

# Where is the sharp end and how did we get here?

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## Introduction

As a definition, 'the sharp end' of medicine suggests to me an acute new illness and the period of decompensation of a chronic disease. Working with this group of patients is both fascinating and challenging. A decade ago, their management was typically an addition to the work of the general physician with a specialty interest. While the lion's share of this work is still handled by the on-take physician, a new specialty of acute medicine has arisen to focus on this workload. This article will consider how the specialty is growing to fill this niche, what it entails to be an acute physician and what the future may hold.

Through the 1990s the process of overheating in the NHS gathered pace. The demographic shift towards a higher proportion of elderly in society began to be palpable. A two-decade retraction in acute capacity as well as the reduction in junior doctors' hours further pressurised the consultant body. Additionally, the quality agenda blossomed; fuelled by well publicised though isolated incidents of poor practice such as the Bristol heart babies scandal and the Harold Shipman case. The access of patients to experienced medical opinion and the working patterns of consultants came under scrutiny. Arguably the biggest catalyst for change at the turn of the century was the emergence of extremely challenging government targets relating largely to access and waiting times. Physicians began to be pressurised to meet both their elective and emergency commitments. Pressure for acute care beds led to 'stacking' of admitted patients in areas with poor medical cover while they queued for access to specialty beds. Trusts recognised the need to provide these patients with an adequate care infrastructure and the possibility to discharge a proportion of these stacked patients before transfer onwards within the hospital.

## The impact of the four-hour target

Emergency departments had become rather neglected before the early years of this century and were frequently the site for holding admitted medical patients. The advent of the four-hour emergency access targets forced trusts to consider alternatives to housing patients in accident and emergency (A&E) departments where their care and comfort was often suboptimal. With respect to patients referred for a

medical opinion by their general practitioners (GPs), these were ordinarily assessed and managed initially within A&E departments, further compromising the ability of trusts to deal with 999 and self-presenting emergency patients.

This wide range of factors led to the emergence of acute medicine as a specialty and the concept of acute medicine units or medical assessment units (AMUs/MAUs) as physical spaces. While in hindsight these entities arose in a somewhat haphazard and variable way, in retrospect the undeniably rapid uptake of acute medicine services by both trusts and professionals in the NHS can be seen as explicable, given the profound needs for the service set out above. Unpublished survey data from 2006 suggests that virtually all trusts receiving unselected medical take now have an acute medical service and some form of AMU.<sup>1</sup>

## Acute medicine units

It is difficult to generalise the functions and processes of AMUs, given their widely differing remits, sizes and staffing patterns. It is, however, pertinent to set out some of their common functions, particularly for those who have had little contact with the model. There are two overriding functions of the AMU, assessment and immediate management of acutely unwell medical patients and their care for the initial period of their admission. The later function arose somewhat by default, given the delay frequently experienced by patients awaiting a specialty bed. This one to two day window spurred those working with these patients to develop a plethora of techniques to try to achieve safe discharge and strong links with the community soon evolved.

Inevitably, the assessment arm of acute medicine has developed in a close relationship with the on-call team. Increasingly, this function is being taken over by an acute medicine service. Shift working for

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juniors is now ubiquitous and the 'team' model as previously existed, whereby Dr X would be on call on a Wednesday (or every sixth day etc) with their team of juniors, no longer pertains. With this, the continuity of the team's juniors clerking a patient while on call and caring for them on the ward until discharge is largely a thing of the past. This has led to the possibility of juniors doing blocks of acute medicine with other periods of elective and subacute ward work. This model is recommended by some and was set out as desirable in the last Royal College of Physicians (RCP) report on acute medicine.<sup>2</sup> The focus on acute care for the foundation trainees as part of Modernising Medical Careers (MMC) along with these changes to the on-call service has provided junior doctors to the early uptakers of a consultant career in acute medicine. The development of specialty training schemes for specialist registrars in acute medicine, has led to the specialty looking and feeling like any other.

### Consultants in acute medicine

My personal view of what constitutes a specialist in medicine is that of a doctor who is able to provide the best standard of care for a patient at any particular time. It may appear difficult to reconcile this concept with that of a 'specialist in acute medicine', given that patients ostensibly have illnesses that can be readily identified as specialty based (eg acute myocardial infarction (MI), asthma, gastrointestinal bleeding). I suspect this apparent contradiction (that of a specialist being a generalist) led to a proportion of the initial scepticism towards acute medicine on behalf of the wider profession. In my view, adding extra 'value' as a specialist in acute medicine is tenable for several reasons and these are worth setting out, if only to help dispel any doubts that may still exist. Firstly, only approximately half of acute medical patients have an easily identifiable single specialty problem,<sup>3</sup> for every acute MI in a previously well patient, there are several elderly patients with sepsis, mobility difficulties and a host of comorbidities. Additionally, it is not always immediately clear what the acute problem is and patients with chronic disease frequently decompensate in a generic way due to multiple factors. It is not only the skills to diagnose and provide expert initial management for these patients, which to my mind justifies the existence of acute physicians, but crucially the ability to move them onwards to the ideal environment. It is this discharge function where I feel much of the unique skills of acute physicians will pay dividends for trusts and health economies in terms of optimising services as well as improving clinical outcomes. It has been shown that in our trust, careful selection of patients for specialty beds (after a period of assessment) significantly improved the proportion of patients cared for on the ward base by the relevant specialist along with improved clinical and throughput outcomes.<sup>4</sup>

### Interface with subspecialists

The skills involved in accurate diagnosis and rational placement of patients are to my mind being honed by those practising in

acute medicine. It is arguable that to utilise the skillbase of a subspecialist in this process is not the most effective use of their talent and experience. Even with an initial triage by a professional who with respect could be termed a 'non expert', eg nurse or paramedic, leaves the assessing specialist with a welter of patients whose medical needs could be just as well met by an experienced acute physician, and others whose diagnosis is ultimately not within the specialist's area of expertise. In my view, trying to combine a secondary care role with a tertiary care role is thus difficult. This is the model of superspecialised sub-sectioned AMUs, staffed by specialists focusing on individual patient groups. It should be made clear that to my mind, an on-call subspecialist, seeing unselected take patients is acting as an acute physician in the initial assessment role and this is to be encouraged for several reasons. Indeed, to me, retreating to pure specialty work is to the detriment of our profession. The vague nature of many patients' problems, the coexistence of several diseases in one patient and the development of new problems within illness episodes and over longer periods necessitates practising physicians remaining competent in the totality of general medicine. The exception is those practising in pure tertiary care. There are also profound workload demands that preclude the abandonment of acute medicine by the subspecialists for the foreseeable future. Finally, for acute medicine to flourish as a subspecialty in its own right it needs continued envelopment and nurturing within the embrace of the wider body of physicians and the presence of strong links and efficient interfaces with the subspecialists at the institutional, local and national level.

### Acute medicine as an interdisciplinary speciality

Planning and executing discharge is a crucial component of all physicians' work. Physicians in acute medicine are highly motivated and well placed to develop an unusual degree of expertise in this area. Having space to process the day's intake of patients is a potent spur to consider discharge of patients as they arrive and innovative techniques have emerged to facilitate this. The concept of multidisciplinary working is exemplified par excellence in this area of acute medical practice. Input from colleagues in diagnostic services as well as the professions allied to medicine is vital in this respect. Nursing staff can be potent drivers for discharge when they enter a rapid turnover mindset. Additionally, excellent links have been forged with community services, this has been aided by the symbiotic and mutually dependent relationship acute medicine has with primary care services.

### Recruitment and manpower

Increasingly, the initial assessment of acutely ill medical patients is by trainees, supervised by acute medicine physicians, placed within an AMU. I envisage this being a self-perpetuating stimulus to the onward expansion of the speciality. Part of the justification for acute physicians will be to train the juniors and in their turn it is hoped the trainers will act as role models, encouraging in

other trainees into the specialty. The issue of manpower is pivotal to the development of acute medicine. In addition to trainees opting for a life in acute medicine, numerous experienced subspecialists are moving part or all of their clinical duties to acute work. This was initially in part due to recruitment difficulties but I sense that this is increasingly a conscious and proactive decision. As a clinician in the early/middle phase of my career, I see this as crucial in the development of the specialty. We are enormously enriched by the experience and wisdom of these fully mature practitioners, not only clinically but also politically. It is no coincidence that those driving the specialty forward nationally, both at the RCP and the Society for Acute Medicine UK (SAMUK), are predominantly these 'transferees'. To have a specialty populated entirely by the under forties would be odd, suboptimal in terms of skill mix and, importantly, lacking the retirements that allow the next generation on board. It is also vital for embryonic consultants to have mentorship and this will become much more the case as MMC trainees emerge.

In spite of this drift of established consultants into acute medicine, recruitment will remain a challenge until the vision for the specialty set out in the 2004 RCP Working Party report (three acute physicians per trust and up to 12 in large trusts) becomes a reality.<sup>2</sup> In this respect it is pertinent to consider the advantages of a career in acute medicine. When I have asked those opting for a change in specialty why they made this decision, a number of themes have emerged. Before working in acute medicine it is the lifestyle and work-life balance advantages that are heralded as the major reasons. Because acute medicine is so ongoing in terms of its 24/7 nature, we all have to 'dip in and dip out' with continuity arrangements that are necessarily robust. No one clinician can deliver the care alone. These factors are somewhat in contradistinction to many ward-based and elective activities that are reliant on a named physician always being in charge of the clinic, list or ward round. For any clinician looking for a flexible and possibly childcare-friendly working life, there are almost limitless possibilities for designing job plans to suit particular needs.

### Acute medicine – the working week

Once working in acute medicine, the range of conditions and acuity of illnesses is a source of constant stimulus. The working week still necessitates a welter of non-clinical work of variable desirability including teaching, patient administration and service development. The clinical work involves ward rounds and clinics, the former to ensure daily consultant review, optimise care and plan onward movement, the latter to provide rapid follow up and opinions to GPs in the hope of obviating acute admission. Unlike a subspecialist's week, much of the clinical workload is involved in initial assessment of patients. This can tend to focus on the very sick and the reasonably well, for whom immediate discharge is feasible. The variety and interest presented by this work pattern seems to me to be so motivational that the morale of my colleagues in acute medicine appears to compare well with that of other subspecialist physicians. Indeed,

these factors will, I hope, continue to counter the pressures experienced at times in acute medicine. The unpredictability of the work and the swings in demand (which are mostly seasonal) are both pros and cons in that the winters tend to be very busy and the summers more tolerable. Recent summers in our unit have highlighted the model for the whole year, that of capacity in the morning to bed all the expected admissions for the day. This position has resulted from development of upstream and downstream services as well as improved acute medicine services. Virtually all acute trusts remain profoundly challenged in the winter months and current financial restraints give no cause whatsoever for complacency.

### Staffing into the future

Meeting the need for acute physicians in the future will, of necessity, be a multifactorial pursuit. As set out above, it is important that subspecialists continue to be involved in take work and to interdigitate seamlessly with acute physicians. In addition to those transferring their clinical work across from a subspecialty to acute medicine, it is probable that the trend for job plans to include a component of acute medicine, perhaps in a time-limited way, will continue. This may fit well with the MMC agenda, whereby a proportion of physicians spend the early part of their career predominantly in acute medicine before further subspecialisation. One slight concern with this would be acute medicine becoming the remit of 'junior consultants'; this is undesirable for the status of the specialty and the skewed age distribution discussed above. Such a model would have to be balanced with more senior clinicians and the possibility of further subspecialisation being in acute medicine. This has been hinted at and there may be a distinction between delivery of acute medical care and the management of an AMU in the future.

### Acute medicine – horizon scanning

The rate of development of acute medicine and the commitment towards its development as a specialty has far outpaced my most optimistic expectations. This has in large part been due to the combined efforts of the RCP and SAMUK. I very much view Professor Sir George Alberti as being perhaps the most influential individual to have driven this agenda over the last five years, both as former President of the RCP, and latterly as an emergency care tsar. While clearly many others have played a role, he has been a superb advocate of the specialty and this has been carried forward by Professor Dame Carol Black and Professor Ian Gilmore.

Many questions remain around the future of the specialty, in addition to those alluded to above. Will the focus of acute medicine move towards the care of the sick in the wider hospital? The success of the Hospital at Night model, whereby a senior clinician supervises a multidisciplinary team in a trust, may well spill over into the daytime hours. In 2009, the European Working Time Directive (EWTd) will reduce junior doctors' working hours by 20% leaving a chasm in care provision and it

is likely that emergency medical teams will emerge; acute physicians may be well placed to lead these teams. A further direction is towards the US model of a 'hospitalist'. The 50% of patients for whom no clear subspecialty destination is evident may be well served by a good general physician looking after them throughout their hospital stay. These patients could be further subdivided into those with a reasonable expectation of discharge within two or five days so that the concept of a short stay general medical ward, a 'step down' from AMU could be conceived. Acute medicine may well become more acute, disregarding the ongoing care element perhaps altogether. In this model the AMU physician may only be involved in the first four hours, providing expert diagnosis, initial management and triage before transfer. Yet another possibility is that acute medicine extends further out into the community, either seeing the patients in a community setting to try and avoid admission, supervising hospital at home services or step down care after discharge.

Ultimately the future direction of the specialty is likely to encompass many or all of these functions as well as many other possibilities. The shape of any acute medical service will reflect local circumstances and the skills and interests of those involved. The huge excitement of being in such a young specialty is that these questions remain up for debate and for the individual professional there is the possibility to shape the service in innovative and novel ways. Part of the remit of the professional bodies is to keep up with developments in a specialty and to provide guidance and suggestions for best practice. The RCP has done this with two thoughtful Working Party reports on acute medi-

cine and this process needs to be almost continually updated given the rate of growth and development in the specialty. A wide-ranging Working Party is currently gathering evidence and will report later this year.

Medicine at the sharp end feels very sharp at the moment. We are being buffeted by a host of political changes: contracts, MMC, EWTD, Payment by Results and the governance agenda being a selection. The acuity of the patients' illnesses remains a constant and the demographic shift continues to ensure an increasing clinical demand. For those who require constant prodding of their adrenal medullas to maintain interest and vitality throughout their career, acute medicine may be just the ticket.

## References

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