Acute medicine

Organisation and training for the next decade

Report of a working party 2004

The Royal College of Physicians of London

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Foreword

A wide range of conditions cause or are closely associated with acute illness, and the care of acutely ill patients is a large and increasing part of medical work in hospital. Many of these patients are very ill and require prompt and accurate assessment, and it is especially important to identify those whose condition is deteriorating or who are at risk of getting worse.

It is clear that this work requires doctors who are skilled and experienced in the rapid assessment, diagnosis and treatment of patients with acute medical conditions. At present most acute medicine is delivered by physicians who combine this work with other kinds of specialist care. For a number of reasons this is not ideal, as the unpredictability and intensity of caring for the acutely ill calls for the undivided attention of the teams dealing with them. The time and attention of the doctors involved should not be diverted to inpatients with other kinds and levels of need; nor should specialty work in outpatients clash with the care of patients who are acutely ill. Junior doctors faced with acute problems must be confident that they can call on a senior colleague who is skilled in acute medicine and receive unreserved support. At a time when traditional continuity of care is being eroded by factors such as shift working, there is renewed concern about the care of acutely ill patients and their safety.

This report addresses these issues by focusing on acute medicine as a new specialty, whose place in service provision must be clearly defined and supported in order to strengthen the care of acutely ill patients. It considers the education, training and careers of doctors who are drawn to this field where – as in every other specialty of internal medicine – specialist competencies must be built on sound foundations of knowledge and skill in general medicine. There is no short cut.

Alongside work in acute medical units, the specialty has close affiliations with emergency (A&E) medicine and critical care (high dependency and intensive care). The report makes recommendations to increase the scope for working across these areas by appropriately trained doctors and other clinical staff.

The report and its recommendations, which build on previous College reports,[1,2] are concordant with emerging Department of Health policies designed to improve the organisation and delivery of care to acutely ill patients. It therefore makes recommendation to medical directors and chief executives of trusts in England, to chief executives of primary care trusts, and to the Department of Health, on arrangements that should be in place in trusts that receive acutely ill patients. The report also makes recommendations to undergraduate and postgraduate deans, and the Postgraduate Medical Education and Training Board on the education and training of doctors for working in this area of service.

A number of recommendations are directed to the three Royal Colleges of Physicians of the UK, and we shall take them forward. Among them is the need to work with the Council of Heads of Medical Schools to establish the academic base for teaching and research that is necessary to advance this area of clinical service.

Finally, the report aims to encourage younger doctors to enter the developing specialty of acute medicine and to play a central part in its shaping and development.

April 2004

Professor Carol Black
President, Royal College of Physicians

References

1 Royal College of Physicians. *The interface of accident & emergency and acute medicine.* Report of a working party. London: RCP, 2002.

2 Royal College of Physicians. *The interface between acute general medicine and critical care.* Report of a working party. London: RCP, 2002.

Executive summary and recommendations

The purpose of this report is to improve the quality and safety of care of people who are acutely ill. Building on earlier reports,[1,2] it marks a further stage in strengthening the care of acutely ill patients, by focusing on the new specialty of acute medicine and its place in service provision. The report examines the facilities and organisation necessary to support clinical services, and proposes standards of care. It also considers the education, training, careers and job plans of doctors who are drawn to this field, and the need for an academic base to ensure teaching and research of the highest quality.

In producing this report, the Working Party reviewed two previous Royal College of Physicians (RCP) reports, *The interface of accident & emergency and acute medicine*[1] and *The interface between acute general medicine and critical care*,[2] and we recommend that they are read in conjunction with this one (see Appendices 1 and 2 for their summaries and recommendations). As with the earlier reports, the Working Party has taken care to ensure that the recommendations are in keeping with current Department of Health policies on this element of service and in terms of Modernising Medical Careers.

The recommendations below may need to be modified locally to take account of differences in consultant contracts and methods of delivery of care in different parts of the UK.

Recommendations

1 **We recommend** the following definition of 'acute medicine':

> *Acute medicine is that part of general (internal) medicine concerned with the immediate and early specialist management of adult patients with a wide range of medical conditions who present in hospital as emergencies.*

The following recommendations are addressed to medical directors and chief executives of trusts in England, to chief executives of primary care trusts, and the Department of Health.

2 **We recommend** that all trusts admitting acutely ill medical patients have a dedicated area where they can be managed. Current terminology is confused, and **we recommend** the term 'acute medicine unit' (AMU). In smaller hospitals this may be a combined multispecialty unit for all acutely ill admissions.

3 **We recommend** that a network of advisers, including lead physicians, be established to take forward the development of acute medicine in England. This would involve:

- consultant physician in acute medicine in every trust, who is given time to take the lead in the development and provision of acute medicine to ensure that this service, which is pivotal to the quality of care, is developed as a matter of urgency

- regional specialty advisers appointed jointly by the three Royal Colleges of Physicians and the Society for Acute Medicine to work with postgraduate deans on issues such as acute medicine training and its funding. They should also support lead physicians in trusts on service delivery issues
- a National Director of Acute Medicine appointed by the Department of Health to work with the Royal Colleges of Physicians, the National Director for Emergency Access and the regional specialty advisers in acute medicine.

4 **We recommend** that there should be at least three consultants with primary responsibility for acute medicine in every acute hospital, and more in larger hospitals, by the year 2008.

5 **We recommend** that a contribution to the practice of acute medicine from appropriately trained consultants in emergency (A&E) medicine and critical care should be facilitated.

6 **We recommend** that appointments in acute medicine should be developed that include commitments to accident & emergency (A&E) departments, high-dependency units and intensive care units, as well as AMUs.

7 **We recommend** that the staff dealing with the acutely ill should be appropriately trained, and that staffing levels should be adequate to meet the needs of patients in an expert and timely manner.

8 **We recommend** that an appropriately trained member of the clinical staff should assess according to clinical need, and certainly within four hours of arrival, all patients presenting to hospital as acute medical emergencies. This should include the development of a management plan.

9 **We recommend** that a doctor with appropriate skills in acute medicine should be present at all times in all units receiving acute medical emergencies. This would usually be a specialist registrar or equivalent in medicine, or in a medical specialty, who should have the MRCP(UK) Diploma or equivalent, and two years recent experience in managing patients presenting as acute medical emergencies. A consultant physician who has no other scheduled commitments should support this doctor.

10 **We recommend** that 15 minutes for each new patient should be available on a consultant's 'post-take' ward round. This equates to about one clinical four-hour programmed activity for a consultant to see 16 new emergency admissions.

11 **We recommend** that each new patient admitted should be reviewed by a consultant physician within 24 hours. This may require the cancellation of other commitments by the relevant consultant. In all but the smallest trusts (those with less than 16 acute admissions per 24 hours), this will necessitate a consultant-led ward round at least twice in each 24-hour period.

12 **We recommend** that all trusts develop an emergency admissions policy. This policy should contain a plan of action to be taken in the event of insufficient acute medical beds, and a

plan to provide a dedicated area, with identified medical and nursing staff, for the provision of acute medical care at times of extreme pressure.

13 **We recommend** closer collaboration between those working in acute medicine, staff in A&E departments, and those working in critical care units, in order to streamline care for the acutely ill. This would include sharing clinical guidelines and best practice, as well as integrating the work of medical and nursing staff, and facilitating staff rotation across the various aspects of the work. A single directorate of emergency care may facilitate this.

The following recommendations are addressed to undergraduate and postgraduate deans, and members of the Postgraduate Medical Education and Training Board (PMETB).

14 **We recommend** that deans of medical schools ensure that dedicated time in the undergraduate curriculum is devoted to acute medicine, and that formal teaching by consultants in acute medicine is provided. All medical students should have experience of acute medicine in AMUs as part of their medical studies.

15 **We recommend** that attachments to AMUs should last for one to four months. Rotas that provide experience in AMUs only in sessions of one shift, one day or one week, without such blocks, should be discouraged.

16 **We recommend** that the PMETB ensures that trainees in acute medicine receive dedicated experience in AMUs, coronary care units, high-dependency units, intensive care units, A&E departments and in geriatric medicine. We **further recommend** that trainees in acute medicine undertake the Royal Colleges' IMPACT© course (Ill Medical Patients, Acute Care and Treatment), and receive training covering the key clinical, management and organisational skills described in the acute medicine curriculum.

17 **We recommend** that clear pathways are developed to facilitate higher specialist training in acute medicine for doctors with a background in emergency (A&E) medicine and critical care, who have appropriate basic specialist training, but do not necessarily have the MRCP(UK) Diploma. Equivalence should be determined for other relevant postgraduate qualifications.

18 **We recommend** that the PMETB considers putting in place arrangements to facilitate the further training of consultants in acute medicine who wish to change career direction and re-enter specialty training.

19 **We recommend** that there should be an emphasis on opportunities for flexible training and flexible working in acute medicine.

The following recommendations are addressed to the three Royal Colleges of Physicians of the UK (Edinburgh, Glasgow and London).

20 **We recommend** that the General (Internal) Medicine Committee of the Royal College of Physicians of London be reconstituted as the Committee for Acute and General Internal Medicine.

21 **We recommend** that the three Royal Colleges of Physicians and the Society for Acute Medicine work together with the Council of Heads of Medical Schools to establish a secure academic base for acute medicine.

22 **We recommend** that the RCP Workforce Unit, on behalf of the three Royal Colleges of Physicians, collects and monitors accurate data on the numbers of consultants and trainees working in acute medicine and on the contribution from consultant physicians who also work in other specialties.

23 **We recommend** that RCP regional advisers and specialty advisers review and advise on job plans for new consultant posts in acute medicine in the light of the working patterns recommended in this report.

1 Background and remit

1.1 In June 2000, the Federation of the Royal Colleges of Physicians published *Acute medicine: the physician's role – proposals for the future*,[3] which addressed the question of how best to provide acute medical care in hospital, and the types of physicians needed. The report encouraged the development of acute medicine units (AMUs), and recommended dual certification – in general (internal) medicine (G(I)M) and in a specialist area of medicine – for all physicians, but especially for those practising in eight specialist fields (cardiology, diabetes and endocrinology, gastroenterology, geriatrics, renal medicine, respiratory medicine, rheumatology, and infectious diseases). It did not recommend the development of a specialty of acute medicine, or singly-accredited acute physicians. Subsequently, new circumstances necessitated a different approach:

- the increasing demand for emergency care, much of which falls within the medical specialties
- the impact of the European Working Time Directive
- the significant changes occurring in the training programmes for all doctors
- the increasing popularity of specialising in acute medicine amongst young trainee doctors, and the consequent demand for a training programme.

All these factors considered together led the Royal College of Physicians (RCP) in 2002 to endorse the development of a specialty of acute medicine and an appropriate training programme.

1.2 In July 2003, the Specialist Training Authority recognised acute medicine as a subspecialty of G(I)M for the purposes of training.

1.3 The Government has demonstrated a commitment to improving acute medical care through the Reforming Emergency Care agenda[4] and *The NHS plan*.[5] An integral part of both these is the provision of acute medicine and the role of physicians in it.

1.4 Following confirmation of acute medicine as a specialty, the Presidents of the Federation of the Royal Colleges of Physicians invited the New Consultants Committee of the RCP to lead a Working Party to review and update the Federation's 2000 report.[3] The remit of the Working Party was to:

- define the term 'acute medicine'
- explore ways of raising the profile of acute medicine
- explore appropriate training programmes to encourage a career in acute medicine
- define the workforce requirements for the provision of acute medicine services, taking note of European Working Time Directive requirements
- consider ways of making careers in acute medicine attractive to physicians

- examine standards of care in order to improve patient safety
- delineate the interface between acute medicine and other medical specialties.

1.5 The members of the Working Party met on four occasions. Evidence was received from consultants, trainees, non-consultant career grade doctors, and nurse consultants, all working in acute trusts, ranging from large teaching hospitals to small district general hospitals. Evidence was also received from advisors to the Department of Health representing emergency care, emergency medicine and primary care.

2 Defining acute medicine and those who deliver it

2.1 Two synonymous terms are currently used to describe the activity involved in providing acute medical care: 'acute medicine' and 'acute (internal) medicine'. This report will use the term 'acute medicine'.

2.2 Acute medicine differs from 'emergency medicine', the term used worldwide for the care practised in accident & emergency (A&E) departments. This includes the treatment of surgical conditions, trauma and minor injuries, and also encompasses paediatric emergencies. In this report, the term 'emergency (A&E) medicine' will be used.

2.3 Whilst the locus of acute medicine is in acute medicine units, it is not exclusive to this environment, and will also be delivered in A&E departments, high-dependency units (HDUs) and on hospital wards. It is, however, a hospital-based specialty.

Definitions

2.4 The Working Party reviewed a number of definitions of acute medicine and **recommends** the following:

> *Acute medicine is that part of general (internal) medicine concerned with the immediate and early specialist management of adult patients with a wide range of medical conditions who present in hospital as emergencies.*

2.5 Unlike previous definitions of acute medicine, there is no time frame attached to the Working Party's definition. The focus is, however, on the immediate and early management of acutely ill patients.

2.6 **We recommend** that all trusts admitting acutely ill medical patients have a dedicated area where they can be managed. Current terminology is confused as several terms are used for these areas, eg medical assessment unit and medical admission unit, and **we recommend** the term 'acute medicine unit' (AMU). In smaller hospitals this may be a combined multispecialty unit for all acutely ill admissions.

Consultants in acute medicine

2.7 The Working Party's preferred term for consultants working in acute medicine is 'consultant physician in acute medicine' and not 'acute care physician' or 'acute physician'.

2.8 Consultants in acute medicine have expertise in the rapid assessment, diagnosis and treatment of patients with acute medical conditions. They manage the acute medicine service based in AMUs. They are leaders within the multidisciplinary clinical team in AMUs, and support colleagues in A&E departments, in HDUs and on general wards. They have a crucial role in the

training of physicians and in the continuing medical education of consultant colleagues in specialties that contribute to acute medicine. They are an integral part of the emergency care service within trusts.

Those who deliver acute medicine

2.9 Those who have acquired the appropriate competencies may deliver acute medicine. In addition to consultant physicians in the new specialty of acute medicine, this will include:

- consultant physicians also working in other medical specialties who provide acute medical care
- consultants in other non-medical specialties, particularly those in emergency (A&E) and critical care medicine, who have subspecialty training in acute medicine.

They will be supported by trainees acquiring competencies in acute medicine.

3 Raising the profile of acute medicine

3.1 The recognition of acute medicine for subspecialty training by the Joint Committee for Higher Medical Training in 2003 was an important step in developing an identity for acute medicine that is distinct from other specialist groups. It is now vital to capitalise on the progress that has been made in the recognition and development of the specialty. The Society for Acute Medicine and the Royal College of Physicians of London are best placed to do this.

3.2 To further support development of acute medicine, **we recommend** that the General (Internal) Medicine Committee of the Royal College of Physicians of London be reconstituted as the Committee for Acute and General Internal Medicine. The composition of the Committee should reflect these new responsibilities and seek representation from the Society for Acute Medicine, the Faculty of Accident & Emergency Medicine and the Scottish Royal Colleges of Physicians.

A nationwide network of advisers

3.3 To ensure that patients receive the very best acute medical care, **we recommend** that a network of advisers in England be established to take forward the development of acute medicine and ensure that appropriate standards are set and maintained. This would involve:

- a consultant physician in acute medicine in every trust, who will be given time to take the lead in the development and provision of acute medicine to ensure that this service, which is pivotal to the quality of care, is developed as a matter of urgency
- regional specialty advisers appointed jointly by the three Royal Colleges of Physicians and the Society for Acute Medicine to work with postgraduate deans on issues such as acute medicine training and its funding. They should also support lead physicians in trusts on service delivery issues
- a National Director of Acute Medicine appointed by the Department of Health to work with the National Director of Emergency Care, the Royal Colleges of Physicians and the regional specialty advisers in acute medicine.

An academic and research base

3.4 Acute medicine in the UK requires the development of an academic and research base in order to support teaching and training at medical undergraduate and postgraduate level, to support basic and clinical research, to develop clinical standards, and to provide audit tools for the assessment of clinical performance. **We recommend** that the Royal Colleges of Physicians and the Society for Acute Medicine work together with the Council of Heads of Medical Schools to establish a secure academic base for acute medicine.

4 Education and training

Undergraduate

4.1 At present, pre-registration house officers are often ill prepared for the demands of the increasing number of acutely ill unselected emergency patients admitted to hospital.

4.2 **We recommend** that deans of medical schools ensure that dedicated time in the undergraduate curriculum be assigned to acute medicine, and that formal teaching by consultants in acute medicine be provided. All medical students should have experience of acute medicine in AMUs as part of their medical studies.

Postgraduate

4.3 There are significant changes occurring in postgraduate medical training. After graduation there will be two years of 'foundation' training, replacing the pre-registration year and the first senior house officer year. Following this, there will be two or three years of basic medical training. It is likely that these changes will provide greater exposure of trainees to emergency (A&E) medicine and primary care. It is also anticipated that these arrangements will include rotations through AMUs.

4.4 **We recommend** that attachments to AMUs for senior house officers (SHOs) should last for one to four months. Rotas that provide experience in AMUs only in sessions of one shift, one day or one week, without such blocks, should be discouraged.

4.5 The Joint Committee for Higher Medical Training has approved subspecialty training in acute medicine, which will be for one extra year after completion of higher specialist training in G(I)M. The responsibility for assessing training is soon to move to the Postgraduate Medical Education and Training Board (PMETB). The Board should ensure that all trainees in G(I)M continue to receive appropriate training in acute medicine, and in particular, that those who wish to obtain subspecialty recognition in acute medicine (see Para 5.4) have further training to acquire the competence necessary to pursue their chosen career path.

4.6 **We recommend** that the PMETB ensures that trainees in acute medicine receive dedicated experience in AMUs, coronary care units, high-dependency units (HDUs), intensive care units (ICUs), A&E departments and in geriatric medicine. We **further recommend** that trainees in acute medicine undertake the Royal Colleges' IMPACT© course (Ill Medical Patients, Acute Care and Treatment), and receive training covering the key clinical, management and organisational skills described in the acute medicine curriculum.

4.7 **We recommend** that clear pathways are developed to facilitate higher specialist training in acute medicine for doctors with a background in emergency (A&E) medicine and critical care, who have appropriate basic specialist training, but do not necessarily have the MRCP(UK) Diploma. Equivalence should be determined for other relevant postgraduate qualifications.

5 Workforce requirements

The balance of specialist delivery: current and future

5.1 There are currently about 100 consultant physicians in acute medicine, either working solely in acute medicine or combined with another specialty.

5.2 A proportion of trainees in G(I)M will have a final career path in acute medicine, whilst others will complete training in G(I)M and another medical specialty.

5.3 At present, consultants who are trained in another specialty deliver the majority of acute medicine at consultant level. Although this is likely to continue, the proportion will decrease over the next ten years as the contribution from consultants trained specifically in acute medicine increases. An increase in the number of training posts is therefore required to allow growth in acute medicine.

5.4 As the recognised training programme for acute medicine was only approved in 2003, consultant physicians currently working primarily in acute medicine have trained through a variety of other routes, and again this is likely to continue, to a decreasing extent, for the next 5–10 years.

Specialists from abroad

5.5 Also, as a result of changes in the European Specialist Order, it is likely that some specialists trained outside the UK will be eligible for the UK Specialist Register and will have the training and experience needed to become consultant physicians in acute medicine in the UK.

Attracting UK trainees

5.6 Recruitment of UK trainees into acute medicine posts will require well-designed training schemes and the expectation of reasonable job plans upon consultant appointment.

Contributing across the interfaces

5.7 **We recommend** that a contribution to the practice of acute medicine from appropriately trained consultants in emergency (A&E) medicine and critical care should be facilitated.

5.8 **We recommend** that appointments in acute medicine should be developed that include commitments to A&E departments, HDUs and ICUs, as well as AMUs.

Staffing for the future

5.9 **We recommend** that there should be at least three consultants with primary responsibility for acute medicine in every acute hospital, and more in larger hospitals, by the year 2008.

5.10 The number of consultants and trainees working in acute medicine needs to be carefully monitored (see Para 9.1).

6 Job plans and career paths

Job plans

6.1 RCP regional advisers review job descriptions and job plans for new consultant posts and are well placed to advise on models recommended in this report. A job plan consists of 10 programmed activities (PAs), each lasting four hours, per week. The models recommended below should be regarded as standard with respect to the activities of a consultant in acute medicine, but may be altered by agreement according to local need.

Consultant physician in acute medicine with no additional specialty interest

6.2 The following is recommended for a consultant physician in acute medicine with no additional specialty interest:

- five direct clinical care (DCC) PAs in acute medicine – one of which will cover patient-specific activities such as letters, case discussions, meeting relatives etc
- one and a half DCC PAs for clinical commitments outside the AMU (to be determined locally, but could include HDU and ICU sessions, establishing and running emergency clinics, procedures lists, specialty clinics etc)
- one supporting PA for AMU service development and management
- two and a half supporting PAs for continuing professional development, clinical governance, appraisal and assessment of trainees, research, teaching etc.

Consultant physician in acute medicine with an additional specialty interest

6.3 The following is recommended for a consultant physician in acute medicine with an additional specialty interest:

- four DCC PAs in acute medicine – one of which will cover patient-specific activities such as letters, case discussions, meeting relatives etc
- three and a half DCC PAs in specialty interest – one of which will cover patient-specific activities such as letters, case discussions, meeting relatives etc
- two and a half supporting PAs for continuing professional development, clinical governance, appraisal and assessment of trainees, research, teaching etc.

Flexible working

6.4 Consideration must be given to the growing number of trainees who wish to work flexibly. Weekly schedules for trainees and consultant job plans should be modified to take account of such wishes. Indeed, the sessional and shift-based nature of work in acute medicine makes it

ideally placed to accommodate flexible and part-time working. **We recommend** that there should be an emphasis on opportunities for flexible training and flexible working in acute medicine.

6.5 **We recommend** that RCP regional advisers and specialty advisers review and advise on job plans for new consultant posts in acute medicine in the light of the working patterns recommended in this report.

Career development

6.6 The career of a consultant in acute medicine must be able to develop over time, so long-term planning is essential. Although most consultants in acute medicine are likely to remain in their posts for the duration of their careers, as they do in most specialties, opportunities to develop roles in areas such as medical education or management should exist. Evidence from existing consultants in acute medicine is that 'burnout' is not a common problem, provided that job plans are satisfactory and that there is a proper team in place. Consultants in acute medicine must therefore be part of a team with their own group of junior medical staff. This is, of course, no different from other high-intensity specialties, such as intensive care medicine and emergency (A&E) medicine.

6.7 However, some consultants in acute medicine may wish to change direction and re-enter specialty training in another area of medicine. Under present conditions, this would not be straightforward as it would involve engaging in open competition for training posts.

6.8 One possibility would be for each specialty to hold a number of NTNs for which existing consultants in acute medicine could apply. Further training would take account of relevant experience already gained. Alternatively, training to the award of 'post-CCT (Certificate of Completion of Training) Fellowship' could be considered. The numbers for both of these would be determined according to national workforce requirements.

6.9 Some consultants may not wish to undergo extensive additional training, but may wish to expand their expertise in a defined area, for example in endoscopy, bronchoscopy, or echocardiography. The one and a half periods of programmed activity for work outside the AMU, as set out in the model job plan above, should be made available for such skills acquisition. This could be on a modular basis, with appropriate competency assessment.

6.10 **We recommend** that the PMETB consider putting in place arrangements to facilitate the further training of consultants who wish to change career direction and re-enter specialty training.

7 Maintaining standards of care

The need for a standards-based approach

7.1 The standards contained in this section are based on the reasonable expectations of patients, and the experience and professional judgement of clinicians. In many cases they are also supported by local audit. Their purpose is to improve patient care and provide a reference point for AMUs and for physicians in acute medicine against which they can measure their performance. Only by adopting a standards-based approach are we likely to improve the care of patients, reverse the waning enthusiasm of specialist physicians for acute medicine, and secure the resources required to deliver safe and effective acute medical care.

7.2 Unfortunately, current practice in the UK often falls below the standards recommended here[6] even though, in the view of the Working Party, they are reasonable and achievable. The recommendations relating to the standards are addressed to medical directors and chief executives of trusts in England, to chief executives of primary care trusts, and to the Department of Health.

Allocated time for acute care

7.3 Historically there has been a failure to recognise the medical time needed with each patient when providing acute medical care. This contrasts with elective areas of medical activity, such as outpatient clinics, procedures and surgical lists, where the time needed for each patient consultation or intervention can be measured easily. Emergency medical care has been fitted around such elective activity, but as the volume of emergency work has risen, the time available to deal with each patient has fallen to levels that challenge safe practice. Medical staff, under pressure not to cancel clinics or elective procedures, can become overwhelmed by conflicting commitments. The standards set out in this section are designed to overcome these problems and to facilitate appropriate workforce and job planning at national and local level.

7.4 Patients requiring acute medical care should receive the same standard of care, regardless of whether they are treated in an AMU, the A&E department, or on an inpatient hospital ward. **We recommend** that the staff dealing with the acutely ill should be appropriately trained, and that staffing levels should be adequate to meet the needs of patients in an expert and timely manner.

Assessment

7.5 **We recommend** that an appropriately trained member of the clinical staff should assess according to clinical need, and certainly within four hours of arrival, all patients presenting to hospital as acute medical emergencies. This should include the development of a management plan. Standards for acute medicine should be followed.[7,8,9]

Medical cover

7.6 **We recommend** that a doctor with appropriate skills in acute medicine should be present at all times in all units receiving acute medical emergencies. This would usually be a specialist registrar (SpR) or equivalent in medicine, or in a medical specialty, who should have the MRCP(UK) Diploma or equivalent, and two years recent experience in managing patients presenting as acute medical emergencies. A consultant physician who has no other scheduled commitments should support this doctor.

Junior medical staff

7.7 One hour should be allowed for assessment, documentation, investigation and result gathering, carrying out interventional procedures, treatment and prescription of therapy for each new patient presenting as an acute medical emergency. Additional time is required for reassessment of existing patients, either in an AMU or elsewhere in the hospital. It is also essential that arrangements are in place to allow the attendance of junior medical staff at consultant ward rounds, and for formal handover of patients at the beginning and end of shifts.

Specialist registrar (or equivalent)

7.8 An SpR should be available 24 hours a day, with no other scheduled commitments whilst covering an AMU. Activities will include case review, dealing with critically ill patients, and taking enquiries and referrals from colleagues.

Consultants

7.9 **We recommend** that 15 minutes for each new patient is available on a consultant's 'post-take' ward round. This equates to about one clinical four-hour programmed activity (PA) for a consultant to see 16 new emergency admissions.

Immediate standard

7.10 **We recommend** that each new patient admitted should be reviewed by a consultant physician within 24 hours. This may require the cancellation of other commitments by the relevant consultant. In all but the smallest trusts (those with less than 16 acute admissions per 24 hours), this will necessitate a consultant-led ward round at least twice in each 24-hour period.

7.11 One consultant can see 16 patients in one four-hour PA. Two consultants working together for one PA can see 32 patients between them. An average daily intake to an AMU of 25–30 patients would therefore require 56 hours of consultant activity per week (equivalent to 16 PAs in England).

Medium-term standard

7.12 As the numbers of consultant physicians in acute medicine in MAUs increase, they should be available on site 14 hours a day (8 am to 10 pm). Outside these hours a consultant should be available to provide advice.

7.13 A commitment at this level equates to 98 hours of consultant activity a week (28 PAs).

Long-term standard

7.14 In the longer term, when sufficient consultant physicians in acute medicine are in post, there should be direct consultant involvement in MAUs for the whole of the 24-hour period, provided this can be matched by a full range of support services.

7.15 A commitment at this level equates to 168 hours of consultant activity a week (51 PAs).

Emergency admissions policy

7.16 The practice of managing acutely ill medical patients on non-medical wards is a cause of major concern and is unacceptable. It is very difficult for both medical and nursing staff to provide satisfactory care for such patients. Their presence in an environment inappropriate for their needs puts extra strain on already over-burdened staff, and poses a significant clinical risk for the patient. The Working Party believes that the regular presence of acutely ill medical patients on non-medical wards represents a failure in bed management. To overcome this, **we recommend** that all trusts develop an emergency admissions policy. This policy should contain a plan of action to be taken in the event of insufficient acute medical beds, and a plan to provide a dedicated area, with identified medical and nursing staff, for the provision of acute medical care at times of extreme pressure.

8 Demographic models of acute care

Workforce requirements

8.1 No consultant in acute medicine can provide effective care if s/he is working single-handed. As there is little or no elective activity, staffing levels cannot be reduced at times of leave or sickness. For this reason **we repeat our recommendation** that the aim should be to have at least three consultants with primary responsibility for acute medicine in every acute hospital, and more in larger hospitals, by the year 2008.

8.2 It is likely that different models of care will evolve in different trusts. Small and medium-sized district general hospitals (DGHs) (those serving a population of between 150,000 and 500,000), where there are two or three consultants in most major medical specialties, are likely to have three consultants in acute medicine, thereby providing only about half of the weekly PAs necessary to service an average workload not exceeding 32 acutely ill patients a day. Because of this shortfall, the majority of acute medicine in medium-sized DGHs will continue to be delivered by consultant physicians in other specialties, supporting consultants in acute medicine.

8.3 Larger hospitals (those serving a population of 500,000 plus) may have seven to 12 consultants in acute medicine, thereby providing a majority, and sometimes all, PAs for an average workload not exceeding 64 acutely ill patients a day.

8.4 This would allow such consultants in AMUs to triage directly to the specialties that may not be directly involved in the initial assessment of acutely ill patients. Alternatively, a model whereby consultant physicians in other specialties support consultants in acute medicine may be preferred.

Small and isolated hospitals

8.5 Small and isolated hospitals will need to have clear guidelines on the management of acute medical conditions and, in the absence of appropriate facilities or expertise, should work closely with local A&E departments and larger centres to ensure the safe, immediate assessment, stabilisation and transfer of patients. Such arrangements are described in detail in *Isolated acute medical services.*[10]

9 The specialty interface

Monitoring data on consultant numbers

9.1 A survey by the RCP Workforce Unit shows increasing numbers of consultants wishing to withdraw from acute medicine.[11] However, it is clear that, except in a few of the largest centres, their continued contribution will be essential for the next 10 to 15 years, in order to provide safe and effective acute medical care for patients. **We recommend** that the RCP Workforce Unit, on behalf of the three Royal Colleges of Physicians, collects and monitors accurate data on the numbers of consultants and trainees working in acute medicine and the balance of the contribution from consultant physicians who also work in other specialties.

Organising acute medicine delivery between the specialties

9.2 Clinical directors and lead clinicians for acute medicine should use the PA calculations set out in Chapter 7 (Paras 7.9–7.15) to ensure that adequate consultant input is available for acute medicine. Each medical specialty in a trust could be contracted to provide a set number of PAs a week, depending on the number of consultants within the specialty. Thus, if an individual consultant, or a whole specialty, wished to reduce their commitment to acute medicine, this would need to be negotiated with the other consultants involved in providing the service who would be expected to take up the shortfall.

9.3 New appointments would contribute to the provision of the acute medicine service, so the allocation to acute medicine within the specialty of the new appointment would consequently increase. However, if the new appointment did not wish to contribute, then the specialty of the new appointment would need to absorb the commitment. This would provide an incentive to appoint new consultants who wished to make a contribution to acute medicine.

9.4 These principles would also allow for local arrangements where consultants over a certain age (say 55 years) could withdraw their commitment to acute medicine if they so wished. There are, however, examples of senior physicians opting to increase their acute work.

9.5 An acute specialty within a trust, such as cardiology, might withdraw from a commitment to unselected medical take if it were able to provide a full 24-hour on-call rota for that specialty and there were sufficient numbers of consultants in other specialties to manage the acute medicine commitment.

9.6 In larger trusts, it may be most effective to have some specialties providing a separate post-take round on a daily basis, according to the expected number of patients appropriate to that specialty. This would apply particularly to geriatric medicine.

Geriatric medicine

9.7 In view of the increasing proportion of elderly patients with multi-system disease presenting as medical emergencies, geriatric medicine is a crucial specialty in its terms of its contribution

both to service delivery of acute medicine and to the training of the next generation of acute physicians.

Closer collaboration across specialties

9.8 **We recommend** closer collaboration between those working in acute medicine, staff in A&E departments and those working in CCUs, in order to streamline care for the acutely ill. This would include sharing clinical guidelines and best practice, as well as integrating the work of medical and nursing staff, and facilitating staff rotation between the various aspects of the work. How this might be achieved is set out in Appendix 1 from *The interface of accident & emergency and acute medicine*,[1] and in Appendix 2 from *The interface between acute general medicine and critical care*.[2] A single directorate of emergency care may facilitate this.

Appendix 1

The interface of accident & emergency and acute medicine[1]

Summary and recommendations

Among the many patients attending accident & emergency (A&E) departments are some who have acute medical illness. This report gives the views of the Royal College of Physicians (RCP) and the Faculty of Accident & Emergency Medicine on the conditions necessary to serve those patients safely and well. It focuses on a key area in the provision of emergency care, addressing issues that have also been raised in a recent document from the Department of Health, *Reforming emergency care: first steps to a new approach.*[1] The chief purpose of the report is to inform discussion between physicians, their clinical colleagues, health service managers and the Department of Health on:

- the provision, organisation and delivery of services in acute medicine
- factors that determine the safety and quality of care of the acutely ill patient
- developments that might help to maintain the safety and quality of care.

An earlier report from the College identified factors that were detrimental to the safe assessment and care of acutely ill medical patients.[2] A relentless increase in emergency referral to hospital has highlighted major shortcomings in care provision. The most critical factors are that there are too few doctors and too few nurses. Another is that insufficient beds are available and often they are badly located and inappropriately serviced. A third is in the organisation of emergency departments.

At the heart of the report is the experience of acutely ill medical patients from the time of their arrival at hospital. A&E and acute medicine should be experienced as a continuum, with patients moving easily and safely from one part of the system to the next, confident that those receiving them are prepared and informed about what has gone before. Whatever the particular circumstances and characteristics of a service, it must be designed for the needs of patients who use it.

The clinical services needed by these patients encompass initial assessment, resuscitation, major trauma care, acute medical care, intensive care, high dependency care and coronary care, supported by comprehensive investigative services. The need for prompt, safe initial assessment of every patient, with continuing review, to ensure that each receives appropriate care without delay, presents a major challenge to emergency services and their organisation. It also has important implications for training in general internal medicine, and the continuing professional development of physicians who undertake acute medical care.

The working party has sought to identify principles that should guide the organisation and working of A&E and acute medicine, and the conditions necessary to provide safe, high quality care for the acutely ill medical patient.

Organisation and working of emergency departments

1 We ***recommend*** that acute trusts set up common clinical management structures linking the disparate elements that comprise an acute medicine service, wherever it is provided. These arrangements must fit coherently within the overall organisation of the hospital, and with the structures that have been developed across health communities within the larger context of emergency care planning.

2 We ***recommend*** that at all times there is a consultant physician available to give clinical leadership for acute medical care. This must be a continuing role and could not be invested in a single individual. We therefore ***recommend*** that acute trusts consider how best to ensure that there is strong clinical leadership for acute medicine, taking into account local circumstances and arrangements at the A&E/acute medicine interface.

3 Sound assessment and clinical management of acutely ill patients requires the commitment of different clinical specialties, professional groups and disciplines to work together to deliver unified care. We ***recommend*** that General Professional Training (GPT) reflects the need for most doctors to be:

- familiar with the clinical problems of patients who present as emergencies, and practised in their assessment and management
- trained and experienced in unified working across the medical specialties and disciplines
- familiar with multidisciplinary team working beyond traditional clinical boundaries.

We recognise the similar implications for the professional training of other health professionals.

4 We ***recommend*** that acute trusts consider the appointment of a consultant from acute medicine or A&E as clinical director of an acute medical service, to manage and organise systems and working practices across the A&E/acute medicine interface.

5 We ***support*** exploration of ways of increasing the flexibility of the health care workforce, and working across professional boundaries, including the introduction of a new post of health care practitioner to complement the work of doctors and nurses.

6 To encourage a unified approach to case assessment and management, and improve the consistency and completeness of the clinical record, we ***recommend*** that:

- a single record for A&E/acute medicine should be considered
- a *structured generic* clerking record should be developed, to include information from the referring doctor, and ambulance and nurse records.

7 We also ***recommend*** that such generic records should not displace specialty-specific records, which are required to support the use of disease-specific protocols and guidelines and to facilitate clinical audit. Acceptance and effective adoption of such a unified record will require changes in practice and habit, and should be reflected in the training of junior doctors and other health professionals. We therefore ***recommend*** that the issues raised be addressed in professional training.

8 We ***endorse*** the view of the College that it is essential that the most recent and relevant patient information is readily available. There must be 24-hour access to old notes seven days a week. This is a risk management issue and requires sound administrative systems and efficient management of the admissions process.

9 We ***recommend*** that acute trusts examine the provision and processes of the major elements of total patient care in relation to emergency care in their communities; and that they seek to remedy shortcomings that have significant adverse effects upon the operation of emergency care.

Facilities required for emergency care

10 Properly staffed facilities are needed by hospitals that receive patients as emergencies or who are acutely ill. We ***endorse*** the view that facilities for the following must be provided:

- prompt triage of patients to appropriate care pathways
- immediate resuscitation
- prompt assessment, observation and initial care of patients
- critical care
- comprehensive investigative, patient monitoring and treatment services – including surgical services – for 24 hours every day.

Hospitals that are too small to maintain a full range of medical and surgical specialties must have sound arrangements for obtaining advice from other units and for the transfer of patients for treatment elsewhere.

11 We ***recommend*** that medical assessment and/or medical admission units should be in place in all hospitals that receive unselected emergency patients. They are essential for the sound assessment and immediate care of acutely ill or injured patients, and for the efficient working of both medical and non-medical staff. (The way in which critical care services may be developed in relation to acute medicine is the subject of a College working party report.)

Standards, safety and quality

12 We ***recommend*** that acute trusts ensure that agreed clinical management policies are in place for the assessment and initial care of emergency patients, and that they are known and observed. We also ***recommend*** that those policies and accepted good practice are subject to continuing review, not only in the wake of adverse events.

13 It is possible to move towards setting standards for the structure and organisation of care at the A&E/acute medicine interface. However, there are considerable problems in producing specific standards, guidelines and auditing tools for such a complex area of medicine. We ***recommend*** that consideration be given to the feasibility of developing a database of clinical standards for acute medicine.

14 We ***recommend*** that the College considers preparing clinical management protocols for patients who present with acute illness. Such protocols should reflect the problems of uncertainty of diagnosis and physiological status, and include clear guidance on when to seek advice from senior staff.

15 We ***recommend*** the general adoption of protocols based on the best available evidence, as this is likely to improve the management of acute medical conditions across the disciplines and specialties.

16 Audit of care in acute medicine, including the means of reporting critical incidents, requires adequate data sets. To allow meaningful, credible interpretation, outcome measures should reflect case-mix and severity as far as possible. We ***endorse*** the view of the College that the quality of NHS data must be improved.

17 We ***support*** proposals to set up a confidential enquiry into deaths of patients admitted as emergency admissions, along the lines of other national confidential enquiries.

18 We ***endorse*** the view of the College that the effective introduction and use of agreed policies and practices, and standardised management protocols, and effective audit, cannot be assured without high quality information technology.

Professional training in acute medicine

19 We ***endorse*** the view of the College that consultant physicians and their teams who undertake acute on-call duties must be trained and experienced in acute medicine; and that this must be reflected in the basic and specialist training of junior doctors and in the continuing professional development of consultant physicians.

Appendix 2

The interface between acute general medicine and critical care[2]

Summary and recommendations

The standard of care received by acutely ill medical inpatients in the UK has been shown to be sub-optimal in a number of recent surveys and publications.

Evidence suggests that this failing may be attributable to a number of factors, not only the organisation and provision of facilities to support this service, but also in the recognition and treatment of acute severe illness in the general medical setting due to increasing emphasis on specialist training rather than generic skills.

Organisation of service

1 The working party ***recommends*** that consultant physicians should move to a dedicated on-call system where their sole responsibility is towards supporting emergency work, ***relating not only to the care of referrals to the medical intake from GPs and from the accident and emergency department (A&E), but also to the evaluation and management of acutely ill inpatients in all departments.***

2 The working party ***recommends*** the introduction of Early Warning Scoring Systems appropriate to severely ill medical patients. Junior medical, nursing and allied health professionals (AHPs), eg physiotherapists, must be trained in their use, both to enhance their recognition of the severely ill and to develop their ability to initiate management driven by appropriate protocols. These systems should specify the point at which the personal involvement of consultant medical staff is mandatory. The effectiveness of these systems should be audited.

3 The working party supports the introduction of intensive care unit (ICU) outreach services, as specified in the publication *Comprehensive critical care: a review of adult critical services* (Department of Health, 2000), and ***recommends*** that junior medical staff be increasingly involved in their educational and training activities. The broadening of this initiative, to provide a multidisciplinary team which can rapidly respond to clinical problems in conjunction with those involved in the provision of the acute medical take, should be considered.

Physical facilities

4 The working party ***recommends*** that appropriate facilities be made available for the provision of Level 2 care for medical patients (see Table 1, p. 5). Ideally, this would be physically adjacent to a Level 3 facility to enable the sharing of nursing and support staff, and of nursing expertise. A consultant physician experienced in the assessment and management of the acutely ill should be actively involved in the organisation and running of such a facility which should be equipped to provide non-invasive ventilatory support (NIV). The supervising physician would be part of the trust multidisciplinary critical care delivery group, and would have a strong training role for the education of attached junior clinical staff.

Training

5 The working party ***recommends*** that training in the recognition and management of acutely ill patients should begin in medical school. All undergraduates should receive training in advanced life support. Postgraduate deans should ensure that pre-registration house officers (PRHOs) retain these skills and are competent providers of resuscitation. Medical schools should consider developing training modules which focus on the knowledge and skills needed in the initial assessment of the severely ill, and which depart from organ system-based training in favour of an approach based on the recognition of the significance of physiological perturbations. To this end, postgraduate deans should locally adopt one of the nationally available generic training schemes (eg the Acute Life-threatening Events – Recognition and Treatment (ALERT^{TM}) programme, designed to teach a systematic approach to the assessment and care of the severely ill. The working party ***recommends*** that a certificate of course completion and competency should become a mandatory requirement for career progression beyond senior house officer (SHO) year 1. Trust boards should also ensure that all nurses and physiotherapists involved in the care of the acutely ill should also undergo this training. Joint training sessions to encourage a team approach to care should be encouraged.

6 The working party ***strongly supports*** the proposal by the Joint Committee on Higher Medical Training (JCHMT) that the first year of SHO training in general (internal) medicine (G(I)M) should include at least 3 months training attachments:

- to facilities managing patients with acute medical illnesses requiring Levels 2 and 3 support
- to a medical assessment unit or A&E department with a focus on the assessment and resuscitation of the acutely ill patient
- and to departments of anaesthesia for education in skills relevant to the care of the severely ill.

In addition to the practical skills gained in these attachments, the working party suggests that junior physicians will thereby enhance their ability to co-ordinate care for the severely ill by working as part of anaesthetic and A&E teams.

7 The working party ***recommends*** that the core curriculum for training in GIM should include sections dealing specifically with the care of the acutely ill patient. This should be introduced early in the training programme and included in the first year of generic training.

8 The working party ***recommends*** that the syllabus and examination for MRCP should include an assessment of candidates' knowledge of the pathophysiology of critical illness.

9 The working party ***recommends*** that the number of physicians in the specialist registrar (SpR) or post-MRCP SHO grade receiving exposure to the care of patients of Levels 2 and 3 dependency should be increased, either through protracted attachments 'within scheme', or by gaining access to an intermediate level training scheme approved by the Intercollegiate Board for Training in Intensive Care Medicine (IBTICM). The provision for physicians to gain access to both training opportunities should be increased. The provision of opportunities for physicians in the SpR grade to access IBTICM-approved advanced level training schemes should also be improved, by increasing their access to 6-month training appointments in anaesthesia. Both initiatives would

produce a cohort of physicians who, in the future, could provide leadership in the care of Level 2 medical patients in their hospitals and improve the co-ordination of Level 3 care; and who could also become responsible for the ensuing in-hospital and outpatient care of such patients.

Chronic respiratory care units

10 The working party ***recommends*** that the need and provision of chronic respiratory care units be reviewed. Patients who require prolonged respiratory support, but are otherwise stable, occupy a significant number of ICU beds. Patient outcomes and bed economy could be improved by establishing weaning units managed by respiratory physicians with specific training and experience.

References

1 Royal College of Physicians. *The interface of accident & emergency and acute medicine.* Report of a working party. London: RCP, 2002.

2 Royal College of Physicians. *The interface between acute general medicine and critical care.* Report of a working party. London: RCP, 2002.

3 Federation of Medical Royal Colleges. *Acute medicine: the physician's role – proposals for the future.* Report of a working party. London: Federation of Medical Royal Colleges, 2000.

4 Department of Health. *Reforming emergency care: first steps to a new approach.* London: DH, 2001.

5 Department of Health. *The NHS plan.* London: DH, 2000.

6 Seward E, Greig E, Preston S, Harris RA, Borrill Z *et al.* A confidential study of deaths after emergency medical admission: issues relating to quality of care. *Clin Med* 2003;**3**:425–34.

7 Society for Acute Medicine (UK). *Recommendations for medical assessment/admission units.*www.acutemedicine.org.uk

8 Emergency Assessment Unit checklist www.publications.doh.gov.uk/emergencycare/emergencyassessmentunitchecklist.htm

9 Modernisation agency. *Improving the flow of emergency admissions. Key questions and steps.* London: Modernisation Agency, 2001.

10 Royal College of Physicians. *Isolated acute medical services: current organisation and proposals for the future.* Report of a working party. London: RCP, 2002.

11 Federation of the Royal Colleges of Physicians of the United Kingdom. *Census of consultant physicians in the UK, 2002.* London: Federation of the Royal Colleges of Physicians of the UK, 2003.

12 Department of Health. *Comprehensive critical care: a review of adult critical care services.* London: DH, 2000.

13 Lammy D. Reforming emergency care; for patients. *Emerg Med J* 2003;**20**:112.

14 Acute Medicine Curriculum for Higher Specialist Training. www.jchmt.org.uk

15 Cooke MW, Higgins J, Kidd P. Use of emergency observation and assessment wards: a systematic literature review. *Emerg Med J* 2003;**20**:138–42.