

**ACUTE MEDICINE
TRAINING IN THE UK**

'THE WAY FORWARD'

**REPORT OF THE WORKING GROUP
ON ACUTE AND GENERAL MEDICINE**

FEBRUARY 2006

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The Joint Committee on Higher Medical Training has invited this review of acute and general (internal) medicine training in the UK in response to the current need to define terms and to agree and recommend a way forward for the provision of training in acute medical services. The Working Group on Acute and General Medicine, hosted by the Specialist Advisory Committee for General (Internal) Medicine, is composed of a broad cross-section of representatives whose objective is to ensure best practice, to adapt to current thinking and to drive national priorities in the provision of acute medical services, in response to the needs of patients, physicians and NHS Trusts. In this report, the Working Group on Acute and General Medicine describes the present position with regard to acute and general medicine training, considers current and future requirements and how to effect change.

November 2005

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EXECUTIVE SUMMARY AND SUMMARY OF RECOMMENDATIONS

The purpose of this report is to consider the training issues, and some of the related service issues, that arise in relation to the development of the new specialty of acute medicine. The Working Group has considered previous reports that address this issue (1-3) and has attempted to build on those.

The report considers the current situation in relation to general (internal) medicine (G(I)M) in the United Kingdom, and recognises that the work undertaken within this specialty has changed very significantly in the last five years. The report also recognises that an entirely new cohort of physicians specialising only in acute medicine cannot be created overnight. Therefore consideration is given to ways in which the new specialty can be developed as rapidly as possible, while continuing to provide a safe, high quality service for all acutely ill patients.

This may be achieved not only by increasing the numbers of trainees and consultants in acute medicine, but also by utilising the skills of those currently practising and training in acute medicine together with another specialty. The report also considers ways in which those currently training in a related specialty may be helped to enter acute medicine if they so wish.

The name of the specialty of general (internal) medicine needs to be changed to reflect the reality of acute medicine today. At the same time there is a need to draw a distinction between those practising solely in acute medicine (the consultant physician in acute medicine) and those who combine acute medical work with a main interest in another specialty.

The report acknowledges that change is needed now, but that there remain considerable uncertainties regarding the details of future training programmes following the implementation of Modernising Medical Careers (MMC). We hope that the report will form a contribution to the debate about how to ensure the competency of future physicians to manage a wide range of emergencies and acute illness presenting to, or arising in, hospital. At the same time, we recognise the importance of continuity of care for patients and for doctors, and the importance of ensuring the quality of the ongoing care of patients once the acute episode has passed.

The Working Group has broad representation from across the United Kingdom, but we acknowledge that the recommendations below may need to be modified according to local differences in population, service structures and methods of service delivery.

Recommendations

Name of specialty and definitions and consultant rôles

1. **We recommend** that the creation of a new specialty of **acute medicine**¹ should be strongly supported. Physicians may train to practise in acute medicine as their main specialty, or may train in essential elements of acute medicine as part of their training in another specialty. General (internal) medicine (G(I)M) as a stand-alone specialty should be phased out in favour of acute medicine.
2. **We recommend** that the name of the Specialist Advisory Committee (SAC) in General (Internal) Medicine be changed to the **SAC in Acute and General Medicine** until G(I)M is no longer available to trainees.
3. **We recommend** that those physicians who wish to specialise in acute medicine alone, without a second specialty, should undergo additional training to that included in the core training for those also training in a second specialty. This should be sufficient to achieve all the competencies and requirements of the acute medicine curriculum. Physicians in acute medicine will expect to provide managerial and team leadership in the specialty within each Acute Trust.

Clinical responsibilities of future consultants in acute and internal medicine

4. **We recommend** that all physicians trained in acute medicine, or involved in the management of acute unselected medical admissions, should be trained in a broad range of competencies to manage the acutely ill, including frail, elderly people with multiple and complex needs.
5. **We recommend** that the competencies that currently enable physicians to provide continuity of care, to address the health and social needs of patients, and to plan complex discharge processes effectively should be included in the curriculum for all physicians.
6. **We recommend** that formal mechanisms for continuity of patient care during the handover between physicians, and between physician and general practitioner at the time of discharge, should be in place in all Trusts that are training acute physicians. Training curricula should emphasise these aspects of patient care, as outlined in recent Royal College of Physicians documents (5, 6).

¹ Acute medicine has been defined as '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' (1). The specialty will concentrate on the early phase of care of the acutely ill, typically the initial 24 to 72 hours, but the competencies needed by acute physicians will be broader and will include many of the skills of the 'general physician' as well as the generic competencies expected of all physicians. This will apply both to those trained exclusively in acute medicine and to those trained in acute medicine with another specialty.

Outpatient work

7. **We recommend** that the totality of outpatient experience for all trainees should include a broad range of conditions that may be encountered. If this has not been possible during Basic Medical Training (ST1+2), then such experience should be ensured during the early years of Higher Specialist Training (ST3–5).
8. **We recommend** that the type of outpatient experience that will be most appropriate for the intended career of the trainee should be defined in the relevant curriculum and should be delivered and monitored in relation to that curriculum.
9. **We recommend** that outpatient experience should be gained that will allow acute medicine trainees to run outpatient clinics for follow-up of discharged acute medicine patients, appropriate rapid-access clinics and ambulatory care.

Workforce requirements for the acute medicine service

10. **We recommend** that the acute medicine workload continues to be shared between as many specialties as possible, **and that** routes into acute medicine should be developed from other disciplines, for example anaesthesia, critical care and accident and emergency (A&E) medicine, as recommended by the Intercollegiate Board for Training in Intensive Care Medicine.
11. **We recommend** that specialist acute medicine training programmes compatible with Modernising Medical Careers (MMC) should be available in every Deanery by April 2007.
12. **We recommend** that further new national training numbers (NTNs) in acute medicine should be created and centrally funded in order to facilitate the necessary expansion of specialty acute medicine. These NTNs should not be created at the expense of current NTNs in established specialties. The development of specialist acute medicine should be monitored closely to ensure that the needs of patients continue to be met across all medical specialties.

Changes to training curricula and regulations

13. **We recommend** that there should be a new curriculum for acute medicine. This should include both the competencies that are required to manage acute unselected medical emergencies and those that are required of a consultant physician in acute medicine. This will include competencies to be found in the current G(I)M, acute medicine and generic curricula.
14. **We recommend** that training pathways should be modified to fit with MMC guidelines as these develop and that there should be an effective, continuous competency assessment process to measure performance against the curriculum.
15. **We recommend** that the acute medicine curriculum identifies those core competencies that are essential for all physicians managing acute unselected medical emergencies, so that consultants who have completed dual-specialty training programmes are fully able to support the consultants in acute medicine.

Conventional routes into acute and internal medicine training

16. **We recommend** that for trainees in dual-specialty training programmes who wish to take up dual-specialty consultant posts, competence in managing unselected medical emergencies should be assured at or near to the end of training and should be relevant to the intended consultant post. The way in which this is achieved may differ between specialties.
17. **We recommend** that a way of distinguishing consultants trained purely in a specialty other than acute medicine from those trained in specialty plus acute medicine should be retained – retaining the 'dual' certificate of completion of training (CCT) (in specialty + acute medicine) is one way of doing this.
18. **We recommend** that careful consideration is given to the possible reduction in service provision and training experience that will result if all acute and internal medicine training for higher specialist trainees is to be provided within two years at the start of a dual-specialty training programme.

Training in acute medicine and individual specialties

19. **We recommend** that future MMC-compatible dual training programmes in specialty plus acute medicine are developed in collaboration with individual SACs as soon as possible. A close working relationship with other specialist SACs should be continued to ensure that the acute medicine curriculum remains up to date. Transitional arrangements will be required while the new MMC programmes are developed.

Views of trainees

20. **We recommend** that guidance should be given to trainees in acute medicine about the career opportunities that exist in the specialty, and about the structure and process of training, and that posts in acute medicine be made.
21. **We recommend** that guidance should be given to *all* trainees, who may work a variety of full shifts and rotas, regarding ways of making each experience educationally valuable, and that the experience of nights on call should be developed as an effective training opportunity with trainees attending post-take ward rounds on all admitted patients

Educational supervision and regional support

22. **We recommend** that each trainee should have a lead educational supervisor, who will be specifically trained and experienced in the rôle, and who will work with a number of clinical supervisors. Consideration should be given to changes that might be required for programme directors and the Record of In-Training Assessment (RITA) process, and to possible further training of regional specialty advisers (RSAs) and programme directors.

Service users' perspectives

23. **We recommend** that patients' and users' concerns and priorities should be emphasised within the training curriculum. These include:
- provision of effective continuity of care and effective handover (see Recommendation 6)
 - rapid transfer of patients from A&E, or other methods of immediate 'streaming' to medicine such as direct admission from general practice to the medical admission or assessment unit.

1 INTRODUCTION AND BACKGROUND

1.1 Over the last three years there has been a steady increase in the number of presentations of acutely ill people to hospital. This trend is partly due to raised expectations on the part of the public and partly to an ageing population and associated chronic health problems. In addition, there have been significant advances in the management of the acutely unwell patient together with a number of current and future key developments. These include:

- Increasing development of specialty ward-based care
- Introduction of the European Working Time Directive leading to shorter on-call periods and full shift working
- Response to the four-hour accident & emergency (A&E) target
- Further development of medical admission and/or medical assessment units (MAUs) to improve patient care
- Introduction of the new GP contract in January 2005 affecting out-of-hours arrangements in primary care
- Increasing focus on 'rule-out' medicine in primary and secondary care
- Planned introduction of Modernising Medical Careers.

1.2 Modernising Medical Careers (MMC) will have significant effects on training because of the proposed shortened postgraduate training periods, facilitation of early specialisation, and a reduction of the degree to which external hurdles (e.g. professional examinations) can impede progression through training. Changes in training include:

- The introduction of the Foundation Programme (F1 and F2)
- The move towards competency-based training following the launch by the Joint Committee on Higher Medical Training (JCHMT) of competency-based curricula
- The introduction of performance-based assessment criteria throughout the training programme
- Changes in entry criteria to the specialist registrar grade.

1.3 At the same time, the traditional concept of general (internal) medicine (G(I)M) has changed. The provision of chronic, as distinct from primary, care for unselected hospital outpatients with pathologies outside the consultant's main area of clinical specialisation is no longer desirable, given that there has been demonstrable improvement in outcomes associated with specialist management. The emphasis on inpatient care has also changed. In the past, inpatient care involved the provision of ongoing care for a wide variety of patients, whereas now it often involves mainly the provision of immediate acute care followed by discharge or by referral to the appropriate specialty for continuing management.

2 GENERAL MEDICINE/ACUTE MEDICINE TRAINING: THE CURRENT POSITION

2.1 The care of acutely ill medical patients is currently provided mainly by physicians specialising and training in general (internal) medicine (G(I)M) together with another specialty. There is also a small but increasing number of acute physicians specialising in acute medicine alone. In the 2003 Federation of Royal Colleges of Physicians *Census of consultant physicians in the UK*, almost half (46.6%) of the consultant workforce was on call for acute unselected admissions, 75% of whom provided care for patients of all ages (4).

2.2 A training curriculum in acute medicine was established in 2003, adding a fourth year to the three-year G(I)M-only programme and was designed to train physicians to take the lead consultant rôle in an MAU. When trained, such individuals are 'acute physicians' and they currently receive a Certificate of Completion of Training (CCT) in G(I)M (acute medicine). At present there are 106 training posts and 46 trainees nationally.

2.3 In 2004, the Royal College of Physicians of London working party report, *Acute medicine: making it work for patients (1)*, considered the education, training and careers of doctors drawn to this field. Acute medicine was defined as:

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.

2.4 The above statement acknowledges the importance of the acute physician being competent to manage all acute unselected medical emergencies. These emergencies may arise in current inpatients as well as in those presenting through the acute medical take.

2.5 The report proposed the training of acute physicians who would practice solely in the specialty of acute medicine, and a number of recommendations were made including:

- There should be at least three consultants with primary responsibility for acute medicine in each acute hospital, and more in larger hospitals, by 2008.
- A contribution to the practice of acute medicine from appropriately trained consultants in A&E medicine and intensive care medicine should be facilitated.
- Appointments in acute medicine should be developed that include commitments to A&E departments, high dependency units (HDUs) and intensive care units (ITUs) as well as MAUs.
- Staff dealing with the acutely ill should be appropriately trained.
- A doctor with appropriate skills 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' of recent experience in managing patients presenting as acute medical emergencies.

2.6 The report recommended that all trainees in acute medicine should receive broad experience in acute unselected take and medical specialties, with specific experience in MAUs, intensive care, coronary care and high dependency units, and in geriatric medicine. There was recognition that consultants in other medical specialties would also need to provide acute care, so that all those who are training in G(I)M together with another specialty should receive appropriate training to manage unselected medical emergencies safely.

2.7 The recommendation in *Acute medicine: making it work for patients*, to have a dedicated physician with responsibility for acute medicine in all hospitals, was consistent with the recommendations of previous reports (1, 2, 3).

3 NAME OF SPECIALTY AND DEFINITIONS

3.1 The term 'general (internal) medicine (G(I)M)' is seen by many as representing an outmoded form of practice. Physicians practising G(I)M with another specialty rarely receive new outpatient referrals outside their specialty, and have relatively few non-specialty patients admitted to their wards in hospital.

3.2 The reality of the acute unselected medical take means that the majority of those practising G(I)M are in fact practising medicine that is very closely allied to the concept of acute medicine as a specialty – except that these individuals do not have charge of MAUs and often provide some continuity of care for patients whom they admit, outside their own specialty. This change in the nature of G(I)M needs to be acknowledged. This will happen as a result of the creation of the specialty of **acute medicine**, which we support. Physicians will be able to train in acute medicine as a specialty in its own right, or in the essential core elements of acute medicine, to enable them to manage acute unselected medical emergencies while also practising in another specialty.

3.3 A physician who trains in acute medicine and in another specialty will be a **Consultant in [Specialty] and Acute Medicine**. A physician who wishes to specialise in acute medicine alone and to manage an MAU will undergo additional training (at least one year) and will be a **Consultant in Acute Medicine**.

3.4 The competencies that allow physicians to provide continuity of care, to assess the needs of older people and to plan complex discharge processes effectively will be required by all, whether the consultant is practising in acute medicine plus another specialty, in specialty medicine alone, or in acute medicine alone.

3.5 It is unlikely that many individuals will wish to train fully as consultants in acute medicine and then again as consultants in a second specialty. However, there are circumstances in which this might be a useful option. It might also be possible to incorporate a year of acute medicine/MAU experience into some dual specialty training programmes without increasing the total length of training (see Paragraph 10.6).

3.6 Ultimately the requirement for these different kinds of physician will be determined by the perception of Trusts and Commissioners as to how the needs of their acutely ill patients will best be met. A breadth of experience should therefore be an essential part of the training of *all* physicians.

Recommendations

- We recommend** that the creation of the new specialty of **acute medicine** should be strongly supported. Physicians may train to practise in acute medicine as their main specialty, or may train in essential elements of acute medicine as part of their training in another specialty. General (internal) medicine (G(I)M) as a stand-alone specialty should be phased out in favour of acute medicine.
- We recommend** that the name of the Specialist Advisory Committee (SAC) in General (Internal) Medicine be changed to the **SAC in Acute and General Medicine** until G(I)M is no longer available to trainees.
- We recommend** that those physicians who wish to specialise in acute medicine

alone, without a second specialty, should undergo additional training to the core training for those also training in a second specialty. The training for specialist consultants in acute medicine must be sufficient to achieve all the competencies and requirements of the acute medicine curriculum. Physicians in acute medicine will expect to provide managerial and team leadership in the specialty within each Acute Trust and will be trained to do so.

4 CLINICAL RESPONSIBILITIES OF FUTURE CONSULTANTS IN ACUTE AND INTERNAL MEDICINE

4.1 This Working Group acknowledges the significant challenges of providing an acute consultation service for hospital inpatients in addition to covering the acute medical take and also recognises that quality of care may need further improvement in some areas (8, 9). Some re-organisation of service will be required together with increasing collaboration between a range of clinicians with skills relevant to the care of acutely ill patients, for example those working in anaesthesia, critical care and A&E medicine.

4.2 Acute physicians are needed to organise the management of acute emergencies whether in patients presenting at the front door of the hospital or in patients who are already in hospital whose condition deteriorates. All physicians who manage acutely ill patients need to be trained in a broad range of competencies in order to provide the highest quality care during the acute period. This applies both to those intending to practise solely in acute medicine and to those who will practise in another medical specialty in addition.

4.3 The period of acute care may vary from 24 to 72 hours and should remain flexible in response to the clinical needs of each patient. There are some patients whose episode of care can be completed within this time frame, and these patients may be discharged directly from the MAU.

4.4 Physicians other than consultants in acute medicine will also require the skills to manage that part of general (internal) medicine that is *not* concerned with 'the immediate and early specialist management of adult patients', in other words the ongoing care through to discharge of some patients with a range of problems that may be outside the physician's main specialty. All physicians will need to recognise the need for urgent intervention by other specialties and be able to identify which specialty physician would be most appropriate to manage ongoing care.

4.5 Many patients who present acutely are elderly and frail and have complex needs. Over 50% of unselected emergency admissions are aged 70–75 years of age, and 25% are over 80 years. Some younger adults may have multiple problems so that a single organ specialist may not be able to manage all of these on admission, while some older people may require the same single specialist management as the young. All of these patients require multidisciplinary assessment at the point of entry or within the first 24 hours.

4.6 Acute physicians, supported by a multi-professional team, should lead in complex discharge planning involving other external agencies. In particular, they should have the skills to liaise with long-term disability ('chronic disease') management programmes to maximise care in the community and avoid admission or readmission where possible. Acute physicians should also be able to determine whether a patient will be best managed in the community (ambulatory care, primary care or intermediate care services) or whether hospital admission is essential (10).

4.7 These factors will necessitate a broadening of the skills of acute medicine trainees and consultants and/or the training of an increased number of geriatricians who will also take on an acute medicine rôle. However, the specialist longer-term management and rehabilitation of older patients should remain part of the specialty of geriatric medicine, and this should not be expected of trainees specialising in acute medicine.

4.8 There is also an increasing demand upon physicians to manage a very wide range of medical problems that occur throughout the hospital. The most severely ill patients need to be managed in a critical care environment, but the care of the majority of those who develop an acute medical illness in hospital should be handed over to the appropriate medical specialty following initial management by the acute medical team.

4.9 The Hospital at Night (HAN) project aims to redefine how medical cover is provided in hospitals during the out-of-hours period. The provision of cover is defined less by professional demarcation and more by the skills required in a wide range of medical interventions and in non-medical areas of the hospital. The acute medicine curriculum must therefore include the competencies needed by the physician who will take clinical responsibility for the medical components of this care. Any net transfer of work to physicians will need to be reflected in additional medical manpower.

4.10 In the light of new ways of working, physicians will need to ensure that there are robust mechanisms in place to ensure continuity of care. This is doubly important because early handover of patients to specialty teams occurs at a critical time for patients' wellbeing. Training curricula and trainee assessment should include specific competencies in the field of high quality handover (see also Sections 11 and 13).

Recommendations

- **We recommend** that all physicians trained in acute medicine, or involved in the management of acute unselected medical admissions, should be trained in a broad range of competencies to manage the acutely ill, including frail, elderly people with multiple and complex needs.
- **We recommend** that the competencies that currently enable physicians to provide continuity of care, to address the health and social needs of patients, and to plan complex discharge processes effectively should be included in the curriculum for all physicians.
- **We recommend** that formal mechanisms for continuity of patient care during the handover between physicians, and between physician and general practitioner, should be in place in all Trusts that are training acute physicians. Training curricula should emphasise these aspects of patient care as outlined in recent Royal College of Physicians documents (5, 6).

5 OUTPATIENT WORK

Unselected outpatients

5.1 General practitioners continue to value the option of referral for a 'generalist' opinion where the organ system primarily involved is unclear. Some individual specialties may find that they receive the bulk of these 'general' referrals. However, all physicians should have the competencies to identify the most appropriate specialist to whom such patients should be referred when this is required.

5.2 In some individual Trusts or parts of the country, there are particular outpatient clinic capacity problems that have led to physicians having so many specialty referrals that they have no capacity to see 'general' (unselected) referrals. In addition, the outpatient clinics of specialties to which a high proportion of the acute unselected take may be directed will tend to have a correspondingly smaller proportion of 'unselected' patients. It is recommended that trainees in these specialties should be exposed to a breadth of medical outpatient experience during the early years of their specialty training.

5.3 The management of patients with long-term disability ('chronic diseases') whose care does not require hospital admission will largely be carried out in the community or in the outpatient clinics of the relevant specialty, and these patients will not usually be seen in 'general' outpatient clinics.

5.4 The totality of outpatient experience during training should be such that all trainees are exposed to a broad range of conditions that may, from time to time, be encountered. This will apply to those in dual specialty training as well to those training solely in acute medicine.

5.5 If sufficient breadth of experience cannot be provided within the totality of the Foundation programme, Basic Medical Training and the early years of Higher Specialist Training, then trainees must rotate through other specialty outpatients to develop the depth of outpatient expertise and experience required.

5.6 Under Modernising Medical Careers, training in acute medicine is likely to form a continuum from Basic Medical to Higher Specialist Training (ST1 to ST5 or 6). For dual-specialty trainees it is logical that outpatient training in the later years should be predominantly in the trainee's main specialty but should reflect the spectrum of work likely to be encountered in a consultant post.

5.7 The duration and frequency of outpatient experience will vary, but must be sufficient to achieve the learning objectives set out in the acute and general medicine curricula.

Acute medicine and outpatient work

5.8 It is increasingly recognised that conventional outpatient clinics are unlikely to provide the kind of rapid access and evaluation/triage that may be required by those practising in primary care. Consultants in acute medicine could develop precisely this service, using new diagnostic and treatment modalities. They would be able to integrate this service with both the medical assessment unit and a range of rapid access outpatient clinics.

5.9 Trainees in acute medicine should gain experience that will allow them to set up and run acute MAU-based assessment and follow-up clinics and management programmes for patients discharged within the first 24–72 hours for further investigation as outpatients. Follow-up of some patients transferred to a specialty ward (but who do not require a particular specialty to manage them) could be included. These clinics could form part of an Ambulatory Care Service². However, a single year of acute medicine training in addition to a single specialty CCT, without the breadth of internal medicine, will not provide trainees with sufficient skills to manage this kind of outpatient work.

Recommendations

- **We recommend** that the totality of outpatient experience for all trainees should include a broad range of conditions that may be encountered. If this has not been possible during Basic Medical Training (ST1+2) then such experience should be ensured during the early years of Higher Specialist Training (ST3–5).
- **We recommend** that the type and level of outpatient experience that will be most appropriate for the intended career of the trainee should be defined in the relevant curriculum and should be delivered and monitored in relation to that curriculum.
- **We recommend** that outpatient experience should be gained that will allow acute medicine trainees to run outpatient clinics for follow-up of discharged acute medicine patients, appropriate rapid-access clinics and ambulatory care.

6 DEVELOPING AN EFFECTIVE ACUTE MEDICINE SERVICE

Workforce requirement for consultant physicians in acute medicine

6.1 Workforce shortages are widespread in today's NHS. This document centres on issues relevant to acute medicine, but must be viewed in the context of shortages in many other medical specialties. The following analysis is based on information from England and Wales; similar data are not currently available for Scotland.

² Ambulatory Care refers to care provided to patients who are based at home, but who need to attend for specialist investigation and treatment more frequently and urgently than would be possible through a conventional outpatient service.

6.2 Implementing the recommendation in *Acute medicine: making it work for patients* (1) that there should be three consultants with primary responsibility for acute medicine in every acute hospital would require a national workforce of approximately 700 full-time consultant acute physicians. (This is comparable with current numbers in many established specialties such as gastroenterology [767], respiratory medicine [650] and diabetes and endocrinology [607] (4)). Such numbers may be achievable more easily in large hospitals, but there will be great difficulty in the smaller units throughout the UK. The creation of this workforce would require a revenue cost of approximately £65 million for consultants and £45 million for specialists registrars (SpRs).

6.3 We therefore have to provide answers to the following:

- How do we create sufficient additional national training numbers (NTNs) for the new training posts that will be needed, and how will these be phased in?
- How do we ensure that there is a physician responsible for training in acute medicine on all acute sites?
- How do we support the development of the specialty of acute medicine given the current preponderance of dual-specialty training?

6.4 Possible solutions are as follows:

- Existing consultants in medical specialties who are contributing to the acute unselected take may change their interests to acute medicine. Many of the existing acute physicians have done this.
- The number of NTNs in acute medicine might be increased in a phased manner. To create such a specialty over 5–10 years would require the establishment of a similar number of NTN posts to consultant numbers required. (For example, 100 new NTNs in the specialty per year for six years with subsequent reduction in NTNs once the specialty is established.)
- Collaboration between acute medicine and other relevant specialties will increase.
- Training in acute medicine could be facilitated for those in other training programmes who wish to take up the specialty.
- Staff and associate specialist (SAS) doctors who obtain direct entry to the specialist register through Article 14 may be attracted to acute medicine.
- It is possible that trainees and consultants who wish to work or practise flexibly will be attracted to the specialty because of the shift-based working pattern.
- We must enhance the appeal of a career as a consultant in acute medicine by drawing attention to current rôle models and by clarifying and promoting the career structure, emphasising the further clinical and professional development opportunities available.

6.5 The possibility of separating current dual-specialty training programmes into their component parts of acute medicine (currently G(I)M) and a second specialty would not be successful because:

- Trainees may choose training in a single specialty other than acute medicine.
- Extensive revision of the existing training programmes would be required to ensure that some specialist training continued in district general hospitals (DGHs) (where much of the present G(I)M programme is now delivered) and, conversely, that those training in acute medicine had appropriate experience in a tertiary centre.
- The workforce available to manage unselected acute medical emergencies would be significantly reduced since specialty activities now carried out by dually trained

consultants during periods of availability for acute medicine would have to be carried out by the single-specialty workforce.

- It is probable that in the future effective specialty triage systems will require the increasing establishment of 'specialty on-call' teams, which will create further demands on the specialties in all but the largest hospitals.
- It is unlikely that any safe and achievable reduction in the specialty workforce would match the expansion needed in the acute medicine workforce.
- Training to be a consultant in acute medicine will require four years of training purely in acute medicine (as in the present G(I)M (acute) programmes) rather than the current three-year training in the G(I)M component of dual training with another specialty.

Effecting change over time

6.6 A large number of physicians trained both in G(I)M and another specialty currently enjoy providing care to acutely ill patients and do so to a very high standard. Their continued involvement with the acute take should be greatly valued and supported. Others would be happy to devolve this part of their work to acute physicians.

6.7 However, until there are enough trained consultants in acute medicine, those with dual-specialty training who contribute to managing the acute medical take will need to continue to do so. As more consultants in acute medicine are trained, it may be possible for some dual specialists to relinquish acute medical duties – but one cannot happen without the other.

6.8 Therefore, in the short and middle term, the bulk of care for acute unselected medical emergencies will continue to be delivered by consultants who are trained and who practise in another medical specialty in addition. In order to maintain a safe and effective service for acutely ill patients, the acute medicine workload should be shared across as many individuals and specialties as possible (see Sections 4 and 10).

6.9 Ideally *all* physicians should be trained to manage the acutely ill, including elderly people and patients whose initial presentation may be non-medical.

6.10 In the future, consultants in acute medicine, with additional competencies to provide managerial and team leadership in the acute sector, will work with consultants with dual-specialty training to ensure that the acute medical workload is managed optimally. In turn, the consultant in acute medicine may wish to acquire additional skills that have been, until now, within the remit of one of the longer-established specialties.

6.11 We recognise that the physicians produced at the end of training will need competencies and specialist skills that match the requirements of Trusts who will be their employers. Trusts will need encouragement to establish consultant acute physician posts when they have limited funding, and when their perceived need may be for additional posts in the longer-established specialties. Although emergency care targets have helped to focus employment policies, the degree to which the establishment of new consultant acute physician posts will free other specialists to practise exclusively in their specialty will need careful monitoring over several years.

Recommendations

- **We recommend** that the acute medicine workload continues to be shared between as many specialties as possible, and that routes into acute medicine should be developed from other disciplines, for example anaesthesia, critical care

and A&E medicine as recommended by the Intercollegiate Board for Training in Intensive Care Medicine.

- **We recommend** that MMC-compatible, specialist acute medicine training programmes should be available in every Deanery by April 2007.
- **We recommend** that further new NTN in acute medicine should be created and centrally funded in order to facilitate the necessary expansion of specialty acute medicine. These NTN should not be created at the expense of current NTN in established specialties. The development of specialist acute medicine should be monitored closely to ensure that the needs of patients continue to be met across all medical specialties.

7 CHANGES TO TRAINING CURRICULA AND REGULATIONS

The curricula

7.1 The general (internal) medicine, acute medicine and generic curricula (last revised in 2003) need to be updated to ensure that training is provided in the competencies required for acute medicine.

7.2 The updated acute medicine curriculum will ensure that individuals are fully trained in all relevant competencies, including the assessment of the patient with acute illness, resuscitation, stabilisation, and transfer (if appropriate) to a higher level of care. These competencies should build on those acquired in the Foundation years and Basic Medical Training (BMT). The work to update the curricula should be completed in time for the start of the new BMT grade (ST1 and 2) in 2007.

7.3 The competencies included in the curricula will provide training for those wishing to play a leading rôle in an MAU (i.e. consultants in acute medicine), those who are dually training in acute medicine with another specialty and those wishing to work in smaller or remote hospitals, who may be required to manage a broader range of problems in addition to the acute unselected take.

7.4 The competencies outlined in the generic curriculum will be incorporated into all the curricula where appropriate since many of these competencies represent precisely the attributes of the 'general physician' that we wish to retain in all physicians. The acquisition of these competencies should begin during the Foundation years and be built upon throughout training.

7.5 Relevant management skills should be phased in at each stage of training, but many might be most appropriately learned in the early consultant years as part of Continuing Professional Development (CPD). An out-of-programme year should be considered for those intending to pursue a future career in medical management.

7.6 The updated curricula will apply to newly enrolled trainees only, although current trainees may wish to avail themselves of relevant training opportunities that may be provided.

Changes to training regulations

7.7 Detailed revision of the training regulations will be needed when the structures of MMC are better defined and when the new curriculum is finalised. Some interim changes are needed to reflect the recommendations of this Working Group, and should be taken forward through the G(I)M SAC.

7.8 Forthcoming revisions may be helpful to current trainees, but they can only apply as regulations to newly enrolled trainees.

7.9 Once the new performance-assessment methods have been shown to be robust, the regulations will need further modification to emphasise the over-riding importance of demonstrating competence. The regulations will stipulate the minimum time to be spent and numbers of patients to be seen to enable competence to be achieved.

Recommendations

- **We recommend** that there should be a new curriculum for acute medicine. This should include both the competencies that are required to manage acute unselected medical emergencies and those that are required of a consultant physician in acute medicine. This will include competencies to be found in the current G(I)M, acute medicine and generic curricula.
- **We recommend** that training pathways should be modified to fit with MMC guidelines as these develop and that there should be an effective, continuous competency assessment process to measure performance against the curriculum.
- **We recommend** that the acute medicine curriculum identifies those core competencies that are essential for all physicians managing acute unselected medical emergencies, so that consultants who have completed dual-specialty training programmes are fully able to support the consultants in acute medicine.

8 POSSIBLE STRUCTURES FOR TRAINING PROGRAMMES

8.1 Details of Basic Specialist Training and Higher Specialist Training have yet to be finalised under the umbrella of MMC. Both innovative and more conventional approaches are under discussion and a 'mixed economy' may well exist for some time.

The new approach to training under Modernising Medical Careers: Foundation and Basic Specialty Training

8.2 The goal of MMC is to select for a career in a specialty (medicine, surgery, etc) during the second Foundation year (F2). This will require a significant culture change and the development of new robust selection techniques. It is proposed instead that the earliest opportunity for selection should be in the first post-Foundation year, BMT1 (ST1). The general medical competencies achieved during BMT1 will be highly relevant to a number of specialties, including general practice, accident and emergency medicine, critical care medicine and anaesthetics.

8.3 A number of Colleges have expressed interest in developing 'common stem'

training in BMT1 which would deliver transferable competencies and permit trainees to change direction with minimum delay. The equivalent of two years of general/acute medicine, in terms of competencies to be achieved, would be required post Foundation for all trainees who wished to continue with careers in medical specialties.

8.4 An important part of the assessment of these competencies would be the successful completion of the different parts of MRCP(UK). MMC's aspiration for a single training grade might be met by allowing trainees to progress seamlessly through a training programme provided all assessments (including MRCP(UK)) were achieved within a specified time frame.

9 CONVENTIONAL ROUTES INTO HIGHER SPECIALIST TRAINING IN ACUTE AND INTERNAL MEDICINE

9.1 Conventional training paths in Higher Specialist Training (ST3 onwards) include dual-specialty training (in acute medicine plus second specialty) and training in acute medicine alone. Two training pathways are currently envisaged under MMC:

- (i) *Consultants in acute medicine* will train to ST2 in medicine and then for a further period in acute medicine (ST3 onwards). The duration of this second period of acute medicine training is still under discussion. It is not envisaged that this period can be shortened by academic out-of-programme experience.
- (ii) *Consultants in [specialty] plus acute medicine* will train to ST2 in medicine, then for a minimum of two years in acute medicine (ST3+4) which will ensure competency to manage unselected medical emergencies, followed by three years in specialty training.

9.2 Options for maintaining competency in acute medicine during three years of training in a second specialty include:

- A period of acute medicine during the final year of training, concentrating on managing unselected medical emergencies rather than the other elements of what is currently understood as G(I)M
- A period of 'competency assurance' at or very near to the time of award of the CCT
- A period of 'mentoring' after appointment as a consultant within the employing Trust
- A period of employment in internal medicine, up to a maximum of 50% of the time, while continuing training in the second specialty for the remaining 50%
- Distributing the acute medicine component of training through the training in the second specialty so that acute medicine is not limited to the first two years
- Relying on the 'experiential learning' that will result from participation in the acute take where this is a requirement of the employment contract between the SpR and the employing Trust.

None of these options appears entirely satisfactory. However, trainees themselves have expressed concern about acquiring consultant responsibility for the acute take if they have not remained, or been brought, up to date with the required competencies.

9.3 It should be recognised that there is a service commitment that is currently met by SpRs, including those in their final year. In addition, there are specific skills that are most appropriately acquired in the final year, for example, leading and managing acute post-take ward rounds, and these should be regarded as an essential part of the training curriculum

9.4 Discussion with the Deaneries will need to take place regarding the training of those who may set out to become consultants in acute medicine plus specialty, and then decide that they wish to specialise entirely in acute medicine or entirely in the other specialty. The reverse situation, where a trainee in acute medicine may decide that s/he wishes to train in another specialty with acute medicine, will also have to be considered.

9.5 While acute medicine training programmes are becoming established it will be necessary to facilitate the movement into acute medicine of current trainees who wish to change their career plans. A number of one-year training opportunities that will provide the MAU and other relevant competencies will be required which, over time, will be incorporated into acute medicine programmes.

No CCT in general (internal) medicine?

9.6 All physicians who wish to take up a consultant post with responsibilities for acute unselected emergencies should be trained in acute medicine to a level of competence that enables them to practise safely. It is possible that a significant number of trainees will wish to train in their chosen specialty only, and there will be a need to distinguish these physicians from those who have completed dual training including acute medicine. Retention of the dual CCT (in specialty plus acute medicine) would be one way of doing this, and would protect mono-specialty consultants from pressure from their employers to take on acute medicine duties. These dual CCTs would be distinct from the CCT in the new specialty of acute medicine.

Possible effect on service

9.7 During the development of MMC training programmes, it will be important to allow for the effects of these programmes upon service provision at middle-grade level. Many specialties at present provide training in general (internal) medicine and specialty together for at least three, and often five, years of the training programme. If all acute medicine training is provided over the first two years of HST, the restrictions of the European Working Time Directive will make it very difficult to provide the same service provision or training by increasing the intensity of the service commitment.

Recommendations

- **We recommend** that for trainees in dual-specialty training programmes who wish to take up dual-specialty consultant posts, competence in managing unselected medical emergencies should be assured at or near to the end of training and should be relevant to the intended consultant post. The way in which this is achieved may differ between specialties.

- **We recommend** that a way of distinguishing consultants trained purely in a specialty other than acute medicine from those trained in specialty plus acute medicine should be retained; retaining the 'dual' CCT (in specialty + acute medicine) is one way of doing this.
- **We recommend** that careful consideration is given to the possible reduction in service provision and training experience that will result if all acute and internal medicine training for higher specialist trainees is to be provided within two years at the start of a dual-specialty training programme.

10 TRAINING IN ACUTE MEDICINE AND SOME SELECTED SPECIALTIES

10.1 It is recognised that the acute unselected medical take and other medical emergencies arising in hospital are currently managed to a very high standard by physicians who also practise in one of a wide range of specialties. This situation is likely to continue for the foreseeable future, and is to be encouraged. The more detailed consideration given so far to a selection of these specialties reflects particular issues that each has in terms of its interface with acute and internal medicine, and is not intended to be in any way exclusive. The Working Group looks forward to future discussions about how best to develop acute medicine in relation to all other specialties in the United Kingdom.

Critical care medicine, anaesthetics and A&E medicine

10.2 A subgroup of the Intercollegiate Board for Training in Intensive Care Medicine with representation from the Society of Acute Medicine, the Royal College of Physicians and the Royal College of Anaesthetists has identified how competencies gained in certain specialties (e.g. anaesthesia) could be relevant to the practice of acute medicine – particularly for patients already admitted to hospital. Flexibility in the training programmes for these disciplines is needed to enable trainees to transfer into acute medicine. This will require assessment of each individual against the competencies contained within the curriculum, but the principle should be to allow as much credit as possible for training already undertaken.

10.3 Some established consultants in A&E medicine, critical care medicine or anaesthetics may wish to obtain additional skills to enable them to participate in the acute medical take or to become consultants in acute medicine. A mechanism to allow this to happen might usefully be built upon the principles agreed for trainees.

Clinical pharmacology and therapeutics (CPT)

10.4 The existence of dually trained acute physicians/clinical pharmacologists in DGH consultant posts might strengthen the specialty of CPT and would also provide a good 'generalist' background because of the wide remit of CPT. Such a dual training programme would last for six years rather than the current seven for triple-accreditation programmes which include CPT.

Geriatric medicine

10.5 The current requirement for geriatricians is about 1 per 40,000 of the population. If geriatricians are to play an increasing rôle in the care of acutely ill older people in the first 48 hours, then an increase in consultant numbers (and hence in training numbers) will be needed in order to avoid an adverse impact on the delivery of ongoing care and rehabilitation of older people. While some geriatricians may wish to concentrate on the acutely unwell, others will wish to continue to concentrate on providing and coordinating specialist multidisciplinary assessment and rehabilitation.

10.6 Some of the current training programmes in geriatric and general medicine could be adapted to include increased experience in the care of acute unselected emergencies and experience in MAU. This would be a special interest year equivalent to that now available in stroke medicine. While all those dually trained in geriatric and acute medicine will obtain a dual CCT, the year in acute medicine would allow the consultant to take a particular interest in acutely ill elderly patients.

10.7 In Scotland there is a much greater distinction between geriatric and general medicine, with geriatricians playing a smaller rôle in the management of unselected medical emergencies than in England and Wales, and therefore the approach to training may need to be modified.

Cardiology

10.8 Currently 50% of CCT holders in cardiology do not have a CCT in G(I)M. Proposals for cardiology training with acute medicine require further discussion between the relevant SACs. In the future, patients with common disorders affecting the cardiovascular system (e.g. arteriosclerotic heart disease, atrial fibrillation and heart failure) may become the remit of the broad specialty of cardiovascular medicine, requiring a number of 'general' cardiovascular physicians as well as subspecialty cardiologists.

10.9 Distinct, but overlapping, training programmes may be required for (a) those cardiologists who wish to continue to participate in acute medical take as consultants in cardiovascular medicine, and (b) those who wish to become 'pure' cardiologists. For dual trainees, a curriculum-focused training programme in acute medicine would ideally be placed in the earlier years of training. In a well-structured new training programme 'double counting' would not be necessary and could be discontinued.

10.10 Many patients who present with an acute medical illness to, or in, hospital fall within the remit of cardiovascular medicine. Cardiology SpRs should therefore remain on the acute medical take rota. Participation in the acute intake near to the end of training would also be appropriate for trainees in cardiovascular medicine who intend to participate in the acute intake as consultants.

10.11 The specialist acute medicine training programme will require input from trainers in cardiology, not only on the coronary care unit but also, for example, in developing a training module in non-invasive imaging (including echocardiography).

Nephrology

10.12 An increasing number of SpRs are opting for a CCT in renal medicine alone. Much of SpR renal training takes place in units which still have a G(I)M/acute medicine commitment; while the units in London for the most part have dropped G(I)M completely, in some hospitals the renal physicians are taking the lead in acute medicine.

10.13 The current curriculum in renal medicine specifies four years' training of which three years must be spent in clinical renal medicine. Many renal physicians argue that they are responsible for all the other medical problems in their own patients and that this provides general medical training. However, there is a clear difference between this and the case-mix encountered in unselected emergency medical admissions.

Academic medicine

10.14 For trainees in acute medicine it was felt that research in acute medicine should be strongly encouraged, but that the pressures of clinical training were so great that research should be carried out as an out-of-programme activity. This would also encourage longer periods of more productive research.

Other medical specialties

10.15 It is recognised that a number of other medical specialties will wish to develop future dual training programmes with acute medicine. This is welcomed, and collaborative work should be taken forward as soon as possible. Examples include:

- *Neurology*: 10-20% of acute admissions have a neurological problem, and there is a need for acute physicians to receive adequate training in acute neurology.
- *Respiratory medicine*: The current training programmes in respiratory medicine include significant training in critical care and high dependency medicine, and excellent training programmes could be devised to train respiratory physicians to play a leading rôle in acute medicine also.

Recommendations

- **We recommend** that the plan set out by the working group of the Intercollegiate Board for Training in Intensive Care Medicine – which proposes training pathways to enable doctors training in anaesthetics, A&E or critical care to practise in, or contribute to, acute medicine as a consultant – should be adopted.
- **We recommend** that future MMC-compatible dual training programmes in specialty plus acute medicine are developed in collaboration with individual SACs as soon as possible. A close working relationship with other specialist SACs should be continued to ensure that the acute medicine curriculum remains up to date. Transitional arrangements will be required while the new MMC programmes are developed.

11 VIEWS OF TRAINEES

11.1 Trainees from the Royal College of Physicians of Edinburgh, the Royal College of Physicians & Surgeons of Glasgow, and the Royal College of Physicians of London expressed the following views:

- Acute medicine training should focus on the initial inpatient management of medical admissions through to discharge – if ongoing inpatient specialist medical input is not required – and on short-term follow-up.
- Acute medicine and the rôle of acute physicians need to be actively promoted and adequately supported by Trusts if this specialty is to become an established component of medical care throughout the UK.
- As with other specialties, trainees in acute medicine will require appropriate supervision during training. Given the nature of the specialty, it will be particularly important that this is available at short notice whilst a trainee works in an acute medical unit or in A&E.
- Prior to training in their chosen specialty (acute medicine or organ- or system-based specialties), medical trainees should develop a firm grounding in internal medicine.
- Trainees wishing to obtain dual CCTs in acute medicine and a specialty should refresh their acute medicine experience (especially the management of unselected medical admissions) during the last year of training.
- In view of the increase in size of medical teams and changing working patterns, it is necessary to have robust mechanisms in place to ensure continuity of care. Training curricula and trainee assessment should include specific competencies in the field of high quality handover (see also Sections 4 and 13).
- Guidance and recommendations are needed for SpRs working weeks of nights with a series of teams, rather than a team-based on-take model, to address continuity of the training experience.
- Accurate and timely information regarding the numbers of training posts in each specialty, and likely manpower needs of specialties, should be made available to trainees to enable them to make realistic career decisions.
- Sufficient training posts should be available in acute medicine as well as in the other specialties.
- Trainees should be able to subscribe to a package of training when entering the SpR grade and, until completion of both acute medicine and specialist aspects, should not be expected to lead service delivery.

Trainees' career preferences

11.2 At present, the number of trainees who may wish to become consultant physicians in acute medicine, without a second specialty, is unclear. However, the number of training opportunities in acute medicine is increasing and high quality candidates are applying.

11.3 The Royal College of Physicians of London SpR survey of January 2005 asked which of several career choices SpRs would pursue if re-entering training now. Of those who responded, 52% opted for single specialty (not acute medicine) alone, 45% for dual training as at present, and only 2.5% for acute medicine. However, 14% said that they would be interested in running an MAU, and 60% said that they would choose to run an acute unselected take.

11.4 These figures suggest that some trainees would enjoy running an MAU in

combination with a second specialty. This survey did not include SpRs working in emergency (A&E) medicine, for whom acute medicine as a specialty was not available when they started training.

Recommendations

- **We recommend** that guidance should be given to trainees in acute medicine about the career opportunities that exist in the specialty, and about the structure and process of training, and that posts in acute medicine be made.
- **We recommend** that guidance should be given to *all* trainees, who may work a variety of full shifts and rotas, regarding ways of making each experience educationally valuable, and that the experience of nights on call should be developed as an effective training opportunity with trainees attending post-take ward rounds on all admitted patients.

12 EDUCATIONAL SUPERVISION AND REGIONAL SUPPORT

Educational supervision

12.1 It is desirable for an individual trainee in acute medicine to have a named lead educational supervisor throughout any one-year placement. This supervisor will need to have input from a number of other clinical supervisors with whom the trainee has worked. With the development of new assessment methods, the rôle of the lead educational supervisor will increase in importance, and specific training is likely to be required.

12.2 Experiential and structured training out of hours should be developed to capitalise on the clinical material that is being managed by the trainees. This may become more important as acute hospitals move towards providing a 24/7 service.

12.3 Trainers in the future may not all participate in the acute take. The implication is that these trainers could then only supervise and assess within their own specialty, and acute physicians will be supervising and assessing the acute work of large numbers of trainees.

Regional specialty advisers

12.4 The regional specialty adviser (RSA) responsible for acute medicine should have appropriate knowledge and experience to advise effectively. In addition, it is probable that the regional workload in acute medicine will be very considerable. One practical arrangement might therefore be for the current RSA in G(I)M to work with a second RSA in acute medicine. It is probable, however, that a number of G(I)M RSAs will feel that they have sufficient understanding of the specialty of acute medicine to carry out the rôle effectively.

12.5 The arrangements in each region should therefore be reviewed in consultation with the SAC in acute and general medicine [G(I)M] to ensure that a proper balance of expertise is available. There seems to be no indication for a separate SAC in acute medicine, and such an arrangement is likely to prove confusing and divisive.

Recommendations

- **We recommend** that each trainee should have a lead educational supervisor, who will be specifically trained and experienced in the rôle and who will work with a number of clinical supervisors. Consideration should be given to changes that might be required for programme directors and the Record of In-Training Assessment (RITA) process, and to possible further training of RSAs and programme directors.

13 SERVICE USERS' PERSPECTIVES

13.1 Members of the RCP London Patient and Carer Network were contacted through their representative on the Working Group. Their current concerns included the following:

- Patients should know who 'their' doctor is in order to establish trust.
- Continuity of care and effective handover should be provided in all circumstances.
- Where multiple specialties or teams are involved, patients should understand who is responsible for the overall coordination of care since each specialist may take a particular view within his or her area of expertise.
- Patients should not have to give their history and be examined on multiple occasions when acutely ill.
- Consultants should introduce themselves to patients and explain their rôle, rather than having the patient described to the consultant by trainees without comment.
- Patients may be frightened in the environment of an A&E department and should be reassured as much as possible.
- Patients are concerned about the effects of the European Working Time Directive on the availability of experienced staff to maintain an effective 24/7 service for acutely ill patients.

Recommendations

- **We recommend** that patients' and users' concerns and priorities should be emphasised within the training curriculum. These include:
 - provision of effective continuity of care and effective handover
 - rapid transfer of patients from A&E, or other methods of immediate 'streaming' to medicine such as direct admission from general practice to the medical admission or assessment unit.

14 NEXT STEPS

14.1 We commend this document to JCHMT, and look forward to their endorsement and that of the Presidents and Councils of the three Royal Colleges within the Federation.

14.2 Work has started on updating the current general (internal) medicine, acute medicine and generic curricula.

14.3 The current rules and regulations for G(I)M will be revised by the SAC in acute and internal medicine in line with the current reality of acute medicine in the UK, and in the light of the recommendations in this report.

14.4 Discussions should take place between the acute and general medicine SAC and other specialist SACs to agree a way forward for training as MMC unfolds.

14.5 A small intercollegiate body should be set up to look at shared competencies and 'equivalence' of training experience for those wishing to contribute to acute care from disciplines outside medicine and its specialties, for example, from anaesthetics, critical care medicine or A&E medicine. This will need to consider the position of current and future trainees and of current consultants.

14.6 Effective systems should be set up to monitor progress in this evolving field and to ensure that potential pitfalls are avoided.

14.7 Further information is needed about numbers of trainees at different stages potentially interested in careers in specialty acute medicine, and about the likely commitment of Trusts in the NHS to creating consultant posts in the specialty.

APPENDIX 1 MEMBERS OF THE WORKING GROUP

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APPENDIX 2 NUMBER OF ACUTE PHYSICIANS AND NATIONAL TRAINING NUMBER REQUIREMENTS

Robert Coward, Specialist Registrar Adviser, RCP London

1. In order to address the issue of the number of acute physicians and national training number (NTN) requirements, the following have been used:

- **Royal College of Physicians of London Consultant Census 2004** (relating to England and Wales only).
- **JCHMT NTN database** – current information on the number of NTN holders holding posts with a dual specialty G(I)M and also NTN holders in acute G(I)M alone (relating to England, Wales, Scotland and Northern Ireland).
- **Acute Trusts** – a figure of 228 for the number of acute trusts in England and Wales to use as a guide to the numbers of acute physicians required (relating to England and Wales only).

Royal College of Physicians Consultant Census 2004

2. Of a total of 8,279 consultants in the medical specialties, 2,213 have on-call commitments for unselected emergency medical admissions. This is highest in geriatrics with 541 consultants (8.61% of total geriatricians) whilst endocrine diabetes (329), gastroenterology (412), respiratory medicine (339) and cardiology (196) are also major contributors to this total. It should be noted, however, that in the survey 40.5% of respondents (3,353) did not answer the question about unselected medical take.

3. At present there are 88 consultants in G(I)M with no other specialty; it is unclear whether these could be categorised as acute physicians.

JCHMT NTN database

4. Data from the JCHMT NTN database in February 2006 showed that there were 46 NTN holders in acute GIM. This compares, for example, with 502 NTN holders in geriatrics, 476 in cardiology, 430 in respiratory medicine and 417 in gastroenterology, the other major specialties which are contributing to acute general internal medicine.

5. Of the 746 CCST/CCTs awarded in 2005, 242 also had joint accreditation in G(I)M. The major specialties were geriatrics (61), gastroenterology (46), diabetes and endocrinology (33), respiratory medicine (45). It was unclear, however, how many of these CCST/CCT-holders took up a post with a G(I)M commitment and acute unselected take duties.

6. Of the 4,875 NTN holders currently enrolled, 3,032 are training in general (internal) medicine.

Acute Trusts

7. The figure of 228 acute Trusts in England and Wales is derived from the numbers of London College tutor posts. With a suggested figure of three Acute Physicians per trust, this would give a total of 684 consultant Acute Physicians for England and Wales. This figure is larger than any other specialty apart from geriatrics with 1,068 consultants.

Interpretation

8. The basic figures would suggest that 600 new consultant posts in the specialty of Acute Medicine need to be created. It is possible that a significant number of these posts could come from existing staff and associate specialist (SAS) doctors who would be applying through the Postgraduate Medical Education and Training Board (PMETB) for these rôles. It is also possible that existing consultants in other specialties would change their interest and concentrate on Acute medicine, as has happened with many of the existing Acute Medicine Physicians.

9. Even with these caveats, however, the creation of 600 consultant posts is a massive challenge. There are three areas of concern:

(i) If 100 NTN posts in acute general internal medicine were created every year for six years, this would give 628 NTNs to obtain a CCT. The assumption has been made that the NTN would hold the number for five years even though the programme is four years. Allowing for an out-of-programme experience and flexible trainees, this is in line with existing specialties. It has also been assumed that existing NTNs, because the numbers are relatively small, will obtain their CCT five years from 2004.

(ii) With this model, it would not be until 2015 (Table1) that the expected number of CCTs would be reached. Prior to this figure being reached, decisions would have to be made about the number of NTNs and whether further expansion of the specialty is required, i.e. from 3 to 5 or 10 acute physicians per Trust.

(iii) Using the assumption of a consultant career of 25 years and NTN training for five years, there only needs to be one NTN for five consultants in a non-expanding consultant service. This implies that there would need to be a drastic reduction of the NTNs in Acute Medicine, from 628 to 130, for a stable consultant workforce of 650. In all other major specialties, the consultant to NTN ratio is at present between 1 and 2.5 not 5 i.e. implying a continued expansion of consultant numbers. Managing this reduction, especially in the light of the service provision of the NTN holders, would require careful planning with consultant replacement of the NTNs.

10. The financial implications of creating new posts is significant: taking an SpR costing of £75,000 per year with a consultant costing £100,000, the creation of 650 consultants would cost £65 million, and 600 NTNs would cost an additional £45 million.

11. The expansion of the specialty of acute general internal medicine is likely to have knock-on effects on other specialties. Certain specialties are reportedly dropping the general (internal) medicine commitment from both the trainees and advertised consultant posts, e.g. cardiology and renal medicine. The reduction in trainees' desire to have dual accreditation has a particular impact on teaching hospitals, which NTNs often regard as being for specialty training only and hence there is unwillingness or lack of numbers to fill acute medical take rotas.

12. With the recent large expansion of NTNs as a consequence of the European Working Time Directive, many commissioners and PCT's have found difficulty funding these posts. The proposed requirement for Acute Medicine posts would place a heavy burden on commissioners without obvious activity gain.

13. The reduction of dual specialty training for existing SpRs and financial pressure would suggest that any new NTNs in Acute Medicine could be created as a consequence of reduction in G(I)M training in other specialties.

14. There are over 3,000 trainees enrolled for G(I)M dual specialty. Either the voluntary changing of some of these posts to Medicine alone or the central redesignation in certain specialties, e.g. cardiology, that G(I)M training is no longer required, would allow many posts to be freed up and potentially be cost neutral.

15. At present, many DGH sites rely on NTN numbers of other specialties, e.g. gastroenterology, cardiology and diabetes, to perform their acute medical take. Whilst performing the acute medical rôle, these doctors also undertake other tasks related to their specialties such as endoscopy lists, catheter lists and specialty clinics. If the majority of these posts were converted into Acute Medicine posts, there would potentially be a significant reduction in these activities.

16. It is possible that up to 50% of the expected 600 new Acute Medicine posts could be identified through existing NTN numbers, bearing in mind that the high intensity G(I)M component is usually for two years out of the total training. Any change in designation of the post will require major revision of the existing training programme rotations.

17. The choice of which G(I)M posts are changed from dual accreditation to Acute Medicine needs careful consideration to ensure service provision and that NTN specialist input continues at DGH sites as well as at teaching hospitals .

Table 1 : Requirements for NTNs in Acute Medicine in England , Wales and Northern Ireland to provide 3 Acute Physicians per Trust

Year	Total NTNs	Additional NTNs*	Cumulative CCT
2005	28		
2006	128	100	-
2007	228	100	-
2008	328	100	-
2009	428	100	-
2010	528	100	28
2011	628	100	128
2012	?	-	228
2013	?	-	328
2014	?	-	428
2015	?	-	528

* Made up of new posts and conversion of G(I)M compared with existing NTNs in specialty

APPENDIX 3 FOURTH SPECIALIST REGISTRAR QUESTIONNAIRE, ROYAL COLLEGE PHYSICIANS OF LONDON

Robert Coward, Specialist Registrar Adviser, RCP London

Introduction

1. The fourth SpR questionnaire, a national RCP survey of all SpRs training in the medical specialties, was carried out between December 2004 and January 2005. It is based on the third SpR questionnaire carried out in November 2003 by Dr Hugh Mather, the previous SpR Adviser at RCP London.
2. The fourth questionnaire was carried out following the implementation in August 2004 of the European Working Time Directive (EWTD). This Directive, with the subsequent Jaeger and SiMAP rulings from the European court, has resulted in the abolition of on-call working and the requirement for full-shift rotas for acute medicine.
3. There had been concerns expressed by the RCP prior to August that the workforce was poorly prepared for these changes, which would result in a worsening of patient care, training and quality of life of the trainees.
4. This questionnaire also enquired about the SpRs' opinion on research, career prospects and the development of acute medicine as a specialty.

Method

5. The questionnaire was based on the third RCP SpR survey which was a paper-based exercise. This survey, however, was performed entirely electronically using Quask on-line survey software.
6. The questionnaire was distributed by using an email link to all SpRs registered on the JCHMT database. This included all 28 specialties in England, Scotland, Wales and Northern Ireland. A total of 963 responses were received; some of the forms were incomplete as the questions were not always applicable, e.g. individuals out of programme, doing research, or not participating in on-call rotas.
7. The questionnaire was sent out in two versions: the initial long version, with which there were technical difficulties in returning the forms, and a shorter abridged version, with 642 and 321 replies respectively.

Results relevant to acute medicine

Working pattern

8. In terms of current working patterns, 38% of respondents were working a full shift, 35% were on call, 6% were working a partial shift, and 8% a hybrid shift; 11% were not applicable and 2% were unsure of the rota. Fifty-nine per cent provided prospective cover.
9. Of the 621 on night shifts, 34% were on for two successive nights, 29% were on for four successive nights, very few were on for five or six nights, and 36% were on for seven successive nights.
10. When asked about working pattern satisfaction, a surprisingly high number said they were very happy or happy (50%) whilst only 28% said they were unhappy or very unhappy.

11. Of the 925 responses regarding working pattern, the vast majority (59%) preferred an on-call rota to full shift (9%). There was some support for partial shift (7%) and hybrid shift (6%), whilst 10% were unsure.

12. Of those SpRs who had changed to full shifts as a consequence of the European Working Time Directive, 69% felt it made training in their specialty worse. Of major concern was the number, 84%, who highlighted that continuity of care for patients had deteriorated. In terms of quality of care, 49% said the Directive had worsened the quality of care, whilst 52% felt quality of care was either neutral or improved. The workload had worsened for 50% of respondents, and quality of life for the SpRs had deteriorated for 61%.

Job satisfaction

13. There were major differences and views about job satisfaction between those working in acute medicine and those working within their specialty. Of the 648 that answered in relation to acute medicine, 34% described their job satisfaction as poor, 52% as moderate, 14% as good. However, for those working in their own specialty, of the 890 who replied, 67% had good job satisfaction, 27% had moderate and only 5% poor satisfaction.

Career choices

14. The most popular choice for a consultant post was an NHS teaching hospital post (32%) followed by a DGH post (25%), 15% considering academic medicine as a career with the remainder undecided

15. When asked whether, if they entered SpR training now, they would consider a career in acute medicine as a specialty (acute medicine defined as a primary rôle in running a medical admission unit), 133 (14%) said yes. However, when asked which course of training they would consider (specialty alone, dual training of specialty plus G(I)M, or acute medicine alone), only 21 said they would consider acute medicine alone as a specialty, whilst 442 (52%) said they wanted to train in a specialty alone and 387 (46%) said they wanted to train in a dual specialty.

Free text comments

16. There was a considerable amount of anecdotal comment submitted in conjunction with the questionnaire. Most of this was extremely critical of changes brought about by the EWTD and amplified on the findings obtained from numerical analysis of the questionnaires.

APPENDIX 4 PROPOSED TEMPLATE FOR A FOUR-YEAR SPECIALIST TRAINING PROGRAMME IN ACUTE MEDICINE AFTER COMPLETION OF BASIC MEDICAL TRAINING

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All medical specialties are relevant for acute medicine but experience in the following specialties is especially recommended: cardiology (including coronary care unit (CCU), respiratory medicine, infectious diseases, gastroenterology and medicine for the elderly/stroke medicine.

Ideally experience should be gained in two separate MAUs during the training period. Experience in A&E and CCU is most likely to be gained in the third year of training but it is possible for the second and third years to be transposed. The table below provides a template for a training programme in acute medicine.

Table 3. Template for a four-year specialist training programme in acute medicine.

Year	Rotation			Mandatory courses
1st	<i>Acute medical receiving preferably within an MAU</i> <i>Experience of medical specialties</i> e.g. acute medical assessment within an MAU for 6/12 cardiology 3/12 respiratory medicine 3/12	Practical procedure training throughout training period	Research project and participation in audit throughout training period	ALS course in management of acutely ill, e.g. IMPACT ALERT or other approved course
2nd	<i>Medical specialties experience</i> e.g. infectious diseases 3/12 GI medicine 3/12 acute care of elderly 3/12 nephrology 3/12	The selection of practical procedures that are available should be listed		Course for training for teaching
3rd	<i>Critical care experience within combination of A&E, ITU or HDU and CCU settings</i> e.g. CCU 3/12 ITU/HDU 6/12 A&E 3/12			
4th	<i>Experience within MAU including management experience 6/12</i> <i>Continuing experience within medical specialties</i> e.g. diabetology 3/12 acute medicine for the elderly 3/12			Management course
Abbreviations: MAU = Medical Admissions Unit A&E = Emergency Department ITU = Intensive Care Unit HDU = High Dependency Unit CCU = Coronary Care Unit ALS = Advanced Life Support IMPACT = Ill Medical Patients' Acute Care and Treatment ALERT = Acute Life Threatening Events – Recognition and Treatment				

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