM or other, closely related specialties, and includes affiliate members from professions allied to medicine.

The objectives of the College are to relieve sickness and promote and protect good health. To accomplish these goals, the College aims are to improve the quality of emergency care by providing training for medical practitioners to the highest possible standards of professional competence in EM, and conducting examinations to confirm that these standards have been reached.

The College makes recommendations to the Postgraduate Medical Education and Training Board (PMETB) for inclusion of EPs on the Specialist Register in EM in the UK. In the Republic of Ireland, training is overseen by the Advisory Committee on Emergency Medical Training (ACEMT) on behalf of the Irish Surgical Postgraduate Training Committee (ISPTC). Higher training in EM follows the College curriculum and culminates in the exit exam. The College also acts as an agent of the ACEMT/ISPTC in carrying out inspections of recognised training posts.

The College maintains a register of members and is developing a register of approved continuing professional development (CPD) activity in preparation for revalidation. Its core responsibility is to provide assurance to the General Medical Council (GMC) that individual consultants in EM have demonstrated the required standard for recertification.

The College provides advice and expertise to the Department of Health, PMETB and all other relevant bodies on matters of education, training, research and clinical practice in EM in the British Isles. It also provides advice to members on individual matters relating to training, and to clinical and professional standards.

It is also the responsibility of the College to set standards of clinical and professional practice in EM in the British Isles and to advise on the facilities required and methods for monitoring these standards. This includes distributing, publishing and circulating information on matters relating to EM to members of the College and to the public.

The College also works in collaboration with other specialist medical Colleges to promote shared training, skills and service provision to ensure delivery of effective health care to the public.

The structure of the College is outlined in Appendix 1 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/
The Core Service

Summary and recommendations

The objective of the College of Emergency Medicine (the College) is to ensure the highest standards of emergency care 24 hours a day for patients of all ages with illness and injury. The resources needed to deliver the core service are listed below. The College believes that these should be in place in all Emergency Departments (EDs) by 2012:

- The presence of a doctor (ST4 or above) trained and experienced in EM 24 hours a day
- Up-to-date facilities for resuscitation, emergency care and ambulatory care
- The ED should be supported by the seven key specialties, but as a minimum an emergency hospital must have an ED, Critical Care, Acute Medicine, laboratory services and diagnostic imaging
- 24/7 access to x-rays, ultrasound and computed tomography (CT)
- Timely support from inpatient teams and efficient procedures for admission to hospital
- A Clinical Decision Unit (CDU) / observation ward
- An up-to-date information technology (IT) and records system linked to the hospital and community care records
- Educational and administrative space within the department

Definition of a core service

Emergency Physicians (EPs) are specialists in the initial assessment and management of the full range of emergency and urgent conditions in patients of all ages. Core elements for an ED service include:

- Resuscitation of patients with life-threatening illness or injury
- The assessment and early treatment of patients with sudden serious illness or injury
- The assessment and treatment of patients who walk into the department with illness or injury (ambulatory care)
- The management of patients requiring a short period of programmed investigations and observation to ensure safe discharge of patients with symptoms that might suggest serious disease and avoid unnecessary hospital admissions
- Strong influence in the management of the emergency care system
- Contingency planning to cope with major incidents or periods of huge or fluctuating demand (such as a flu pandemic)
- Teaching and training doctors and other staff in the care and assessment of the ill and injured patient
- Delivery of an EM service to quality standards - this requires a skilled workforce 24/7, up-to-date facilities and equipment
- Key links to other parts of the emergency care pathway, and timely access to diagnostics, inpatient teams and hospital beds

Workforce

Emergency care has been at the leading edge in the development of multidisciplinary working and there is a strong team ethos in EDs. EDs function best with strong medical and nursing leadership.

The care of sick patients and dealing with difficult diagnostic problems are not roles for the unsupervised junior trainee doctor. The numbers of medical staff must ensure the presence of doctors of adequate seniority, training and experience (the equivalent of UK specialty training ST4 or above) to provide clinical decision making throughout the 24-hour period.

The aim is to have senior ED doctor advice and review for all patients attending the ED. Until there are enough EPs in post to achieve this standard, senior review should apply to all patients in the resuscitation area, those with headache, chest pain or abdominal pain and ill children under the age of five being considered for discharge and unscheduled return attendances.⁶,⁹,¹⁰

Facilities and equipment

As a minimum, the footprint and design of the ED should comply with national standards. In the UK this is the Hospital Building Note HBN22 (many modern departments will exceed this standard) and the College recommends that
this document be updated urgently to reflect modern ED practice. In the Republic of Ireland see Standards for Emergency Department Design and Specification for Ireland, 2007. This should ensure working space for all members of the ED team, patients and their carers; and provide safety, confidentiality, privacy and dignity. Infection control is an increasing priority for the emergency care system; this needs adequate numbers of areas for isolation as more and more patients are being identified as infection risks or at risk from infection. These concerns need to be balanced against the requirement for patient safety, staff safety and adequate areas for clinical staff to complete documentation and discuss cases.

There should be separate areas for children, both when waiting and for treatment. Acutely disturbed patients need specific facilities. There should be a quiet area for the care of bereaved relatives.

Up-to-date resuscitation equipment is essential, with monitoring facilities allowing ambulatory and central monitoring. Where possible, monitoring and diagnostic data collected electronically should be transferred to the electronic patient record.

Core Facilities
Every ED should have:
- Resuscitation area
- Trolley area(s)
- Ambulatory care area
- Reception and waiting area
- Dedicated children’s facilities if the ED sees more than 16,000 children per year
- Rapid assessment and treatment area
- ED CDU/observation ward
- Educational space
- Offices and secretarial space

Details of the numbers of rooms can be found in relevant national standards. The College intends to review the current national standards to ensure that they meet the needs of modern EDs, especially for resuscitation and trolley areas, in the light of the increasing numbers of very ill patients attending the ED.

Diagnostics
There is abundant evidence that the safe delivery of care bundles and pathways needs timely access to investigations. The risks of misdiagnosis of some conditions are too high to be left to clinical assessment alone. Early access to diagnostics can also prevent unnecessary hospital admission.

Pathology
As a minimum point of care testing in the ED should be available to assess:
- Arterial blood gases
- Haemoglobin
- Electrolytes
- Urinalysis
- Glucose
- Lactate
- Pregnancy testing

The ED should agree with the admitting teams the relevant investigations required for the majority of presentations. This will optimise the early ordering of such investigations and minimise unnecessary requests. There should be a reliable method of rapid transport of pathology samples. These must be prioritised by the pathology department as all of these will be urgent requests. Ideally results should be available within one hour. A robust and accountable system of results acknowledgment must be in place.

Diagnostic imaging
Radiographs
The ED must have access to plain radiography 24 hours a day. The images should be available on a digital PACS system for review in the ED and by colleagues in other clinical areas within the hospital, for example intensive care and the trauma and orthopaedic departments. All radiographs must be reviewed by a radiologist/radiographer. Immediate, ‘hot’ reporting is ideal but as a minimum the report should be available for review within 48 hours.

Ultrasound
Ultrasound is now established as a fundamental component of the assessment of the ill and injured patient in the ED. Every resuscitation room should have an ultrasound machine.

Trainees will undergo training in ultrasound as part of their curriculum-based training. ED clinicians will be expected to provide
diagnostic ultrasound in the following situations:

- Focused assessment with sonography for trauma (FAST) scan
- Abdominal aortic aneurysm (AAA) diagnosis
- Central venous access as required by national guidelines
- Foreign body location

In some areas, ultrasound services may be provided by radiology. If this is the case, systems must be in place to ensure a timely 24/7 service.

**Computed tomography (CT)**

The use of CT will inevitably increase during the next few years providing early, prompt and detailed assessment of the undifferentiated patient. The College recommends that the CT scanner should be available within or immediately adjacent to the ED. This facility should be available 24 hours a day. Protocols should be agreed with colleagues in Radiology regarding the referral process for CTs for head injury, stroke, pulmonary embolus, major trauma and abdominal pain. There should be electronic transfer of images for reporting within one hour.

**Magnetic resonance imaging (MRI)**

Access must be available for urgent MRI 24 hours a day for those conditions where immediate surgical intervention may be necessary (for example, spinal cord compression). This facility may be in another unit, but systems should be in place for timely referral and transfer.

MRI of the extremities will provide prompt and detailed assessment of injuries where previously repeat radiographs and clinical assessment was unavoidable. These conditions would include wrist injuries with possible scaphoid fractures, and knee injuries.

**Inpatient support to the Emergency Department**

**Access to inpatient beds**

Patients waiting on trolleys for prolonged periods due to lack of inpatient beds represents sub-optimal patient care. Such delays are an international problem with evidence that patients with prolonged ‘trolley times’ have an increased length of stay in hospital and possibly increased mortality and morbidity. The lodging of large numbers of patients on trolleys awaiting admission (access block) compromises the ability of the ED to treat patients and adds to distress for patients, carers and staff.

There has been substantial improvement in England with a ‘whole systems’ approach to this problem. The four-hour access standard has led to increased ownership of this issue by the whole hospital and community care teams.

However, some parts of the British Isles still have major difficulties and there are concerns about this issue. The problem is at its worst in the Republic of Ireland, where no meaningful standard exists. There are also significant difficulties in sustaining the four-hour standard in many EDs in the UK.

A sustainable system to eliminate delay would require an average bed occupancy of 85%. Realistically, the financial agenda in most acute Trusts will not allow any unused capacity. However, a hospital should have sufficient capacity to deliver the four-hour access standard.

**Supporting specialties**

The supporting specialties required on site to support an ED have been extensively reviewed in previous documents. It remains our view that the required support for the ED 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. This may mean the patient bypassing the nearest ED or clear procedures for rapid stabilisation and summoning retrieval teams if there is a long journey to the nearest appropriate facility.
Where key support services such as Orthopaedics, General Surgery or Paediatrics are not on site, then there is a greater need for more senior EPs to assess, stabilise and treat patients prior to discharge or transfer. There also need to be clear procedures for dealing with common problems, for example, acute abdominal pain and the pyrexial child.

There should be clear arrangements for timely support from psychiatric services.\textsuperscript{17,18}

\textbf{Facilities for transfer}

There should be clear guidelines for referral and transfer of patients to other hospitals. These should be agreed by both the receiving and transferring hospitals. These should cover the information required for referral, documentation, treatments to undertake before transfer, equipment and escorting staff.

\textbf{Information technology (IT)}

EM is an information intensive discipline. We continually gather, integrate, analyse and act on information whether in the clinical environment or in using information to manage and shape services. Such systems should be ED-specific and developed to comply with international interoperability standards as it is essential to share information with other health and social care providers. The IT system should provide:

- Rapid registration
- Electronic access to previous clinical records including ECGs and clinic/hospital discharge letters
- Recording all clinical activity including direct supervision and advice by senior ED doctors
- Direct access to ED clinical guidelines
- Electronic ordering of pathology and diagnostic imaging and access to results
- Presentation specific pro forma
- Prompts to comply with coding requirements including:
  - time seen, admitted or discharged
  - diagnostic coding
  - investigations coding
- Electronic discharge summaries
- E-mail access to general practitioner (GP) surgeries for transmission of ED discharge letters
- Contact numbers for other health care professionals, such as health visitors for child protection issues
- Direct access to clinical databases and reference sources, for example TOXBASE, National Electronic Library for Health
- ED reports for audit and governance
- ED reports for case mix and staff modelling, business intelligence

Accurate real-time data entry does have staffing implications. This process takes longer than traditional methods, especially with the need to train new junior doctors three times a year.

\textbf{Clinical Decision Unit/observation ward}

Patients with many conditions can be safely discharged following a short, intense period of investigation or a brief period of treatment and observation, typically 4-12 hours. Many EDs see such units as an integral part of their work. If the ED does not have this facility then inevitably there will be more short stay admissions to hospital and potentially more unsafe discharges from the ED.

The admissions criteria for short-stay observation should be agreed in conjunction with the inpatient teams and the commissioners/purchasers of the service.

These may include the following:

\textbf{Diagnostic protocols}

- Exclusion of acute coronary syndrome
- Assessment of severe sudden headache
- Assessment of renal colic
- Assessment of possible deep venous thrombosis/pulmonary embolus

\textbf{Observation and risk stratification protocols}

- Syncope
- Transient ischaemic attack assessment
- Head injury care
- Observation following alcohol intoxication
- Non-specific abdominal pain
- Management of self-harm and overdose
- Recovery from sedation
- Elderly patients requiring multi-disciplinary assessment
• Post-anaphylaxis observation
• Post-treatment of pneumothorax

**Short term therapy**
• Mild to moderate asthma
• Low risk pneumonia
• Cellulitis
• Pain control after soft tissue trauma

The CDU will allow the development of protocols linked to ambulatory care in the community for example DVT assessment, pulmonary embolism requiring advanced scanning and cellulitis treatment.

The following principles apply:
• The CDU/observation ward will be run by the ED clinical team
• Regular review by a senior ED doctor is recommended and a consultant-led ward round twice in 24 hours
• Dedicated medical and nursing presence will be required
• The maximum length of stay will be 24 hours, although many patients will stay for less than 12 hours
• All patients admitted to the CDU/observation ward must have a management plan including provisional diagnosis, frequency and nature of observations required and discharge arrangements
• Management of patients in the CDU/observation ward will be protocol-driven
• The area is not to be used by admitting teams as a default for failure in hospital capacity planning
• The College will undertake further work on the staffing requirements for CDUs

**Guidelines**
The ED should develop, in conjunction with the admitting specialties, appropriate evidence-based guidelines. These may be derived from national or international reference sources or adapted locally as required. The guidelines should be available electronically and in hard copy to all clinicians in the department. Revision of the guidelines should occur every two years at least. Compliance with the guidelines should be the subject of the departmental rolling audit programme.

**Prevention, public health and public education**
The ED should lead and co-operate with other services in the prevention of illness or injury. Examples would be referral to falls clinics for the elderly, accident prevention in children, working with police on the prevention of violence and initiatives to reduce harm from alcohol or misuse of drugs. EDs can have a key role in public education but this requires time and resources.
Summary and recommendations

- The primary focus for all Emergency Physicians (EPs) is delivering high quality care in the Emergency Department (ED) and the Clinical Decision Unit (CDU)/observation ward.
- The core skills of EPs provide a solid base for work in many other areas and, where ED staff numbers and the training allow, there are opportunities for extended work both within the hospital and the pre-hospital environment.
- Extra training and education may be needed to work optimally in these other areas.
- EPs make substantial contributions to pre-hospital critical care, event medicine and sports medicine.
- In hospital, increasing numbers of EPs are working in Acute Medicine, Critical Care Medicine or have a special interest in Paediatrics.
- The College of Emergency Medicine welcomes this diversity and the development of portfolio careers.

What is the ‘extended service’?

The training, experience and flexibility of EPs mean that their skills are transferable to environments other than the ED. This is not a new development. Historically, EPs have had important roles in for example, pre-hospital care, event medicine, and sports medicine. However, with increasing regulation and emphasis on standards of training and education, the College wishes to work with other organisations to improve training, education and research in these areas.

Pre-Hospital care

Pre-hospital care is a diverse area of practice. Some of the types of work are listed in Box 1. The College has established a pre-hospital Emergency Medicine (EM) group to advise on matters of training, education and standards.

The most high profile work is pre-hospital critical care, either with helicopter services, hospital-based flying squads or with British Association of Immediate Care Schemes (BASICS). Re-organisation of services will generate an increasing need for retrieval medicine and support for remote departments. The College is working with other colleges and the Faculty of Pre-Hospital Care to set standards for training in these services.

In the past many EPs took an active part in local ambulance services, often through paramedic training. It will be essential that EPs remain involved, especially if ambulance services expand more into clinical decision making roles. Training in clinical diagnostic methods and joint guidelines for clinical pathways will need time and resources.

A few EPs work in senior management roles in ambulance services. This is a sensible bridge between the ED and the community. The College will work with Medical Directors of Ambulance Services to enhance co-operation.

Transfer and retrieval medicine

It is likely that with re-organisation of services there will be a need to transfer more critically ill patients. To minimise risks, this should be part of a well-organised emergency care network. It is likely that the best model will be similar to that of paediatric ICU retrieval teams, where the main centre provides a service to other units. EM doctors already play some part in such services and it is likely these roles will expand. The College will work with other organisations to improve standards of training and service standards for this growing area of practice.

Sports medicine

The assessment and treatment of musculoskeletal injury is a core skill of EM and

<table>
<thead>
<tr>
<th>Box 1 Facets of out-of-hospital EM</th>
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<tbody>
<tr>
<td>Pre-hospital critical care and retrieval medicine</td>
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<tr>
<td>Ambulance service, clinical (including telephone advice), educational and managerial</td>
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<tr>
<td>Event medicine</td>
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<td>Sports medicine</td>
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<td>Military medicine</td>
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<tr>
<td>Voluntary ambulance/ first aid societies</td>
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<td>Expedition medicine</td>
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EPs have extensive experience in this area. One million patients with sports injuries will attend EDs in the UK and Republic of Ireland every year. Most of these are treated in the ED and in ED-run clinics. The College will work with the Faculty of Sport and Exercise Medicine to push forward training and education.

Medical care at events
Many EM clinicians provide medical support for large events. There are now recommendations on training for such work. The College will work with other organisations to improve training opportunities for its members and to agree standards for this work. This will be especially important with the large demands that will be placed on the system by the Olympic Games in London in 2012.

Acute Medicine
The specialties of EM and Acute Medicine are complementary but not interchangeable. For example, Acute Physicians do not have skills in the management of trauma or children which together comprise 75% of the ED workload.

The College view is that:
- EM and Acute Medicine are complementary
- The skills of the doctors in these separate specialties should not be regarded as directly transferable or interchangeable
- EPs undertake the initial assessment and management of the undifferentiated patient and may provide continuing care in a CDU or observation ward for a maximum period of 24 hours, usually then leading to the patient being discharged home
- Our colleagues in Acute Medicine are ward-based, undertaking more prolonged patient management before patients are admitted to in-hospital teams or discharged with arrangements for outpatient review by the Acute Physicians
- Acute Physicians will not have skills to manage 75% of patients who may present to the ED following trauma or who are under 16 years of age
- The College has agreed to the extra training required by those EM trainees who might undertake consultant work on Acute Medicine Units

Critical Care
There are clear synergies between EM and Critical Care Medicine. Increasing numbers of trainees are undertaking further training to obtain a Diploma in Intensive Care Medicine (ICM) and some joint posts between the ED and ICU have been established. With Acute Care Common Stem (ACCS) training in the UK, the College predicts more interest in such joint training initiatives. It may make sense for smaller hospitals to have doctors who have a broader training and competence allowing them to cross-cover departments. The College will continue to work with the Intercollegiate Board for Training in Intensive Care Medicine (ICBTICM) and the Royal College of Anaesthetists (RCoA) in this area.

Sub-specialty Paediatric Emergency Medicine
The care of children with emergency and urgent care needs is a core skill of all EPs. However, for the past seven years there has been the opportunity for trainees to obtain further training in Paediatric Emergency Medicine (PEM), leading to the registration of PEM as a sub-specialty interest. Over 100 trainees have undergone this training. These doctors take the lead for children’s issues in the ED, including links to child protection, training, education and cross-service guidelines.

The College recommends that every ED with more than 16,000 children’s visits per annum must have minimum of one PEM-trained consultant. All EDs should have a named consultant who leads for children’s issues in the department.

Hospitals may run short stay observation units for children. EPs can help in staffing and running these units.

Where an ED sees more than 16,000 children per annum and there is inpatient Paediatrics, there should be one PEM-trained consultant from an EM background and one PEM consultant from a Paediatric background.

The majority of children attending an ED come with injuries. It is more logical and efficient to site the Paediatric ED with the main ED than within the children’s hospital ward. Those cases requiring resuscitation and major trauma cases will be brought to the main ED resuscitation room so co-location of the Paediatric ED is the optimum configuration.
Unscheduled primary care

Primary care liaison

There is great benefit from having dedicated time for this role. The development of pathways, communication and case work around frequent attenders will all have a positive impact on the primary care/ED interface.

GP out-of-hours service

This is an area where there are new models of care being proposed. If a health community needs a primary care centre for out-of-hours work, then there is sense in co-locating such primary care centres near the ED. EPs have many of the skills required for the assessment and treatment of urgent and emergency conditions. EPs may find they increasingly work in this area. The College wishes to work with the Royal College of General Practitioners (RCGP) and to improve standards of training in this area.

Urgent Care Centres (UCC)

The definition and purpose of UCCs and polyclinics is unclear at present and subject to debate. The College has clear views that the ED already fulfils many of the functions of an UCC and therefore there is no clinical reason for locating such facilities in front of an ED. We find the term ‘Urgent Care Centre’ misleading with no clear definition of the case mix, staffing or how they relate to the ED. There is no evidence of the clinical or financial benefits of this model. The College has issued a position statement on this subject and views such proposals as clinically unproven and against the principle of patient choice of access to proper emergency care. A toolkit to assess the governance and business plans for such centres has been developed (see Appendix 6 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/)
The Emergency Care System

**Summary and recommendations**

- The Emergency Department (ED) is the hub of the emergency care system.
- Deficits in primary care or community services will increase ED workload.
- Timely and efficient procedures for admission to hospital are essential to prevent ED overcrowding.
- Demands for emergency care are increasing annually and the current emergency care systems are working near the limits of capacity.

**Scope of the emergency care system**

The emergency care system is a continuum providing patient care from an urgent in-hours GP appointment to the complex care of a critically ill patient, including the community, ambulance, ED and hospital inpatient response. Social and psychiatric services are increasingly important parts of the system.

Any changes to the emergency care system must be planned thoroughly and be based on the best current evidence. The ED should lead local and regional emergency care networks to bring about appropriate change.

Vast numbers of patients use the urgent and emergency care system, summarised in Figure 2. There are about 80 million urgent contacts with general practice, 13 million ED visits and six million visits to Minor Injury Units/Walk-In Centres in England each year.

The ED is at the hub of the emergency care system spanning the interface between the community and the hospital. Given its central role, the ED must lead the organisation of the emergency care system. No ED can work in isolation. Delivering the best care is dependent on good co-operative working between services across the system. Recent small shifts in workload from one service, for example primary care (in some areas) may have implications for other services in those systems.

Figure 2 shows the overlap and number of interfaces between services. Given the volume of care and the number of organisations providing that care, it is remarkable that it seems to work most of the time. However, this emergency care system is operating at the boundary of safety and sustainability and is thus susceptible to destabilisation by relatively small changes in demand or supply. Any changes to emergency care systems need to be well planned and managed, and based on the best available evidence, including the clinical effectiveness and cost effectiveness of suggested alternatives to the ED.

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**Figure 2**

The workload of the emergency care system (from Acute Health Care Services, AoMRC)
The organisation of emergency services

Reorganisation

Possibly more has been written on the subject of reorganisation than any other aspect of emergency care. It is clear that ‘one size does not fit all’. The position of the College remains that as stated in chapter 5 of the previous Way Ahead. However, there is now some evidence to support this position.

- Where small/medium EDs are geographically close (within 10km), a more coherent emergency service may be possible by amalgamation.
- Between 10-20 km the local health communities will have to make a judgement on the balance of risk of having ill patients travel further against the benefits of centralisation.
- Where the next nearest ED is more than 20 km away there is a strong argument for retaining an emergency service.
- Any change in organisation should be on the basis of an assessment of the balance of risk with proper planning on how medical admissions will be managed.

For a tiny number of patients with serious trauma or ST elevation MI (STEMI) there is a need to centralise services, but the clinical case is not made for the vast majority of ED care. Indeed there is some evidence that mortality increases for some types of severely ill patients who have to travel longer distances. It would greatly increase the carbon footprint of the NHS to adopt widespread centralisation.

There are real challenges in delivering high quality care to remote pockets of population. This is more acute in Scotland, Wales and Ireland. The College has described how emergency care can be sustained in less than ideal circumstances. The Irish Association for Emergency Medicine has expressed its views on reconfiguration of Emergency Services in Ireland in its document IAEM position paper on Reconfiguration and/or Regionalisation of Emergency Services (January 2008): http://www.iaem.ie/reconfig.pdf

ED overcrowding

ED overcrowding is a symptom of the poor functioning of the whole emergency care system. Solutions must be across the whole system and not focus solely on the ED.

Patients waiting on trolleys for prolonged periods due to lack of inpatient medical beds does not represent good quality patient care. This is an international problem with evidence that patients with prolonged ‘trolley times’ have an increased length of stay in hospital and possibly increased mortality. The lodging of large numbers of patients on trolleys waiting for admission (access block) compromises the ability of the ED to provide optimum care for patients. It also adds to distress for patients, carers and staff. There has been substantial improvement in England with a ‘whole systems’ approach to this problem. The four-hour access standard has led to ownership of this issue by the whole hospital and the community care teams. However, some parts of the British Isles still have difficulties with ‘inpatient boarders’ occupying inpatient beds for social or non-medical reasons effectively blocking access for new admissions.

Overcrowding is at its worst in the Republic of Ireland, where no meaningful access standard exists. There are also significant difficulties in sustaining the four-hour standard in many EDs in the UK. A sustainable system to eliminate delays would require an average bed occupancy of 85%. Acute hospitals should have sufficient capacity to deliver the four-hour access standard of 95% of patients admitted within four hours of arrival. The College recommendation of 95% differs from the DH England policy of 98%. However, the College is in line with policy in Scotland, Wales and Northern Ireland.

The College is aware of evidence that the pressures on ED, in-hospital teams and hospital managers to achieve this standard consistently result in compromises which affect the quality of care provided, for example patients being moved from the ED prematurely to satisfy the four-hour standard criterion. Adoption of the 95% standard would continue the high profile expectations of efficient emergency care and also ensure that the quality of emergency care was not compromised.

The ED and primary care out of-hours / NHS Direct

The patient’s primary care team

There are a large number of urgent contacts that are managed by primary care. Patients want good access to their own primary care practice. However, there have been increasing problems with timely access in some areas.
The College feels that widening access to the patient’s own primary care team would be an important step, for example Saturday opening for urgent as well as routine appointments, in improving the urgent care system. The College view is that health care systems should build on this key service. This is especially true for the community care of frail elderly, those with acute exacerbations of chronic disease and children with acute illness.

Out-of-hours services

There are some excellent examples of co-operative working between the ED and out-of-hours services. The College believes that co-location of out-of-hours primary care services is sensible. However, this is different from placing a UCC in front of the ED doors to ‘filter’ patients, mainly for financial reasons.

NHS Direct

There is now a significant amount of evidence that the presence of NHS Direct in the UK has not reduced ED attendances. It has created a huge demand, but not from those who have serious emergency problems. Those patients referred to the ED by NHS Direct tend to have less serious problems than those coming from other routes. A suggestion to develop a similar system in the Republic of Ireland is likely to have similar results. Clearly telephone advice and triage has now become an expectation but policy makers should be clear that it is not a substitute for the true emergency system or the ED.

The emergency care network

The College recommends that regional/national health authorities set up active emergency care networks, preferably led by EPS. The networks should have real influence in process managing emergency care in that region. They should:

- Recommend the best distribution of acute care services, including acute hospitals
- Ensure proper organisation of regional trauma services
- Ensure proper organisation of regional paediatric services
- Ensure proper organisation of regional services for STEMI
- Ensure proper organisation of regional retrieval services
- Facilitate network working on a ‘hub and spoke’ model for some services
- Monitor outcomes and process measures for emergency services

The tasks listed above will need time and resources if these bodies are to function. They should report to the Board of the Strategic Health Authority (SHA) (England) and to Health Departments/Executives in Northern Ireland, Scotland, Wales and the Republic of Ireland.
Clinical standards
A number of clinical standards have been developed by the College Clinical Effectiveness Committee. The Committee has also developed audit tools for some of these standards in partnership with the Healthcare Commission (HCC). They are chosen to reflect common conditions and sample the clinical practice of the Emergency Department (ED) across the main domains of Emergency Medicine (EM) practice. Full details are available in Appendix 2 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/

Clinical standards include:
- Myocardial Infarction
- Major trauma
- Pain management (audit tool)
- Fractured neck of femur (audit tool)
- Dislocated shoulder
- Advanced life support
- Asthma in adults and children
- Paracetamol overdose (audit tool)
- Fever in children
- Radiology
- Retention of urine (audit tool)
- Pneumothorax in adults
- Head injury

Pathway standards
- Ambulatory patients who present at an ED should triaged by ED staff. They should not have to pass any ‘primary care filter’
- Patients brought to hospital by emergency (999) ambulance should be seen in the ED unless there are specific protocols regarding other destinations (for example, direct transfer to the catheter laboratory for STEMI)
- Hospitals should have enough inpatient capacity to ensure that patients are not kept waiting for admission to a hospital bed
- In England, the current access standard for treatment of 98% of patients admitted or discharged within four hours might be seen as an aspirational standard. However, a standard of 95% of patients admitted or discharged within four hours has more clinical, operational and financial logic. It is more likely to be sustainable.
- In the Republic of Ireland a 100% six-hour standard has been proposed by the ED Taskforce Report published in June 2007

Clinical expertise
- By 2012, EDs in the UK should be staffed by a doctor trained to ST4 level or above, 24 hours a day, seven days a week
- Unselected patients presenting to a hospital with an ED should have the choice of being seen in the ED. Patients with less acute illness may be more appropriately seen by a co-located primary care ‘out-of-hours unit’
- Assessment at the ‘front door’ should be performed by experienced ED clinicians and patients directed to the most appropriate practitioner
- Every ED with more than 16,000 children’s visits per annum must have a minimum of one Paediatric Emergency Medicine (PEM)-trained consultant. It is recommended that all EDs should have a named consultant who leads on children’s issues in the department

Specialty support
- The optimum support for an ED consists of seven key specialities of Acute Medicine, Critical Care Unit, diagnostic imaging (including 24-hour CT), laboratory services including blood bank, Paediatrics, Surgery and Orthopaedics
- The absolute minimum support for the ED is 24-hour on site Acute Medicine, Intensive Care/Anaesthesia, diagnostic imaging (including 24-hour CT) and laboratory services, including blood bank
Summary and recommendations

- The Emergency Medicine (EM) curriculum is up to date, evidence-based and founded on the principles set out by the Postgraduate Medical Education and Training Board (PMETB).
- EM training in the UK has recently been changed to provide learning environments where doctors will learn the skills that the NHS will need to run a modern emergency care system. It will take a minimum of six years after Foundation training to complete this specialty training.
- Schools of EM will run local training programmes, monitor trainee progress and quality assure training placements.
- Trainers need scheduled educational time to undertake workplace-based assessments as recommended by specialty schools and PMETB.
- Schools of EM should provide a focus for development of staff grade and associate specialist (SAS) doctors and local continuing professional development (CPD).
- The examination for Membership sets the level of competency expected for doctors who will be able to perform at middle grade level in EM in the UK and the Republic of Ireland. It is founded on educational principles and evidence from research and is regarded by those sitting the exam as fair and relevant to EM practice.
- The examination for Fellowship sets the level of competence expected for doctors who will undertake consultant roles within the ED. It tests a wide range of competences including clinical, academic and managerial skills.
- These exams are backed by workplace-based assessments and yearly assessments of progress, all contributing to what is a robust assessment package for EM training.
- A key objective of the College is to provide more support and development for trainers.

The curriculum

The EM curriculum (http://www.collemergencymed.ac.uk/asp/document.asp?ID=4383) has been in place since 2006. The curriculum describes the knowledge, skills and attitudes needed for future consultants. It also describes the assessment tools that are used to ensure trainees meet these standards. The knowledge base required for basic sciences that underpin EM practice has been developed using results from ground-breaking internationally recognised research. The curriculum is central to successful EM training and practice. Both trainers and trainees need to be familiar with the content of the curriculum as it continues to evolve to reflect EM practice and how we can best meet the needs of our patients. It is not anticipated that there will be major changes to the content of the curriculum over the next five years.

New skills have been added to the curriculum and by 2012 all those completing their training at that time will have advanced airway skills and ultrasound skills.

Assessment processes

The College seeks to ensure that individual doctors meet the required standards by a process of continuous assessment using work-based tools, yearly reviews of progress and examinations. The examinations are aimed at assessing competence at two levels, the first level assessing competence to act as the experienced doctor in the department (MCEM), the second to act at consultant level (FCEM).

The examination components continue to evolve, but it is intended to consolidate the process that has been undertaken so far rather than to introduce new changes. Rigorous quality assurance will continue and be supported by educational research.

The examination for Membership (MCEM)

The Membership examination tests basic science and clinical knowledge (Parts A and B). Part C tests the application of clinical, communication and team working skills in an objective structured clinical examination (OSCE). Research has shown that candidates judge the exam to be fair and to be relevant to clinical practice.

The pass rate in the Part A needs to improve and the specialty will need to support
trainees by the provision of courses, past questions, and guidance. Parts B and C will remain largely unchanged.

**The examination for Fellowship (FCEM)**

The final examination will be refined, with increasing modularisation of the academic part of the exam. From late 2009, critical appraisal assessment will take the form of a written exam and it is intended to allow trainees to take this component before or during the final exam. There will not be a critical appraisal viva by the end of 2009. It is also intended that within the OSCE section patients with clinical signs directly relevant to EM will play an important part, in addition to the existing use of actors and simulators.

The examinations must reflect EM clinical practice. Thus the examination process will reflect the severity, frequency, reversibility, morbidity and mortality of the conditions experienced by patients cared for by Emergency Physicians (EPs). PMETB requires that the College reports the results of each of the component parts of MCEM and FCEM exams, by Deanery from autumn 2008 onwards.

The training programme for EM has been extensively reformed over the past three years. The objective of this reform was to produce doctors with the skills that we predict the modernised NHS will require. Therefore, there is greater emphasis on high level Critical Care skills and Acute Medicine skills, reflecting the change in case mix attending the ED. The aim is to equip EPs with a level of skill that will allow more self-sufficiency in the initial care and stabilisation of seriously ill or injured patients. Equally, the training continues to include ambulatory care of patients with injuries and illnesses recognising that we are key to the safe provision of care for these conditions 24 hours a day.

After the two years of Foundation training, EM training will take a minimum of six years. Entry into higher training (year four to year six) will be by competitive entry. The minimum criteria for entry into higher training will be evidence of satisfactory competences gained in the Acute Care Common Stem (ACCS) and core training (CT3) periods. This evidence should comprise appropriate workplace-based assessments, yearly reviews of progress and success in the MCEM examination (Figure 3). It is possible to take time out to gain experience in focused areas or to travel during higher training, but such time must be recognised prospectively by the Postgraduate Medical Education and Training Board (PMETB).

Those clinicians in fixed-term specialty training appointments (FTSTAs) and SAS posts wishing to pursue a career in EM should adopt the same educational goals and competences as those within training programmes.

**Acute Care Common Stem (ACCS)**

The ACCS programme is central to the development of the specialty. The College hosts and chairs the Intercollegiate Committee for ACCS training. Close working with the other specialties that run ACCS programmes is important in the development of this initiative.

**Career grade pathways and support for SAS doctors**

SAS doctors and those in other career grade posts form a key component of the EM workforce. The College processes are based on national and regional Boards that include a SAS grade doctor. Sixteen EM doctors working in SAS posts have successfully gained entry to the Specialist Register by gaining a certificate of eligibility for specialist registration (CESR). Doctors in these posts who are working towards CESR have the same educational requirements as trainees in formal training schemes. They are strongly recommended to adopt the same educational goals using the College curriculum and assessment tools such as workplace-based assessment. The process is exacting and any SAS doctors wishing to train towards this process are strongly advised to seek advice from local EM trainers. The major changes to the SAS contract will impact on EDs and the College is committed to providing appropriate CPD for these doctors working in the ED.

**Schools of Emergency Medicine**

The College has strongly recommended that local schools of EM are established within the Deanery structure. This has now occurred in most regions in England. These will act as a focus for training and education for all EM doctors, including SAS doctors.

Alternative models to EM schools must have strong educational leadership by EM clinicians. Schools of EM will run local training programmes, monitor trainee progress and quality assure training placements. They should provide a focus for development of SAS doctors and local continuing professional development (CPD).
2009 ST4 entry: Competitive entry if completed at least 24 months in recognised training posts and 4 out of the 6 elements that make up the first 3 years of EM training**
Full *MCEM + 3 life support courses.

2009 CT3 entry: Competitive entry if completed at least 18 months in recognised training posts and 3 out of the 6 elements that make up the first 3 years of EM training**
*MCEM A + 2 life support courses.

2009 CT2 entry: Competitive entry if at least 12 months in recognised training posts and 2 out of the 6 elements that make up the first 3 years of EM training**
No exam required + 1 life support course.

*Trainees who plan to enter training at any level in 2009 must pass the MCEM exam to progress through to ST4 training. Alternative exams will not be acceptable.
**The 6 elements of training are EM, AM, Anaesthetics, ICM, PEM and MSK.
***The availability of time-limited posts will vary regionally.

*Please note the information contained here is correct at the time of going to press. Please check the website http://www.coliemergency.med.ac.uk for the latest information.
Trainers
The College recognises the pivotal role of trainers in the delivery of the training programme. The College intends to help trainers by:

- Providing national training days which will focus on the assessment process, the important role of the educational supervisor and Annual Reviews of Competence Progression (ARCP)
- Providing help to become more effective teachers within our day to day practice
- The greater provision of educational support in the form of e-learning and study days, run both at the College and regionally

It is anticipated over the longer term that there will be a trend toward trainee summative assessments being undertaken regionally. Thus, the intention is to support each region in developing a larger cohort of examiners who can undertake such assessments and would also participate in the College examination process.

The input of other specialists to our training programmes is very helpful. However, only EPs have a true understanding of the issues that face EM. EM will need to become more self-reliant in providing its own training.

The College supports the adoption of new knowledge, skills and techniques that have been shown to improve the care of our patients and supports, for example, the increasing use of ultrasound and greater airway expertise. It can be expected that new areas will emerge (for example, focused echocardiography) that will require additional training and support.

Each training centre can anticipate that they will need to demonstrate their effectiveness against standard criteria. More time will be needed for training; for its provision, assessment and organisation. The protection of that time against a background of service demand is central to training and the maintenance of training standards. This must be reflected in job planning for both existing consultants and future appointments. It may be that in the future, some departments elect not to deliver specialist training but to focus on providing clinical care with senior ED doctors (consultant and SAS) whilst other departments concentrate on providing the highest possible standards of training alongside clinical care. Sufficient resources must be provided for each model.
Continuing Professional Development and Revalidation (UK)

Summary and recommendations

- Continuing professional development (CPD) is an essential and integral part of practice for all trained doctors in Emergency Medicine (EM)
- The College will set up systems for the provision of, and easy access to, CPD to help maintain standards of clinical practice for all trained doctors in EM
- The College will set up systems to encourage life-long learning in EM
- The College will set up processes to allow recertification of specialist practice

Revalidation

Revalidation is a single process with two components and will be a legal requirement that all doctors will undertake. The two components are:

Relicensure

All doctors wishing to practise in the UK will require a licence to practise. As a first stage, the General Medical Council (GMC) will issue these licences to practise as soon as it is practicable to do so. It is likely that this will be based on a revised system of annual appraisal.

Recertification

This will require all specialists in EM to demonstrate that they continue to meet the standards of practice for EM. This will be a positive affirmation of the doctor’s entitlement to practise, not simply an absence of concerns. Recertification will be carried out at regular intervals of no more than five years. Where possible, it will coincide with relicensure.

All medical Royal Colleges are working together to develop recertification under the auspices of the Academy of Medical Royal Colleges (AoMRC). Although some aspects of revalidation will be introduced by 2010, the detailed development will be a longer process.

The College and recertification

It is the College’s view that this process should apply to all doctors working in career grade posts in EM. However, at present the legal position is that it will apply only to doctors who are on the Specialist or General Practice Registers. The legislation states:

‘The process will be carried out by the relevant medical Royal College, and renewal will be based upon a comprehensive assessment against the standards drawn up by that college. Recertification will be contingent upon the positive statement of assurance by that college to the GMC.’

The College will be the organisation responsible for recertification of doctors on the Specialist Register in EM. Its role in recertification, as with other colleges, is:

- To set educational, professional and clinical standards for the specialty, thus encouraging good medical practice and standards of care
- To develop and pilot methods to demonstrate a practitioner’s fitness to practice, both professional conduct and clinical competence, against the specialty standards
- To provide a statement for the GMC assuring that an individual specialist has demonstrated fitness to practice

To provide for recertification there are a number of current projects:

Setting professional standards in EM

The College is defining clear, unambiguous standards relating to the practice of the specialty. These will be achievable standards that are credible and applicable to EM clinicians.

Definition of methods and evidence used to demonstrate specialist practice

Building on a prior survey of Fellows, the College will identify methods to demonstrate fitness to practice, utilising tools that are validated and acceptable to the EM clinician. Such tools may include a multi-source feedback peer review, evidence of e-learning and the contents of an e-portfolio.

Development of a specialist e-portfolio

Working with the Academy of Medical Royal Colleges (AoMRC) and NHS Education for Scotland (NES), a portfolio for consultants will be developed and piloted.
CPD recording and monitoring
The College will continue to provide an electronic recording service, monitoring of and advice on CPD.

CPD provision by the College
The College is undertaking a mapping process to ensure education can be accessed on all sections of the curriculum. This includes ensuring that the conference and CPD days complement each other and cover the core curriculum over a five-year cycle.

On average, three CPD workshops per year will be held at the College home, Churchill House, covering various topics on the curriculum; in the future, these will be linked to e-learning.

Approval for CPD
The College has re-instated the process for approval of courses and conferences for CPD credits. This does not mean that any particular course is endorsed formally but that it would be suitable for self-directed learning. There is a method for courses to be reviewed by College Council members and formally given educational approval. Examples of these are the advanced airway course and ultrasound courses.

Revalidation in the Republic of Ireland
The enactment of the Medical Practitioners Act 2007 will require those on the Specialist Register, including those on the division of EM, to revalidate periodically in order to retain their specialist registration. While the exact process is at this stage uncertain, it is likely to be similar to that which applies in the UK. The College will work with colleagues in the Republic of Ireland to ensure that the process and the requirements are appropriate for EM.
8 e-learning Strategy

Summary and recommendations

- ENLIGHTENme is a large project aimed at delivering e-learning at Foundation doctor level, EM specialty trainee and senior levels. The project will also deliver an electronic knowledge bank of e-links to papers, websites, guidelines, images and other educational materials.

- These developments are in addition to existing resources such as the Emergency Medicine Journal (EMJ) and British Medical Journal (BMJ) learning and St. Emlyn’s: http://www.stemlyns.org.uk

Introduction

A central objective of the College of Emergency Medicine is to deliver high quality education to its Members and Fellows with the aim of improving the delivery of emergency care. The impact of the worldwide web has created a range of opportunities to deliver such education in an innovative and creative fashion by building virtual learning environments (VLEs) with increasing levels of sophistication.

The College e-learning strategy - the ENLIGHTENme project

Over the past three years, the College has developed an integrated web-based strategy - the Electronic Learning Initiative for Emergency Medicine (ENLIGHTENme) project. The project has four key strands which are being launched in a phased manner.

e-learning for healthcare (eLfh)

This is a three-year collaboration with the Department of Health (England) which began in April 2008 and aims to develop and launch over 1,000 sessions mapped specifically to the College’s curriculum. Each session will be structured to be interactive and allow self-evaluation for trainees in EM. Each series of sessions will be developed to complement the trainee’s regional ‘face to face’ continuing educational programmes and support the acquisition of competences through workplace-based assessment (WPBA). Phase one of this six-phase project will be launched in 2009. The overall project is due to be completed in mid-2011.

Doctors.net

This collaboration was launched in May 2008 and is aimed primarily at Foundation year doctors and ST1 doctors in the UK or Senior House Officers in the Republic of Ireland working in the Emergency Department (ED). The eventual aim is for a series of over 100 modules intended to cover the key topics required for the most junior doctors working in the ED. The materials will also be freely accessible and applicable to other doctors involved in acute and emergency care. The College will also provide materials to allow consultants in EM to tailor their local teaching programmes to complement the materials within this strand.

CPD support for Fellows and Associate Fellows of the College

A partnership with BMJ Learning has led to the launch of the Emergency Medicine channel in May 2008. A series of interactive modules will steadily expand to provide up to date CPD to help meet the needs for recertification and revalidation in the future.

e-learning hub

The College has appointed an electronic publishing house, the Deeson Group, to help it build the ENLIGHTENme hub and knowledge bank. This platform will evolve into a high quality evidence-based reference source and interactive learning environment that will link the three strands of the project. This will be launched in 2009 and steadily expand over a three-four year period.

The overall project is a highly ambitious effort by the College to build a learning environment that is tailored to the needs of the various groups of doctors working in EM in the UK and Ireland.

Local examples of virtual learning environments (VLEs)

Groups in Manchester, Liverpool and Leeds have developed experience and expertise in building e-learning environments for their EM trainees. The most advanced of these local solutions has been the St. Emlyn’s website in Manchester. This experience is valuable for the local trainees and also allows this vision to develop for the national project. In the long term, centres and regions will have opportunities to expand their local VLEs and link them to the national programme, as well as tailoring aspects of the national strategy to their local needs.
Summary and recommendations

- The medical workforce in the Emergency Department (ED) is undergoing significant change
- The current model where the majority of care is being delivered by inexperienced junior doctors is inappropriate
- The College recommendation is that patient care will be directed by experienced senior ED doctors supported by junior medical staff. This would still provide a superb training environment for junior doctors and ensure the delivery of high quality care for patients
- It is an aspiration that all EDs will have 24-hour cover by experienced EM medical staff
- This model requires a significant expansion in the numbers of experienced decision makers to be available 24 hours a day, seven days a week, and will not be deliverable in smaller hospitals
- Numbers of consultant staff per unit will depend on the type of service required. Small departments should have a minimum of four consultants, medium-sized departments, eight, and large departments with a heavy, complex workload, sixteen consultants
- A minimum of sixteen whole time equivalent (wte) consultants are required to staff a 24/7 rota. Four wte consultants will be able to schedule clinical cover within normal working hours and three hours Saturday and Sunday. Six wte consultants should be able to provide twelve hours daytime cover on weekdays and six hours at weekends

Introduction

Proper staffing of the ED is the single most important factor in providing a high quality, timely and clinically effective service to patients.

This document is written at a time of change and uncertainty in the NHS. There seems to be an NHS policy imperative to introduce alternative (non-medically trained) providers into emergency care. We are in the middle of a major change in doctors’ training programmes and all the upheaval in traditional staffing patterns that this entails.

The volume and complexity of the work of the ED continues to increase. Much of this clinical burden is falling to senior trainees, staff grade and associate specialist (SAS) doctors and consultants. We now have evidence that junior doctors are seeing fewer patients, feel less confident and require more supervision. The challenge for the future is to provide a high quality clinical service that is based on trained staff but is also cost-effective and competitive in what might be a medical market-place.

Box 2  The political and clinical face of emergency care is being shaped by a number of government policies that will present major challenges to the present structure of EM.

- The NHS Next Stage Review
- European Working Time Directive (EWTD)\textsuperscript{33}
- Modernising Medical Careers\textsuperscript{34}
- The new contract for General Practitioners\textsuperscript{35}
- The new SAS contract\textsuperscript{36}
- The move by many commissioners to seek alternative providers for high volume, low acuity work (‘cherry picking’)\textsuperscript{37}

The pressures imposed on the provision of emergency cover in acute hospitals by the European Working Time Directive (EWTD)\textsuperscript{33} and changes to training and education will pose great challenges to all hospitals but will have particular implications for smaller units.

Definitions

**Senior Emergency Physician**

An EM consultant, a doctor on the specialist register for EM, an associate specialist or SAS grades 9-11.

**Middle grade Emergency Physician**

A doctor with the equivalent of training in EM at ST4 level or above. These doctors may be senior EM trainees or SAS grade doctors in grades 4-8.

The EM staff defined in the two headings above provide the senior medical workforce for the ED.
Junior doctor
Those post-registration doctors who have less than three years’ training in EM or EM-related specialties.

Nurse Practitioner
An EM nurse who has undertaken formal training in the ambulatory care of patients with injury (and/or illness) and has had an assessment of competency allowing a degree of autonomous practice.

Workforce planning
Over the past four years, the College and the British Association for Emergency Medicine (BAEM) worked with the Department of Health (DH) England to develop a model of planned consultant expansion to meet a level of service with consultant presence 18 hours a day in most departments. Until the implementation of Modernising Medical Careers (MMC) in 2007, the agreed targets were to have trained 1700 consultants by 2017.

In planning for MMC, the College put forward detailed numbers for entry into specialist training. However, our policy of limiting training places to meet agreed consultant expansion had no support from MMC, junior doctors (including the Junior Doctors’ Committee and the Academy Trainees’ Committee) and most other colleges.

The numbers entering EM training in 2007 were approximately double that advised by the College. This will mean that by 2012 there will be approximately 1500 CCT holders. While it is clearly good for patients and the service that there will be so many trained doctors available, it is going to be a challenge to expand the numbers of consultant posts at this rate. The College will continue to lobby for consultant expansion.

Current workforce
In the autumn of 2007, the Healthcare Commission (HCC), in partnership with the College, carried out an extensive survey of Type I EDs in England. Data are available for 199 EDs. A summary of the current medical workforce is given in Table 2.

In addition there were 1,272 Emergency Nurse Practitioners (ENPs); 417 of these were single role ENPs. The remainder undertook dual roles of ENP and ED senior nurse. This would mean that about 5,500 wte staff were in clinical decision roles. These departments saw 13.7 million patients giving a rate of 2,500 patients per year per clinical decision maker. These numbers do not include the work of locums and other non-standard grade doctors.

There were 128 Minor Injury Units (MIUs) returning data, staffed by almost 800 wte nurses at band 5/6/7 (also 48 doctors). These departments saw 1,340,000 patients in 2007. This would give an estimate of 1,500 patients per nurse per year (about one patient per hour).

What skills are needed to staff an Emergency Department?
The first step in planning the staffing of any organisation is to carry out an analysis of the skills required.\(^2\) Please refer to Appendix 3 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/. The delivery of high quality EM now requires senior ED doctors to be available 24/7. This opinion is reflected in recent reports

Table 2: Type 1 EDs medical workforce whole time equivalents (wte), England, Autumn 2007

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Number</th>
<th>GRADE</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>753</td>
<td>ST3</td>
<td>125</td>
</tr>
<tr>
<td>Associate Specialist</td>
<td>107</td>
<td>ACCS</td>
<td>131</td>
</tr>
<tr>
<td>Staff Grade</td>
<td>567</td>
<td>VTS</td>
<td>515</td>
</tr>
<tr>
<td>Clinical Assistant</td>
<td>122</td>
<td>FY2</td>
<td>1024</td>
</tr>
<tr>
<td>Trust Grade</td>
<td>434</td>
<td>FY1</td>
<td>118</td>
</tr>
<tr>
<td>GP</td>
<td>47</td>
<td>FTSTA</td>
<td>196</td>
</tr>
<tr>
<td>STIR</td>
<td>539</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
by NCEPOD\(^4\) and CEMACH\(^9\). Currently about 50% of EDs have 24-hour ‘middle grade’ cover.

The College estimates that by 2012 there should be enough consultants, SAS doctors and senior trainees to provide this level of service.

**Models of EM consultant working**

*Command and control model*

In this model the main role of the consultant consists of clinical activity including direct patient care, supervision and team leading in addition to teaching, clinical governance, management and administration. This traditional model needs to be reviewed due to increasing complexity of clinical work, the level of training and skills required to deliver high quality emergency care and an increasingly less confident junior medical workforce. The College recommends that departments should move away from this model. This will pose challenges for smaller departments (see rural hospitals) where the burden of administrative work remains relatively high but shared between fewer consultants.

*Clinical manager model*

In this model the main role of the consultant is directing junior staff, actively ‘signing off’ treatment plans and the management of patient flows around the department. This is becoming the work pattern in large multi-consultant departments.

*Clinical decision maker model*

As consultant numbers increase, this model will characterise a larger part of the consultant role. A consultant, with a full team of nursing and other support staff, can be highly efficient. This is a role that all consultants would undertake but to use them in this role exclusively is not the best use of a consultant’s skills. Given the current numbers of consultants and expected rates of consultant expansion it is impossible to envisage a fully consultant-provided service.

*Part-time working*

EM is especially suited to doctors who wish to work on a part time contract. With more multi-consultant departments and more shift work, the trend to less than full time working will increase. The College will appoint an advisor for flexible working.

**How should we calculate staffing needs?**

Previous estimates of workforce were based on a model of a junior-doctor delivered service. While junior doctors still see significant numbers of patients, more patients are being seen by trained staff including consultants, SAS doctors, senior trainees and ENPs. It is vital that the appendices on workforce are taken into account when using this section.\(^{38}\)

It would be ideal to have a measure of the added quality value of senior EPs. However, in common with many other specialties, managers and commissioners still think in terms of numbers of patients seen and outputs achieved. While some progress is being made in whole department quality issues – such as assisting patient flows, training, admission deflection and early identification of serious disease – the numbers of patients seen remains a fairly ‘hard’ measure of workload. The number of patients seen by any single grade of staff appears to be very variable.\(^{39}\) It depends on the case mix, the working style of the department and the support available to the decision making clinician.

The working patterns of consultant EPs are complex. On the lowest level of individual patient contact, consultants are clinically responsible for the care of all patients seen in the ED. This might mean being responsible for the care of 10,000-12,000 patients per year per consultant. While working in the department they give direct advice on the care of many cases, perhaps seven patients per hour. In a fully supported ‘see and treat’ role they might see six to eight patients per hour (this does require a lot of support from extra nursing and staff able to transcribe, in real time, dictated clinical notes). If working in the Majors area, a senior ED doctor might see three to four patients per hour with others carrying out instructions. However, working as individual clinicians with minimum nursing support with no junior staff or clinical support staff they might see only two patients per hour. This is summarised in Figure 4.

Any workload calculations need to take into account the type of work practice and the level of support available.

**Workforce evidence**

*General data*

A detailed workforce study of EDs, MIUs and WiCs in England was undertaken by the Healthcare Commission (page 32). Analysis
gives a figure of 2,500 patients per clinical decision maker. However, these figures do not include locum numbers. A recent study comparing actual workforce figures to those recommended in the previous Way Ahead showed a very good correlation with actual figures of staff in post in April 2007.

### Consultants

The results of the consultation on consultants’ work patterns brought conflicting evidence. In one department the consultants saw 2200-2400 per annum with a job plan of 26 hours of clinical shifts per week (about 2 patients per hour). Others said the numbers were unrealistically high but another consultant who has been delivering a consultant-only service said the numbers were about right. International comparisons are difficult but a large study of over 17,000 patients in Canada showed triage category 1 (resuscitation) patients took on average 115.4 minutes (range 17.2-274.7 min), 34.4 minutes for category 2 (range 19.6-55.9 min), 21.9 minutes for category 3 (range 12.9-35.1 min), 15.0 minutes for category 4 (range 9.8-25.2 min) and 11.0 minutes for category 5 (range 6.2-24.6 min).

This emphasises the effect of case mix on the rate of seeing patients. Other smaller Canadian studies have shown an average contact time of 20 minutes per patient. Another showed an average of 2 patients per hour but with marked variability, especially towards the end of long shifts. In the USA a rate of 2.5 patients per hour is recommended.

Studies show a high level of interruptions in clinical work (up to 14 per hour).

### Foundation doctors

The work rate for FY2 doctors of one patient per hour given recent published evidence and feedback in the consultation seems reasonable.

### Summary

The study by Paw shows the previous Way Ahead predictions to be reasonable (+/- 2 wte up to 100,000 attendances in the ED). However, the workforce, hours of work and case mix are all changing. The College has to make a recommendation that we believe is deliverable by most EM doctors working in a highly variable system. We acknowledge that the variability means these estimates might be seen as too low but we have to be realistic where some EPs are working with little or no support.

The College emphasises the workload is not only seeing new patients as the sole clinician but also includes the clinical supervision, advice and on the spot teaching. These activities all take time and clinical information systems must be configured to capture this consultant activity.

The working averages for trained staff are given below. The evidence base confirms high variability in the productivity of all grades of staff. The one constant appears to be a twofold variability in numbers of patients seen per hour. International comparisons are difficult given the consultant contract in the UK that puts a maximum of 30 hours for clinical work which includes CDU work and patient related administration. The number of actual hours that consultants are available to see patients is also significantly reduced by out-of-hours working. The College would strongly support more patients being seen directly by consultants.

The figures given are based on an analysis of current evidence but moves to increase the numbers of patients seen per consultant will be essential to provide a cost effective workforce solution.

### Effect of supervision

- Senior ED doctor, supervising staff (‘Total contact and advice’ in figure 4) – one new patient per hour + total contacts/input to seven cases per hour (average case mix)
- Senior ED doctor, no supervision (‘Sole clinical care’ in figure 4) – two new patients per hour (average case mix). This may increase to six patients per hour if case mix

![Figure 4](image-url)
only involves ambulatory care patients and there is clinical and administrative support.

- **FY2 doctor** – 1 (range 0.8-1.2) patient per hour (average case mix)
- **ENP** – one patient per hour (ambulatory care)

### Factors affecting the rate of seeing patients

#### Numbers of senior staff in the department

Where there are fewer senior staff, a greater proportion of time will be spent on the basic managerial and educational needs of the department and in supervision. The College no longer recommends a full ‘command and control’ structure, but in small departments a degree of this type of working is still required. As senior staff numbers increase, more time will be spent in a clinical decision role.

#### Working style and support

A consultant might see up to six ambulatory care patients per hour if fully supported by a nursing team and the ability to dictate the clinical record. However, this needs an excellent back up system where any ‘grey cases’ and practical tasks are undertaken by other members of staff. Work at this intensity is going to be difficult to sustain for more than a few sessions per week. It is not clear if such working intensity is practiced 24/7.

Equally, departments with a high number of complex resuscitation cases might find consultants constantly involved in critical cases where an individual patient might take two hours or more.

#### Case mix

Normal case mix indicates an average admission rate of 15-20% with full numbers of injury and paediatric injury cases.

Heavy case mix includes large numbers of ambulance and trolley cases, more complex illness and fewer injury or paediatric cases. These cases take longer to assess and manage.

### Other clinical duties

Most departments should have a Clinical Decision Unit (CDU). It is vital that there is regular senior input to such units. It will take a minimum of one PA per day per CDU. Review clinics, hospital at night work and work in subspecialty areas will all reduce the clinical time available in the ED. Consultants are on call to assist with serious clinical cases. They should not be expected be recalled to hospital to “queue bust” where deficiencies in staffing have caused a build-up of less serious cases.

#### Shift systems

The effects of working a full shift rota will significantly alter the numbers of patients seen. It is recognised that doctors working very anti-social shifts, especially night shifts, take time to recover and this has to be reflected in the amount of hours scheduled for direct clinical shifts.

The actual number of clinical hours worked is affected by different rotas (Table 3). The College recommends that doctors over the age of 55 should not have to work night shifts.

#### Average numbers of patients per year

Table 4 sets out indicative numbers of patients that various types of staff might be expected to see as the primary clinician. Those with a heavy clinical management role will have clinical input into many more cases than the supervising clinician. In reality a consultant work pattern in a large multi-consultant department will be a mix of roles.

### Small and rural hospitals (less than 40,000 attendances and four consultants)

There are real challenges in sustaining an emergency service in small hospitals. Where EDs are close together (less than 10 km apart), consolidation of small hospitals is likely to help sustain a comprehensive service. With distances above 10-20 km there is a need to sustain emergency services. This not only

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Table 3: Effect of extended hours of working on actual hours per week available for clinical shifts by senior medical staff. The effects are averaged out across the year.

<table>
<thead>
<tr>
<th>GRADE (Number of PAs)</th>
<th>Working 0700-1900 Mon-Fri: hours on clinical shift</th>
<th>12 hrs a day rota, Mon-Sun: hours on clinical shift</th>
<th>18 hrs a day rota Mon-Sun: hours on shift</th>
<th>24/7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant (7.5)</td>
<td>30</td>
<td>28</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>SAS doctor (9)</td>
<td>36</td>
<td>32</td>
<td>28</td>
<td>24</td>
</tr>
</tbody>
</table>
affects the ED but Intensive Care Units (ICU) and other inpatient services. Cross cover between acute services may be required with significant extra training implications for staff in the acute specialties.

Table 4  Variation in numbers of new patients seen by grade of staff, rota hours and type of work style. These are average figures. The evidence-base consistently shows a two fold variation in numbers of patients seen.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Type department</th>
<th>Work style</th>
<th>Rota</th>
<th>Hours per week in role</th>
<th>No. patients per year</th>
<th>Range of no. pts seen per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant</td>
<td>4 consultant</td>
<td>Clinical manager</td>
<td>&lt;12/7</td>
<td>18</td>
<td>900</td>
<td>600-1200</td>
</tr>
<tr>
<td>Consultant</td>
<td>8 consultant</td>
<td>Clinical decision maker</td>
<td>&gt;12/7</td>
<td>20</td>
<td>1500</td>
<td>1000-2000</td>
</tr>
<tr>
<td>Consultant</td>
<td>16 consultant</td>
<td>Clinical decision maker</td>
<td>24/7</td>
<td>20</td>
<td>1400</td>
<td>900-1800</td>
</tr>
<tr>
<td>Middle grade</td>
<td>Large multi-consultant</td>
<td>Clinical decision maker</td>
<td>24/7</td>
<td>24</td>
<td>2000</td>
<td>1500-2500</td>
</tr>
<tr>
<td>Middle grade</td>
<td>Ambulatory care</td>
<td></td>
<td>18/7</td>
<td>28</td>
<td>Up to 4500</td>
<td></td>
</tr>
<tr>
<td>Senior EP</td>
<td>Small rural</td>
<td>Command and control</td>
<td>In hours</td>
<td>20</td>
<td>900</td>
<td>600-1200</td>
</tr>
<tr>
<td>Junior doctor (CT 1-2 or FY2)</td>
<td>Supervised clinical decision maker</td>
<td>24/7</td>
<td>40</td>
<td>1700</td>
<td>1400-2000</td>
<td></td>
</tr>
<tr>
<td>ENP</td>
<td>Clinical decision maker, ambulatory care</td>
<td>18/7</td>
<td>37.5</td>
<td>1500</td>
<td>1000-2000</td>
<td></td>
</tr>
</tbody>
</table>

Any workload calculations need to take into account the type of work practice and the level of support available
Summary and recommendations

- Emergency Departments (EDs) are a unique environment in which to train and the impact of the four-hour emergency care standard and the nature of the work should be reflected in the training resource and educational time.
- Emergency Medicine (EM) specialty training of six years aims to produce doctors competent to take up consultant posts.
- There needs to be urgent expansion in the numbers of consultant posts to improve service and supervision.
- EM trainees are encouraged to develop special interests within EM and this will require more posts aimed at trainees developing these extra skills.
- Senior EM trainees are responsible for considerable service provision and supervision, especially out of working hours. They should be directly supervised by an EM consultant for at least one third of the time they are in the ED. This should increase as more EM consultants are appointed.
- Shortened training time will need a high level of organisation for EM training and the quality of this training should be monitored by EM schools.
- Study leave is vital for some core training and budgets for study leave should be sufficient for these core courses.
- The Emergency Medicine Trainees Association (EMTA) has become part of the College. This provides an improved means of communication with the College Executive and committees.
- Trainees have regional as well as national representation.
- There are significant differences to training programmes in the Republic of Ireland.

Emergency Medicine training

EM trainees help maintain throughput against the four-hour standard. This may have a direct impact on their training needs. As with training in many specialties, there is a fine balance between service provision and training needs in EM and this should be reflected in the resources available to trainees and trainers alike.

Modernising medical careers (MMC) and new training programmes

The new training programme is described in detail in other documents. Trainees have welcomed the new approach to training and strongly believe that this programme produces doctors ready to take up consultant posts. As with all major changes, there have been some problems with some posts and EMTA will be working with the College to ensure high quality training across the UK.

While trainees have concerns that MMC and the EWTD could have a negative impact on training, particularly in this unique environment, the College has done a huge amount of work to remedy this: developed a curriculum and electronic training resources and portfolio; strove to improve and develop the delivery of training in departments; and refined workplace-based assessments and examinations that will reliably assess progress. Trainees have confidence that these will counter the reduction in time available for training, as long as they can receive the requisite amount of supervision and support to achieve their required competences and consolidate their skills.

To achieve this, more direct patient care and supervision of junior trainees must be provided by consultants, senior trainees and staff grade and associate specialist (SAS) doctors. Teaching time should be protected and scheduled training opportunities should not be superseded by departmental pressures except in exceptional circumstances.

The introduction of MMC has led to a large increase in the number of trainees (Table 5). For the College view of this please refer to Appendix 3 in the web-based version of this report at: http://www.collemergency.med.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/. This increase is needed to augment the levels of consultant cover for EDs but there needs to be
real and sustained consultant expansion over the next five years.

**Table 5** Estimated numbers of new CCT holders per year

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>325</td>
<td>200</td>
</tr>
</tbody>
</table>

MMC results in trainees having a relatively brief time to achieve the same level of skill and experience expected of consultants today. EM training will be mapped to the curriculum, focused on knowledge and competences specific to EM, and predominately delivered within the ED. The College will need to monitor the effect of shortened training time on the level of competences in trainees. This will be especially important in experience of other specialties and trainees and trainers will have to identify any needs early in ST4 to ensure any gaps can be addressed.

**Trainee representation**

EMTA provides trainee representation at all levels of College activity, and to external agencies. Full details are available in Appendix 1 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/

Each regional Deanery has a Specialist School that oversees the structure, organisation and quality of training. The majority of these invite a trainee to sit on the committee to provide feedback to and from the trainees. To date, this has been an informal arrangement and not a requirement.

The new College structure formalises a regional Board in each SHA or devolved nation. A trainee representative is elected to the Board by their peers in the region to represent the trainees in that region. They in turn can feed back to the EMTA Executive about any regional matters, and can act as a route of communication between the trainees and the EMTA Executive. These regional trainees collectively comprise the Council of EMTA, and meet annually at the conference.

Any junior doctor who is a member (in any category) of the College and is registered for training is automatically a member of EMTA and can look for support, advice and representation from the EMTA Executive and council. Full details are available on the EMTA website: http://www.collemergencymed.ac.uk/EMTA

**Emergency Medicine training**

Training leading to a CCT in EM consists of three years of core training and three years of higher specialist training.

**Core specialty training in EM (CST)**

CST in EM consists of two years of the Acute Care Common Stem rotation (ACCS) plus the core training (CT3) third year. The first two years (ACCS) comprise one year of Acute Medicine and EM, and a second year of Anaesthetics and Critical Care Medicine.

EMTA believes core trainees should be allowed to maximise the potential of this experience. Trainees must be permitted the full six months experience in each non-EM specialty to allow consolidation of skills, even if competences are signed off early. Close working relationships must be maintained at a senior level with the Anaesthetic, Critical Care and Medical directorates to ensure the quality of training delivered to all trainees entering each discipline. A well-defined educational programme and competency goals should be established at an early stage.

The CT3 year is intended to deliver appropriate musculoskeletal (Trauma and Orthopaedics) and Paediatric experience. Time spent in the ED should be focused on the management of musculoskeletal injuries and children, thereby accounting for about 80% of the patient load seen during this period of training. Trainers should allow trainees to attend appropriate educational programmes run by Orthopaedic and Paediatric specialties, and experience in appropriate out-patient clinics, operating theatres and ward-based work. In regions with Paediatric EDs, trainees should be rotated through these departments for their Paediatric placement. The College has issued a framework of training for CT3 which is available on the website at: http://www.collemergencymed.ac.uk/asp/document.asp?ID=4105

**Specialty training (ST4-6)**

At this stage, trainees have made a commitment to EM and will have gained all the basic competences necessary to manage acute situations until more senior and/or specialist help arrives, and will have been
successful in the Membership of the College of Emergency Medicine examination (MCEM). They are known collectively as Specialty Registrars (StR).

While they will spend 30-50% of their time with a consultant present in the department, they will participate in a full shift middle grade rota, and will be providing a greater level of service provision. Service commitment provides many of the training opportunities necessary to gain competency in the specialty. This includes the supervision and training of the more junior (CST and FY) trainees in the department.

Supervision and service provision

By 2012, supervision of CST trainees by middle grade doctors or consultants should be available indirectly 100% of the time (i.e. present in the department), and directly 30% of the time, during any service provision for any department throughout core training. Foundation year and core trainees should no longer be expected to work in an ED unsupervised overnight. The presence or availability of more senior trainees in other specialties is not a substitute for appropriate supervision of EM trainees by EM specialists.

For senior trainees, time at work should be approximately divided into three: seeing new patients; supervising junior staff and being trained.

Supervised practice (30-50% for all trainees) involves the immediate availability of a consultant who is present on the shop floor, who is able to observe clinical practice, discuss cases, teach junior staff about presenting conditions and their management, and demonstrate and supervise practical skills.

Out-of-programme experience (OOPE) and sub-specialisation

There are currently approved training programmes that provide accredited training in Paediatric Emergency Medicine, Intensive Care Medicine, and Acute Medicine. The College is currently in the early stages of developing such training in pre-hospital Emergency Medicine. This may require taking time out-of-programme to develop these interests. Time allowed would depend on an individual trainee’s experience and learning needs, but would generally be for a minimum of three months to a maximum of two years (particularly if attempting dual accreditation with another specialty interest, for example Intensive Care Medicine).

Any out-of-programme experience must be approved in advance for training by PMETB.

Trainees should be encouraged to experience out-of-hours practice in the chosen specialty. Trainees should keep in contact with their EM trainer throughout their OOPE and should, whenever possible, continue to attend formal teaching within their region and ED.

Appropriate links should be maintained at STC level to help facilitate the requisite experience for trainees to pursue such aspirations.

Shorter exposures to specialty clinics and operating lists should be available within reason for a week or two at a time, to allow experience in other areas of ED work if the trainee and trainer feel that is the best way to address learning needs that cannot easily be met within the ED. Such shorter attachments might include Ophthalmology or Obstetrics and Gynaecology.

Research and audit

All trainees should have office space within the ED with a computer and internet access for searching the literature and research and audit purposes. Trainees and their trainers should agree at an early stage what achievements and activities are expected of them. Trainees may have up to four hours per week allocated for research and audit activities. This is no longer strongly recommended with the reduction in working hours, but where trainers/STCs and local educational providers support this allocation, a trainee should know what outcomes are expected and these should be monitored.

There should be support provided to trainees to participate in research projects on a regional and national basis. Such support should include training for critical appraisal and conducting research.

Management experience

The opportunity for gaining management experience will vary widely between departments. However, senior (ST4-6) trainees should be allowed the opportunity to attend meetings and contribute to the management of the department. This may include the handling of complaints, the development of clinical protocols, clinical services, business cases and budget planning, undertaking
medico-legal work and attending both departmental and directorate meetings.

**e-learning and educational supervision**

Trainees should have a named educational supervisor for each department in which they are employed. In addition, regional training boards may consider supporting a longer-term mentor scheme, to provide continuity in career development and guidance.

The e-learning programme currently being developed promises to be an extremely valuable resource for trainees and trainers alike. It will help to document trainee progress, identify training needs and facilitate the provision of training to address such needs, and allow trainees a portal to educational resources from their own home and within their own time, so adding flexibility to the training programme.

The development of an e-portfolio and logbook will facilitate documentation of procedures and clinical cases and also help record exposure to and experience of essential competences, while reducing the workload involved in maintaining a training record.

**Regional teaching programmes**

Regional Schools must ensure there is a comprehensive programme of educational meetings provided for trainees at all levels of experience. These should be for a minimum of one full day per month, or equivalent. There should be consultant input into these sessions, and they should employ a variety of teaching methods to address the curriculum and content of examinations, and broader skills and knowledge to be determined by the needs of the trainees in that region.

**Study leave**

Study leave budgets have been decreasing steadily and this trend is expected to continue. Courses required to complete training should be provided within the training region. HTCs might consider group training dedicated to EM trainees for advanced life support (ALS), advanced paediatric life support (APLS) and advanced trauma life support (ATLS) within the regional educational programme on a rolling basis. This will facilitate the continuing registration of these courses among trainees and encourage participation in instructor programmes.

**Examinations**

*Membership of the College of Emergency Medicine (MCEM)*

The Membership examination is undertaken during core training and is a necessary requirement for progression to higher training (ST4 and beyond). Core trainees should aim to complete this examination at an early stage if their career is to progress without the need for additional training years.

*Fellowship of the College of Emergency Medicine (FCEM)*

The Fellowship examination is undertaken in the final eighteen months of training and allows candidates to demonstrate their knowledge and skills at consultant level. Once trainees have completed the minimum period required for training, and obtained their Certificate of Completion of Training, they will be eligible to apply for consultant posts.

**Encouraging Foundation trainees and medical students**

Specialty trainees have important roles in supervising and teaching Foundation trainees and medical students. They can also have an important influence in encouraging interest in the specialty and can assist in national and local career events. As members of EMTA, trainees at all levels of experience are encouraged to take an active part in the development of the specialty on a regional, national and international basis.

See section 13 (page 44) for details of training in the Republic of Ireland.
Staff Grades and Associate Specialists

Summary and recommendations

- Schools of Emergency Medicine (EM) should appoint a doctor with specific responsibility for the training and education of Staff Grade and Associate Specialist (SAS) doctors.
- The College recommends that all career SAS doctors recertify in EM as part of revalidation. To do so, they need time allocated for continuing professional development (CPD) and may need specific targeted training.
- The College recommends that doctors entering these posts for the first time have at least three years’ experience in the specialty and its related specialties (experience equivalent to end of ST3).
- SAS staff need assistance and advice if they wish to take up the new contract. EM consultants and departmental leads should be willing to advise and help in the process of assimilation to the new contract.

Training and education

It is recommended that there are regional and national, coordinated, programmed educational activities to ensure that educational and CPD needs are met. These should be based on similar programmes for specialty trainees as SAS doctors are expected to provide identical high quality patient care. These should be the equivalent of one full day a month on separate days to the ST programme.

Management experience and e-learning should be available to SAS doctors. Audit (and if appropriate research time) should be built into SAS job plans.

It is the view of the College that one PA for supporting professional activities (SPAs) is the absolute minimum for any full time career grade doctor, essential for CPD requirements.

The new SAS doctors’ contract

The new contract has been available on an optional basis from 1 April 2008. Some SAS doctors may not wish to take up the new contract. Departments may need to deal with SAS doctors on different contracts. Doctors are advised to visit the BMA website for full and accurate details of the contract: http://www.bma.org.uk/ap.nsf/content/home

Further details are available in Appendix 4 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/

The contract states that the minimum entry requirements for the new specialty doctor grade will be full registration with the GMC, plus a minimum of four years (or equivalent) of postgraduate training, two of which must have been in a relevant specialty. The College recommends that doctors who are considering entering these posts for the first time have at least five years of postgraduate training with competences equivalent to those at the end of ST3 training.

Introduction

SAS doctors have for years provided important service to Emergency Departments (EDs). As experienced clinicians, at times their training and continuing development has taken second place to service pressures. Changes to specialist registration, the need for recertification of specialist practice and increased demand for experienced doctors in EDs, all mean that training, education and continuing development will be essential for SAS doctors. The needs and views of SAS doctors will be represented within the College by the Forum for Associate Specialist and Staff Grades in Emergency Medicine (FASSGEM). The major changes to the SAS contract will impact on EDs.

SAS doctors within College structures

FASSGEM will be the focus to promote SAS training, education and views within the College. SAS doctors will be represented on Council and all the major committees. In addition, there will be SAS representation on regional and national Boards.

The College will work with Deaneries to ensure that the schools of EM provide adequate input to the educational and training needs of SAS doctors. EM schools should have a post with specific responsibility for SAS doctors. They should provide career advice and give advice on applications for a certificate confirming eligibility for specialist registration (CESR).
Transfer of existing staff

Over the next year there will be a transfer process. It is vital that the new contract is discussed with existing SAS grades. Assimilation into the new contracts from existing SAS grade contracts will consist of a diary of their current activities, preferably for a three-month period. Doctors will provide evidence of their current activities, duties and responsibilities.

Job planning

The new ‘specialty doctors’ will have defined and agreed responsibilities depending on his or her experience and capability. Service delivery and patient care will continue to be central to the post.

An agreed job plan should be based on their current timetable of activities. The discussion should focus on the prospective timetable and list all the duties of the doctor, the number of PAs for which the doctor is contracted and paid, a schedule for carrying out PAs, the doctor’s personal and professional objectives and agreed supporting resources. It will be based on and will build upon the doctor’s existing NHS commitments and will set out their duties, responsibilities and objectives for the coming year.

The working week

The working week for a full-time doctor will be made up of ten programmed activities (PA), with a timetabled value of four hours each (additional PAs may be allowed, see below for details).

PAs will be separated into:

• Direct clinical care
• Supporting professional activities
• Additional NHS responsibilities
• External duties

For full time doctors, most PAs will be devoted to direct clinical care (DCC) with a minimum of one PA per week allocated for supporting professional activities (SPAs).

On-call duties

All emergency work that takes place at regular and predictable times should be programmed into the working week on a prospective basis and counted towards PAs in the annual job plan. Less predictable emergency work should be handled, as now, through on-call arrangements or an on-call supplement, paid as a percentage of salary.

Changing to the new contract

The following steps will need to be followed:

The HR department will assess payment for each individual doctor in the relevant grades (SG, AS, CMO, SCMO and non GP HPs and CAs 2) under their current contract, identifying the elements given above.

The career grade doctor or service grade doctor in the Republic of Ireland

Although officially there is no provision for such a grade in the HSE, there are a number of individual senior doctors working in EM in the Republic of Ireland who fit into this category. They have a variety of titles, contractual arrangements and receive different levels of pay. The Irish Association for Emergency Medicine recognises the need to have a proper structure for these doctors sharing a uniform contract with appropriate terms and conditions of employment. The educational requirements for entry to this associate Emergency Physician grade and the linkage to higher specialist training are defined in a document available at: http://www.iaem.ie
The Department of Health and Social Services and Public Safety is one of 11 government departments managing Health and Social Care in Northern Ireland (NI). There are 21 emergency care departments (ED), 11 type 1 departments, 5 type 2 and 5 type 3 (Minor Injury Units).

EDs are heavily used and a recent review of unscheduled care suggested that attendances are 20-30% higher than the rest of the United Kingdom average. This may be partly due to the lack of development of other types of unscheduled care services. In 2004, 673,925 patients were seen, which is 26% higher per 10,000 population than the rest of the UK.

The development of emergency care is part of a huge range of transitional changes within the health care system, including a review of public administration and a complete re-organisation of management, with a change from four health and social service boards to five large trusts led by a health and social care authority. There are real challenges in Northern Ireland (NI) in delivering high quality care in geographically remote areas and this accounts for the relatively large number of departments compared to the national average. This also results in a very high ambulance usage and a disproportionate conveyance rate. While centralisation of services has been attempted this is very unpopular with local communities.

Recent changes in primary care are of concern and many departments report increased attendances particularly in the evening. Out-of-hours centres do not allow open access in Northern Ireland and there are no walk-in primary health care facilities. The stated goal of the Health Department is to develop a fully integrated community-led solution for unscheduled care. It is also clear that EDs will be the only ‘walk-in’ centres.

Service development has not been associated with the investment in staff and facilities which took place in the rest of the UK. While performance against the new four-hour standard has improved enormously, the target date for individual departments reaching 95% of patients seen within four hours is not until March 2009.

Funding has not been forthcoming for the NI region to audit major trauma and standards from National Service Frameworks and NICE guidelines are reviewed locally prior to endorsement with the help of the Standards and Guidelines Unit.

A school of EM has been established in NI. The training programme has expanded but uncertainty remains as to the extent to which consultant numbers will be expanded, if at all. The ACCS programme has not been embraced by the other specialties and in NI EM is currently the only specialty using this training pathway, thereby causing difficulty in maintaining the rotation.
The Irish Association for Emergency Medicine (IAEM) is the representative body for consultants and trainees in Emergency Medicine (EM) in the Republic of Ireland. There is likely to be significant reorganisation of emergency services over the next few years.

There are plans for expansion in training and consultant posts.

The Advisory Committee on EM Training directs training. A period of general professional training of at least three years is followed by a five-year higher specialist training programme.

IAEM has produced recent documents on staffing and design of Emergency Departments (EDs) and on reconfiguration.

A full version of this section is available in Appendix 5 in the web-based version of this report at: http://www.collemergencymed.ac.uk/CEM/About the College/Current Issues and Statements/The Way Ahead/

**Introduction**

The creation of the Health Service Executive (HSE) on 1st January 2005 has allowed the development of a unitary system which is similar to the UK NHS in organisational terms.

There are 33 EDs in the Republic of Ireland. There is a current review of services with the likely result being the rationalisation to a smaller number of larger EDs probably on fewer than 20 sites. The IAEM view on reconfiguration is contained in the document: http://www.iaem.ie/reconfig.pdf.

**Staffing**

There are currently 52 substantive consultants in EM serving a population of 4.2 million. The Department of Health and Children (DoHC) and the HSE have stated aspirations to expand consultant numbers significantly.

IAEM has produced a position paper on the medical staffing of EDs (http://www.iaem.ie/staffing EDs.pdf). This envisages a move to a 12-hour day, seven days a week, model of consultant shop floor presence requiring eight wte consultants per ED providing this level of cover. In addition, this document reiterates the need for a grade of senior doctor akin to the SAS doctor in the UK.

**Training**

Training in EM is directed by the Advisory Committee on Emergency Medicine Training (ACEMT). Training in EM requires a minimum of three years’ general professional training (GPT) after completion of Internship and five years higher specialist training (HST). During GPT a doctor should obtain a wide range of experience at Senior House Officer level in a variety of specialties of which a minimum of 12 months must be spent in EM and a further 12 months in specialties of relevance to EM with responsibility for the management of patients admitted to hospital as emergencies. Doctors entering HST in EM must hold an appropriate higher qualification.

The duration of HST is five years but a minimum of three years must be spent in the practice of EM on the HST programme. Completion of training requires a satisfactory record of in-training assessment (RTA) from the ACEMT and success in the Fellowship of the College of Emergency Medicine (FCEM) examination.

**Certification of satisfactory completion of specialist training**

The Irish Surgical Postgraduate Training Committee (ISPTC) is the training body recognised to advise the Medical Council on completion of training in the specialty of EM and for entry on the Register of Medical Specialists.

For current trainees in Ireland, the requirements for training in the specialty are that they should have satisfactorily completed a HST programme in EM in educationally approved posts and passed the FCEM examination.

Fulfilment of these two requirements triggers a recommendation for accreditation by the ACEMT. This recommendation is certified by the ISPTC at which stage a Certificate of Completion of Training (CCT) is issued.

A process exists for recognition of training of doctors outside of the Irish HST Training programme. Those recommended for accreditation in the UK or those who have completed full EM training in Australasia, Hong
Kong, Singapore or Canada are deemed to have acceptable qualifications for entry to the Register of Medical Specialists in Ireland.

**Future developments**

It is accepted in a recent review of ED overcrowding that there are significant infrastructural deficits in Irish EDs and that even many recently opened or redeveloped EDs have substandard facilities [http://www.hse.ie/eng/Publications/Hospitals/ECTaskForce.html].

The IAEM has produced a detailed paper on ED design and specifications in October 2007, outlining the standards to which EDs should be redeveloped [http://www.iaem.ie/standardsfordd.pdf].

There is an urgent need for a national programme to rapidly upgrade and improve ED infrastructure particularly in view of the current and impending reconfiguration of services which will place greater pressures on the smaller number of departments left open to provide the full range of EM services.

In spite of considerable public and professional pressure on the DoHC and the HSE to introduce a six-hour standard for all patients attending EDs, as recommended in the ED Task Force Report, little significant progress has been made. The success of the four-hour standard, initially in England and Wales and more recently in the rest of the UK, in addressing ED overcrowding has failed, as yet, to sway the HSE into bringing in a sufficiently challenging national standard to deliver real change.

The provision of high quality clinical information systems in Irish EDs is also inadequate. As a unitary service, the HSE now has the opportunity to develop a high quality national ED clinical information system. Any such system must be user friendly, have Emergency Physicians (EPs) involved in its specification and development and must achieve the standards currently being reached internationally.

The benefits of the development of Clinical Decision Units (CDU) and/or observation wards as an integral part of EM has yet to be fully realised in Ireland. This deficiency needs to be addressed as a priority. There is also a need for more timely support from inpatient teams and more efficient procedures for admission to hospital. Improved procedures would minimise unnecessary duplication and allow patients to transit through the system much more efficiently.

Community and social services are poorly developed in Ireland and tend to operate on an office hour basis. Such services need to be significantly expanded so as to facilitate the safe discharge from the ED of patients who may require community support.
Following the formation of the Scottish Executive (now Government), responsibility for health policy was devolved to the Scottish Parliament. This has resulted in significant differences in the organisation of the Health Service on either side of the border and while the direction of travel is similar, changes have been less radical in Scotland, there has been an emphasis on a more integrated, non-market based healthcare system and greater credence has been given to clinical opinion. There is a great desire in Scotland to maintain and encourage this approach and preserve the ethos and form of our current Emergency Care system. The solutions to service delivery are therefore likely to develop in a way which will differ from England and from some of the proposals outlined in The Way Ahead.

The general standards and aspirations within the document are embraced and should be met but the differences in organisation, integration and delivery of the service in Scotland should also be acknowledged. It is therefore proposed that one of the early tasks for the Scottish National Board of the College of Emergency Medicine will be to produce the document The Way Ahead - (Scotland).
In Wales, responsibility for health rests with the Welsh Assembly and the structures and responsibilities differ from England. There is a current consultation on proposed changes to the NHS structure. The strategy in Wales differs from England with respect to health, including:

- Abolishing internal market
- Reduction of Local Health Boards to eight, with transfer of management and provision of community services from Trusts to LHBs and options for establishing an NHS Board for Wales. Funding will be provided directly from the Welsh Assembly to NHS Trusts or via new national NHS Board (payment by results does not apply in Wales)
- The geography of Wales causes significant difficulties in delivering health care, with sparsely populated areas in the centre of Wales and with difficulties in transport
- At present, there are no Urgent Care Centres (UCC) or treatment centres in Wales
- Policy documents differ, for example Delivering Emergency Care Services (DECS) and there is an emphasis on primary care and prevention e.g. Design for Life
- There are areas of social deprivation in Wales and it is possible that the disease spectrum differs from the average in England with probable increases in trauma in certain locations
- There is a different consultant contract in Wales

The solutions to service delivery will therefore differ from England and local solutions as an alternative to those set out in The Way Ahead 2008 may be considered acceptable although the general standards within the document should be met.
Summary and recommendations

- In most Emergency Departments (EDs), children comprise 25% of patient attendances.
- PEM as a sub-specialty can be registered on the CCT of either Paediatric or Emergency Medicine (EM) specialists.
- There is an agreed training pathway for sub-specialisation in PEM for either Paediatric or EM consultants.
- Detailed service standards for the care of acutely unwell or injured children were updated in 2007 by the Intercollegiate Committee, in the document Services for Children in Emergency Departments. This document incorporates recommendations for children’s nursing, primary care centres, information management and technology, major incidents and research.
- Outreach services for acutely unwell children are developing well across the UK, with availability of ‘next day’ assessments by skilled nurses in the community, or paediatrician-led follow-up clinics. This support can help EDs in avoiding hospital admission, and in particular transfer to a paediatric unit on a separate site. The development of Clinical Decision Units (CDUs) or short stay observation units for children also facilitates admission avoidance and there are successful models around the UK. Similar facilities are beginning to develop in urban centres in Ireland.

The interface between Paediatrics and EM

It is important that the interface between Paediatrics and EM is configured to provide optimum care for patients. This means understanding the local case mix, i.e. proportion of injuries versus illness, percentage of children requiring admission to hospital (often dependent on the effectiveness of the primary care ‘sieve’ locally), and whether or not the hospital is a receiving site for emergency cases from other units (for example, those without inpatient paediatric support).

In the majority of cases, children with undifferentiated problems are best assessed within an ED. No other specialty provides specialists trained to assess and treat patients with undifferentiated medical problems across the spectrum of ages and complaints, from infants with minor viral illness or meningitis, to children with foreign bodies in noses or major trauma, and teenagers with alcohol intoxication or psychological problems.

Hospital admission avoidance is desirable. Clinicians ‘at the front door’ need the skills and confidence to predict the need for admission accurately. Admission rates for children are usually lower than that for adults, reflecting the high numbers of less serious injuries and illness.

Detailed service standards for the care of acutely unwell or injured children were updated in 2007 by the Intercollegiate Committee: Services for Children in Emergency Departments. This document incorporates recommendations for children’s nursing, primary care centres, information management and technology, major incidents and research.

Training in Paediatric Emergency Medicine (PEM)

Core training in PEM is undertaken at ST3 level for EM trainees (six months). There is no core training PEM equivalent for Paediatric trainees. Beyond ST3, higher trainees from either specialty may opt to acquire a CCT with a registered sub-speciality interest in PEM by completing additional relevant time in an appropriate training post. Around 17 sites in the UK offer such training. Most UK EDs are now aiming to appoint a lead consultant for PEM. Demand for these PEM consultants currently outstrips supply.

The curriculum for clinical competences for registrars undergoing sub-specialty training in PEM (derived from either specialty) is available from: http://www.collemergencymed.ac.uk/CEM/Training and Examinations/Curriculum/Paediatric EM/

PEM with a Certificate of Completion of Training (CCT) in EM

A trainee in EM who seeks to register PEM as a sub-specialty will usually need to undertake at least one year of training in the care of children, over and above core training. For more detailed information see the trainee’s guide to specialty training in Emergency Medicine.
Medicine, available from: http://www.collemergencymed.ac.uk/CEM/Training and Examinations/Training/2007 entry STRs/

**PEM with a Certificate of Completion of Training (CCT) in Paediatrics**

Trainees in Paediatrics seeking registration in PEM as a sub-specialty will need to undertake an additional two-year training programme. This is undertaken after core higher specialist training.

Paediatric trainees wishing to pursue this sub-specialty training will need to apply for a national training grid post in PEM. Information on this process is available from: http://www.rcpch.ac.uk/training/NTN-Grid. This type of training, when translated into a consultant job plan, can be combined with work on the acute admissions/observation unit, outreach care for urgent follow-up, intensive care and retrieval medicine, or can stand alone as a pure PEM post. Further advice is available from the Intercollegiate Committee for Services for Children in Emergency Departments.

**Training in PEM in the Republic of Ireland**

Those who have achieved a CCT in EM in the Republic of Ireland who wish to register PEM as a sub-specialty will need to undertake at least one year of training in the care of children, over and above core Specialty Registrar (StR) training. As in the UK, trainees in Paediatrics seeking registration in PEM have a pathway available to them. The Advisory Committee on Emergency Medicine Training is currently in negotiations with the Faculty of Paediatrics of the Royal College of Physicians of Ireland to streamline this process more fully.

**The Association for Paediatric Emergency Medicine (APEM)**

EPs and Paediatricians with an interest in PEM may choose to belong to APEM. One-two day meetings are held twice a year: the spring meeting with the annual conference of the Royal College of Paediatrics and Child Health; the autumn meeting with the College of Emergency Medicine. Contact http://www.apem.me.uk for further details.
Summary and recommendations

- Between one half and one quarter of all Intensive Care Unit (ICU) admissions originate from the ED
- There is a recognised training scheme for Emergency Physicians (EPs) who want to develop a special interest in ICM
- There is now a special interest group for EPs with a special interest in ICM (EPIC)

Introduction and need for Emergency Medicine/Intensive Care Medicine training

A quarter of ICU admissions originate in the ED and the ED is the source of up to half of all level III patients.

Recent substantial investment in ICU bed provision has been outstripped by increased demand and rising expectations. Consequently, some critically ill patients experience prolonged delays in the ED.

Critical care interventions are often required before admission to ICU; these interventions may include advanced airway management, non-invasive ventilation, and intensive therapy for severe sepsis – all of which are within the curriculum for EM.

Changes in the work patterns of EM consultants, involving more direct patient contact and out-of-hours presence, have facilitated a greater focus on the sickest ED patients.

The core objectives of the EP and the intensivist – support of vital functions and correction of abnormal physiology – are similar. Thus, the knowledge, skills and attitudes that prevail in the ICU are appropriate in the resuscitation room. In Comprehensive Critical Care an expert group stated, “Competences are more important than professional boundaries in the delivery of a safe, efficient and cost-effective service.”

Combined Emergency Medicine/Intensive Care Medicine training

Five years ago there were fewer than ten EPs with a commitment to ICM. A new training programme began in August 2007. The first EM trainee to complete the UK Diploma in ICM achieved this milestone in June 2008. By 2012 there may be 50 consultants practicing at the EM/ICM interface, representing up to 10% of CCT (ICM) holders.

The Acute Care Common Stem (ACCS) training programme in EM includes a CT2 year which counts towards step one training and there is provision for a seventh year of training, in which step two competences, leading to a CCT in ICM, can be gained.

Emergency Physicians in Intensive Care (EPIC)

EPs with an interest in ICM may choose to belong to Emergency Physicians in Intensive Care (http://www.ep-ic.org), an organization founded in May 2007 which aims to promote best practice in the care of critically ill patients in the ED and to demonstrate the value of joint training in EM and ICM as a model of good medical care. The emergence of a body representing sub-specialty interest is evidence of the coming together of the two specialties, as is the recent publication of a series of articles on critical care in the Emergency Department in the Emergency Medicine Journal.
Summary and recommendations

- Over half of all admissions to acute beds from the Emergency Department (ED) are to Acute Medicine (AM) or related specialties
- Hospitals should explore the concept of an ‘emergency floor’
- Clinical Decision Units (CDUs) are integral to the delivery of high quality timely care for some patient pathways
- There is an agreed training pathway to equip Emergency Physicians (EPs) with the skills to work as specialists in AM

The interface between Acute Medicine and Emergency Medicine

It is important that the interface between EM and AM is configured to provide optimum care for patients. There should be local agreements for patients with certain clearly defined clinical conditions to bypass the ED and be received directly by other specialist services (for example, patients with ST elevation myocardial infarction (STEMI) going directly to a primary angioplasty service). However, the vast majority of patients with undifferentiated medical problems are best assessed within an ED. No other specialty provides specialists trained to assess and treat patients with undifferentiated problems across the spectrum of ages and complaints. Some patients who appear to have a ‘medical’ condition require input from other specialties. Assessment by the ED allows intervention prior to appropriate referral.

The College has contributed to Acute Medical Care, a report outlining the care of medical emergencies. This report acknowledges the differences between EM and AM and notes the areas of commonality and the areas of exclusive skills. One of the key tenets of this report is the concept of the ‘emergency floor’ with co-location of the ED, acute medical admissions unit, critical care, and other acute and urgent care facilities and key support services. This arrangement will allow for smoother integration of all services.

One of the key components of this interface is the CDU. The role of the CDU is to deliver high quality, evidence-based and timely care for a spectrum of patients that would traditionally be admitted to an inpatient bed. The care delivered is commonly guideline or protocol driven, covering:

- Diagnostic streams (including chest pain, venous thromboembolism, subarachnoid haemorrhage)
- Observation streams (including post-procedural sedation, deliberate self-harm, opiate toxicity and smoke inhalation)
- Treatment streams (including asthma, community acquired pneumonia and cellulitis)

An important component of CDU care is facilitating a diagnostic process that prevents inappropriate discharges. This is particularly important in the difficult diagnostic areas relating to chest pain and venous thromboembolism and the complex disposition decisions relating to the elderly patient with complex medical and social problems. EM has developed a core of expertise in this area.

Specialist training in Acute Medicine for Emergency Medicine trainees in the UK

The development of Acute Care Common Stem training (ACCS) as the core training programme for doctors in emergency medicine will result in the widespread acquisition of Level one competences in AM. These doctors will be able to undertake a further period of training to gain level two competences, enabling them to work as a specialist within an AM service. The development of a workforce able to work across the boundaries of EM and AM will be important in helping to integrate the services to provide better patient care.

Specialist training in Acute Medicine for Emergency Medicine trainees in the Republic of Ireland

The Advisory Committee on Emergency Medicine Training has had some preliminary negotiations with the Royal College of Physicians of Ireland to explore the possibilities of EM trainees achieving dual certification in General Internal Medicine. This process is ongoing.
Emergency nursing practice can be defined as “...the nursing knowledge and skills required for the assessment and management of acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural problems.”

Increasing numbers of nurses are also acquiring skills in diagnosis in defined areas of practice. Emergency nursing is now practised in a number of settings in addition to the Emergency Department (ED), such as Walk-In Centres (WICs), Minor Injury Units (MIUs) and Urgent Care Centres (UCCs). Some of these services are nurse-led. These developments in service provision have required an expansion of roles and responsibilities with nurses in key decision making roles. New and innovative roles such as advanced practitioners allow the management of increasingly complex patient presentations. Across the UK and Ireland the scope of practice and pace of role expansion shows some variation, in line with national developments in redesign of emergency care services.

**Numbers of Emergency nurses**

In the autumn of 2007, the Healthcare Commission in partnership with the College and The Faculty of Emergency Nursing, carried out a survey of EDs, WICs and MIUs in England. This survey has provided a large amount of information on the nursing workforce revealing some 9132 qualified ED nurses and 1476 support worker roles. Of these, 1272 were Emergency Nurse Practitioners, 417 were full time in this role. If we assume 50% of the time the other nurses were in the ENP role, this would equate to about 800 wte ENPs. ED nurses cared for 13,700,000 patients in this year, or approximately one ED nurse per 1,400 new patients. This does not represent an ideal ratio as there are significant vacancy levels and a recent on-line survey undertaken by the Royal College of Nursing (RCN) discloses significant stress in ED nurses (Table 6).

**Triage/see and treat**

‘See and treat’ models have not replaced triage in EDs, as shown by the HCC workforce survey (Table 7). A triage system, based on a robust methodology, provides a powerful risk assessment tool and the means of effectively allocating resources, both human and environmental.

See and treat models are used more widely in Minor Injury Units (MIUs) and Walk-In Centres (WICs) where patient case mix will differ with larger numbers of non-urgent presentations and lower overall attendance figures than EDs. However, there is evidence that many of these services operate both see and treat, and triage depending on patient volume.

**Emergency nurses**

The high volume of patients with immediate nursing needs is reflected in the relatively

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**Table 6:** Numbers of whole time equivalent nursing and support workers

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<th>Band</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>Numbers</td>
<td>822</td>
<td>587</td>
<td>67</td>
<td>4903</td>
<td>2337</td>
<td>1624</td>
<td>267</td>
</tr>
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</table>

**Table 7:** The use of triage, ‘see and treat’ or both systems depending on type of unit

<table>
<thead>
<tr>
<th>Unit type</th>
<th>See and Treat</th>
<th>Triage</th>
<th>Both</th>
</tr>
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<tbody>
<tr>
<td>MIU</td>
<td>86</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>WIC</td>
<td>31</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>ED/MIU3</td>
<td>3</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>ED</td>
<td>26</td>
<td>45</td>
<td>94</td>
</tr>
<tr>
<td>Other/UCC</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Paediatric ED</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
high numbers of band 5/6 nurses. An increasing number of older patients with high levels of nursing need now attend the ED and levels of serious and critical illness are increasing. Interventions such as thrombolysis and non-invasive ventilation and more intensive monitoring require improved levels of education and continuing professional development (CPD) for nursing staff.

**The shift leader/coordinator role**

The four-hour access standard has brought new responsibilities for senior nurses (mainly band 7). They possess the skills to expedite patient care and manage patient flows within the ED but such duties can remove these nurses from direct patient care with potentially negative effects on clinical care and on supervision of more junior nurses.

**Paediatrics**

Significant numbers of children attending emergency care are effectively managed by emergency nurses with a general level of first registration. It is recommended that this group of nurses are supported by structured training and development to acquire the knowledge and skills specific to both children and emergency care to further enhance their ability to care for children. The FEN competences for ‘child and younger people’ provide a specific framework, designed by paediatric emergency nurses, to address any developmental needs. The counter argument also exists that where paediatric nurses are employed in general EDs, and managing adult care, they too need a competency framework to aid development.

**Emergency Nurse Practitioners**

The roles and responsibilities of Emergency Nurse Practitioners (ENPs) across the UK vary significantly in terms of scope of practice, grading and impact on local services. In the 2007 HCC workforce survey, over 300 units stated they operated some form of ENP service, 172 units had ENPs working in dedicated roles whilst 133 units favoured a dual role of ENP and senior nurse. Bandings were fairly consistent with band 6 and 7. Variations in the preparation and ongoing development of these nurses are evident, largely due to a lack of any nationally agreed standards for practice or agreement on the activities expected of these practitioners. There is a need to define proper standards for training and continuing development of ENPs. This would allow much greater transferability of skills between departments and also assure patients of a consistent level of care.

**Advanced Nurse Practitioners (ANP)**

The Advanced Nurse Practitioner (ANP) is still a relatively new role but one that is gaining recognition both nationally and internationally as a major contributor to the provision of accessible and quality health care.

The Nursing and Midwifery Council (2005) defines advanced practitioner roles as nurses who are “... highly experienced and educated members of the care team who are able to diagnose and treat health care needs and refer to an appropriate specialist if needed.” The role requires skills of advanced clinical assessment and treatment of a diverse and undetermined caseload of patients, who may have highly complex and/or chronic presentations. These nurses work autonomously, determining clinical diagnosis and treatments indicated, whilst providing expert clinical expertise for developing and enhancing services. It is difficult to estimate the numbers of patients seen by or impact of ANPs as many are still in preparation via MSc’s in clinical practice programmes and are very new to services.

**Consultant nurses**

Consultant nurses have clinical, managerial and teaching responsibilities in EDs and some may also be involved in research. They will clinically manage groups of ENPs or ANPs. There are currently few training schemes for this role.
Research and Publications

Summary and recommendations

- Emergency Medicine (EM) research has been very successful over the past five years in establishing a number of nationally recognised research units. EM researchers are now winning large grants and publishing in leading national and international journals. However, the research base is still small compared with other specialties.

- A functional clinical research network has been developed, enabling some success in large multi-centre trial methodology. However, the number of patients registered in clinical trials in EDs remains very small compared to the clinical base of the specialty. The entry of patients into clinical trials should become a core skill of EM clinicians and should be given priority in departmental work plans.

- Academic training schemes have been established. More needs to be done to foster academic training.

- The College will continue to encourage development of the Emergency Medicine Journal (EMJ) as a journal with an international reputation.

- The College will continue to publish evidence-based guidelines developed through the GEMNET system.

- The College will continue to update and develop the website which will become the hub for College business and communications.

Introduction and background

An effective academic base is vital to provide the evidence base for the practice of EM. EM has become firmly embedded in the clinical system for acute care in the UK and Republic of Ireland, and is now starting to develop a firm academic structure in the UK. In the research assessment exercise (RAE) in 1999 no Emergency Physicians (EPs) were ‘returned’ by UK universities. In RAE 2008 six academics in EM were included in the ‘returns’. This demonstrates a rapid improvement in the quality of output and number of EM academics; however, the number is still very small compared to many other specialties, and is disproportionately low compared to the total number of EPs.

The background to academic EM has been rapidly changing. The most important research programmes for EM are the Health Technology Assessment (HTA) and Service Delivery and Organisation (SDO). These two programmes have provided most of the recent funding for EM research. The MRC has also funded some high profile EM projects. The National Research Ethics Service (NRES) is vital for the conduct of large research projects. It consists of a co-ordinating centre at the Central Office for Research Ethics Committees (COREC) and the Research Ethics Committees (REC). RECs are now becoming increasingly specialised (especially for areas such as paediatrics, incapacitated subjects, and tissue-based research).

Future development of academic Emergency Medicine

In order to develop the academic basis for EM we need to look at the types of research that EM will need in the future and the College’s role in creating the people and infrastructure. EM practice needs expertise in:

- Evaluation of technologies – drugs, interventions, diagnostics, methods of risk stratification
- Service delivery and organisation – the best configuration of services for our patients and workforce
- Secondary research – synthesis of the evidence into health technology appraisals or Cochrane reviews

A research project consists of subject content, methodology and delivery. We will always be in competition with other specialists about the subject content, for example the cardiologists will have as great a content expertise (or maybe more) as an EP on research on the acute management of a myocardial infarction. The key ‘competitive edge’ or ‘added value’ that can be provided by EPs is knowledge of the methodology of emergency care research and the ability to deliver a research project in a challenging environment. Our future strategy should therefore be to develop (1) our methodological expertise and (2) our systems for delivering the research.
The first will be undertaken by academics. However, the second will require a much wider engagement of EPs within the NHS.

**Emergency Medicine academic centres**
Academic centres are defined by criteria developed for the research assessment exercise (value of research grants and impact of published papers). Current academic capacity within EM is below our requirements, so we need to develop additional centres, with an additional three university academic units over the next five years.

**Emergency Medicine academic personnel**
Most EM academics currently work in units that are below a critical mass. Over five years we should aim to have a minimum of three substantive academic posts in each academic unit. We should encourage more specialisation so that each centre has a particular expertise and track record in a particular methodology or research area.

**Contribution of non-academics**
The delivery of future EM research will require the contribution of many EPs who are not in academic posts. One of our major strengths is the vast number of patients who attend our EDs. We must engage all EPs in entering patients into clinical trials and EDs in participating in research projects as these activities cannot only be undertaken by the relatively few academic centres. Our training programme must provide the knowledge, skills and attitudes that allow this to happen. Our job plans must recognise that most EPs should devote time to patient recruitment for clinical trials.

**Training**
There are two types of training track in EM: the standard programme; and the academic programme.

**Academic content of standard training**
EM needs to undertake pragmatic, clinically-based research which must be generalisable to everyday practice. Generalisable research cannot be carried out in the ‘ivory towers’ – it must be carried out in the real world. So, EM research will have to take place in non-academic centres, usually with many EDs co-operating in large multi-centre studies. This means that every EP must play their part – and in order to do this our training programmes must give:
- Awareness of the importance of EM research
- Competence in Critical Appraisal
- Knowledge of the international conference on harmonisation of technical requirements for registration of pharmaceuticals for human use—good medical practice (ICH GMP)
- Attitudes that promote collaborative research

**Academic training**
We need to develop an academic training strategy that is structured, yet flexible. The following elements should be incorporated:
- Undergraduate
- Academic FY2
- Academic clinical fellowship (Academic ACCS plus ST3)
- PhD (funded fellowship)
- Academic clinical lecturer
- NTN(A)
- Academic senior lecturer

The building blocks of such a system are all in place, but we need to put them together to give trainees a clear vision of an academic training pathway and provide support for those individuals choosing this career path.

**Recognition of academic contribution**
For the large multi-centre research projects needed in EM it is not possible for all contributors to be authors on the published papers that result. However, we do need to create mechanisms by which all participants in research projects can have their contribution acknowledged through the appraisal system, the Clinical Excellence Awards schemes and the Research Assessment Exercise. There is also the need to create an ethos within EM that research is important enough to have time spent on it for the good of the specialty without personal reward and have research time recognised within job plans for EPs.

**Publications**
The *Emergency Medicine Journal (EMJ)*
The Journal is gaining a deserved national and international reputation. The College will continue to foster development of the Journal.
It will ensure closer collaboration with other educational projects such as e-learning.

**Standards and Guidelines**
The Clinical Effectiveness Committee will continue the publication of evidence-based guidelines developed though the GEMNET system. The professional standards committee will publish service guidelines and standards.

**The Website**
The website will become the hub of College communications. It has recently been updated and further development is planned.

**College literature**
The College will explore the concept of a new series of publications aimed at explaining the work of the ED. The Lay Group will be encouraged to participate in this work.
# Glossary of Selected Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACCS</td>
<td>Acute Care Common Stem (training)</td>
</tr>
<tr>
<td>ACEMT</td>
<td>Advisory Committee on Emergency Medicine Training</td>
</tr>
<tr>
<td>AM</td>
<td>Acute Medicine</td>
</tr>
<tr>
<td>ANP</td>
<td>Advanced Nurse Practitioner</td>
</tr>
<tr>
<td>BAEM</td>
<td>British Association for Emergency Medicine</td>
</tr>
<tr>
<td>CCT</td>
<td>Certificate of Completion of Training</td>
</tr>
<tr>
<td>CDU</td>
<td>Clinical Decision Unit</td>
</tr>
<tr>
<td>CEM</td>
<td>College of Emergency Medicine</td>
</tr>
<tr>
<td>EBM</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>EM</td>
<td>Emergency Medicine</td>
</tr>
<tr>
<td>ENP</td>
<td>Emergency Nurse Practitioner</td>
</tr>
<tr>
<td>EP</td>
<td>Emergency Physician</td>
</tr>
<tr>
<td>FASSGEM</td>
<td>Forum for Associate Specialist and Staff Grades in Emergency Medicine</td>
</tr>
<tr>
<td>FEN</td>
<td>Faculty of Emergency Nursing</td>
</tr>
<tr>
<td>GMC</td>
<td>General Medical Council</td>
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<tr>
<td>HCC</td>
<td>Healthcare Commission</td>
</tr>
<tr>
<td>HSE</td>
<td>Health Service Executive (RoI)</td>
</tr>
<tr>
<td>IAEM</td>
<td>Irish Association for Emergency Medicine</td>
</tr>
<tr>
<td>ICBTICM</td>
<td>Intercollegiate Board for Training in Intensive Care Medicine</td>
</tr>
<tr>
<td>ICM</td>
<td>Intensive Care Medicine</td>
</tr>
<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>MIU</td>
<td>Minor Injury Unit</td>
</tr>
<tr>
<td>NP</td>
<td>Nurse Practitioner</td>
</tr>
<tr>
<td>PA</td>
<td>Programmed Activity</td>
</tr>
<tr>
<td>PEM</td>
<td>Paediatric Emergency Medicine</td>
</tr>
<tr>
<td>PMETB</td>
<td>Postgraduate Medical Education and Training Board</td>
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<td>RCoA</td>
<td>Royal College of Anaesthetists</td>
</tr>
<tr>
<td>RCGP</td>
<td>Royal College of General Practitioners</td>
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<td>Royal College of Nursing</td>
</tr>
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<td>SIR</td>
<td>Specialty Registrar</td>
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<td>The College</td>
<td>The College of Emergency Medicine</td>
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<tr>
<td>UCC</td>
<td>Urgent Care Centre</td>
</tr>
<tr>
<td>WIC</td>
<td>Walk-In Centre</td>
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References


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