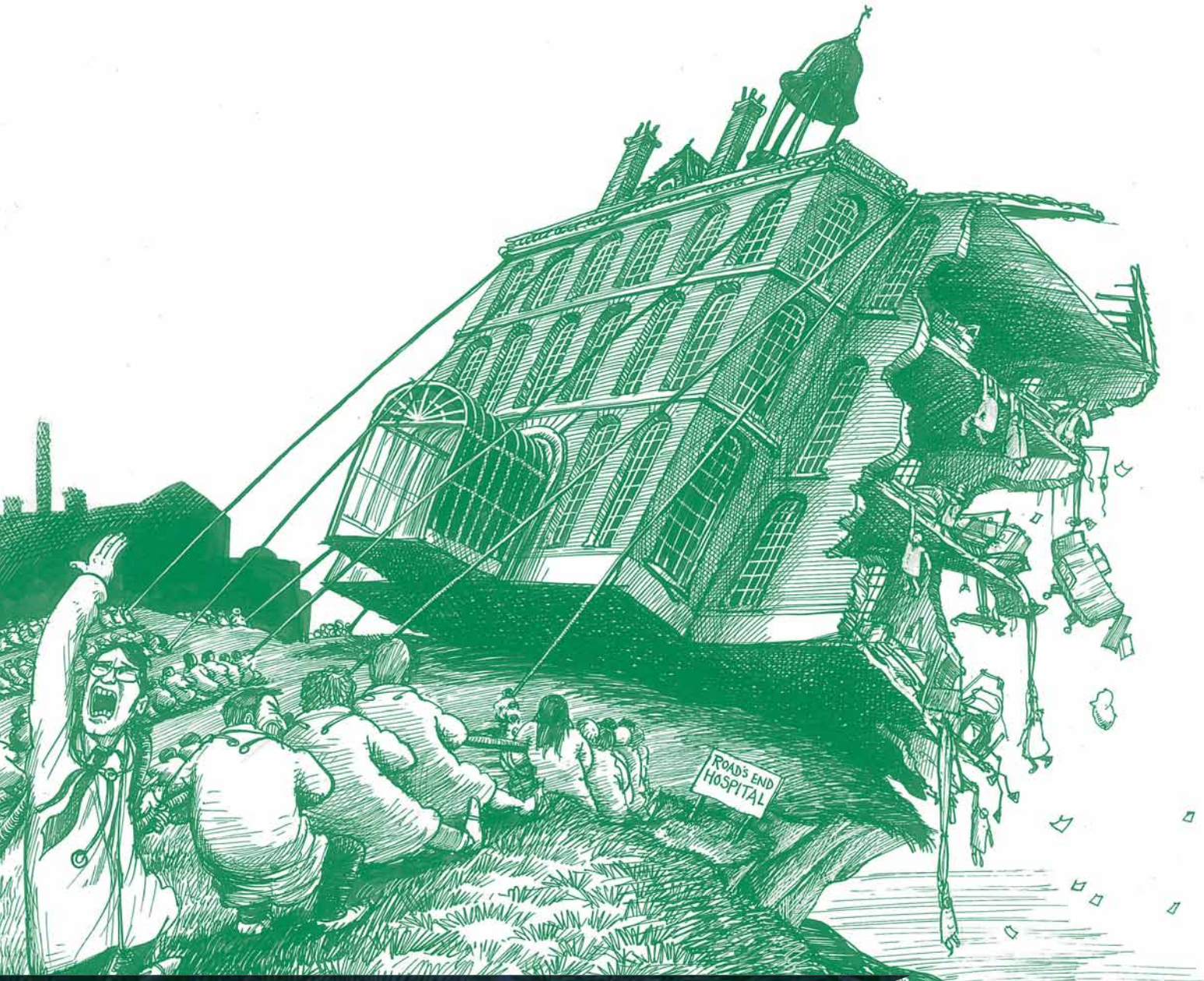
Royal College of Physicians

Setting higher standards



Hospital workforce
Fit for the future?

A report by the Royal College of Physicians

March 2013

Background

In *Hospitals on the edge? The time for action,*[1] the Royal College of Physicians (RCP) laid out the current crisis in hospital care. Over the past 10 years hospital admissions have risen by over 35% while hospital bed numbers have fallen by 10%.[2] Hospitals have so far only managed to cope with these dramatic changes by reducing average length of stay but can no longer cope with the increasing demands posed by the number of hospital patients.

The number of frail elderly people in hospital is increasing year on year and this has been identified as the key challenge to the NHS by numerous independent bodies, including Dr Foster Intelligence,[3] the King's Fund[4] and the Centre for Workforce Intelligence (CfWI).[5] The proportion of frail elderly people has risen to 30% of all admissions in the past year.[3] The average length of stay is less than 4 days for people under 60, and over 10 days for those over the age of 75.[2]

There is a significant increase in mortality for patients admitted to hospitals at the weekend in the NHS[3] with considerable variation between hospitals. The variation shows a clear association with the number of 'senior hospital doctors' present at the weekend. This has resulted in numerous calls for development of a 12-hour, 7-day hospital service, initially from the RCP and the Academy of Medical Royal Colleges.[6]

The CfWI has estimated that if consultant numbers continue to expand according to the number of doctors in higher training, the total number of consultants in hospitals in 2020 will increase by 60%.[7] The estimated increase in the pay bill for these additional consultants is £2.2 billion. This has resulted in calls for a radical rethink about how many hospital doctors the UK trains.

There is increasing evidence that both trainee doctors and senior hospital doctors are struggling to cope with the increased demands being placed on the service. The reduction in trainee doctors' hours enforced by the New Deal and the European Working Time Directive (EWTD) has increased the tension in an already over-stretched workforce.[8]

This evidence was the stimulus for detailed research into the working lives of medical registrars in the UK, the results of which are being published in the report, *The medical registrar: empowering the unsung heroes of patient care,*[9] published alongside this leaflet. Medical registrars face increasing challenges in their delivery of patient care in NHS hospitals. The report documents the problems they face, and some potential solutions.

The RCP monitors the numbers, working practices and opinions of medical consultants and registrars on an annual basis via the consultant census. The *Census of consultant physicians and medical registrars in the UK, 2011* gives an overview of the trends in the medical consultant workforce, enabling predictions to be made about how this workforce will develop over the next few years.[10]

The consultant and registrar medical workforce are responsible for the care of most patients admitted to hospitals as an emergency over the course of the week. Understanding how this workforce is likely to change over the next 5–10 years is crucial in planning healthcare services both within and outside hospitals.

This document summarises the key evidence from both *The medical registrar*[9] and the 2011 consultant census[10] to help understand how the medical workforce can be used to help solve the crisis in hospital care.

The RCP has also responded to the 'Shape of training' review, where many of the conclusions in this document are reflected (www.rcplondon.ac.uk/sites/default/files/rcp_shape_of_training_response.pdf). ■

About the Royal College of Physicians

The Royal College of Physicians plays a leading role in the delivery of high-quality patient care by setting standards for medical practice and promoting clinical excellence. We provide physicians across 30 medical specialties with education, training and support throughout their careers. As an independent charity representing over 28,000 fellows and members worldwide, we advise and work with government, the public, patients and other professions to improve health and healthcare.

References

[1] Royal College of Physicians. *Hospitals on the edge? The time for action.* London: RCP, 2012. www.rcplondon.ac.uk/sites/default/files/documents/hospitals-on-the-edge-report.pdf

[2] Hospital Episode Statistics, HESonline. Summary report, 2011–12. www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=193

[3] Dr Foster Health. *Hospital guide 2012. Is your hospital fit for the future?* Dr Foster, 2012. http://download.drfosterintelligence.co.uk/Hospital_Guide_2012.pdf

[4] King's Fund. *The care of frail older people with complex needs: time for a revolution.* London: King's Fund, 2012. www.kingsfund.org.uk/publications/care-frail-older-people-complex-needs-time-revolution

How does the NHS decide how many doctors to train?

Planning how many doctors to train is an almost impossible task. There are three key problems with the current training and planning process for hospital doctors.

Key problem 1 It takes 12–15 years to train a first-year medical student to become a consultant or GP. Training has become more specialised following an initiative called 'Modernising Medical Careers', and thus it is difficult to adapt training numbers quickly in response to the changing needs of the population.

Key problem 2 While government can set out how many medical students, junior doctors, GPs and consultants to train, the final number of GPs and consultants in a town or city is decided by how much money is available to employ them. Thus in times of plenty there is a big expansion in hospital consultants, but in times of austerity there are not enough jobs for trainees, giving the impression that we train too many doctors.

Key problem 3 Training is based around teaching hospitals and in particular big cities. 86% of hospital trainees end up working in the same area as they trained. Areas that struggle to recruit trainees or have fewer trainees allocated to them will never be able to fill additional consultant posts even if there is funding for these posts. ■

'We are going to need more consultants with skills in acute, general and geriatric medicine to be able to cope with the ageing population.'

Are we training too many or too few consultant physicians?

The *Hospitals on the edge?*[1] report makes a clear case that we are going to need more consultants with skills in acute medicine, general medicine and geriatric medicine to be able to cope with the ageing population.

The 2011 consultant census shows how consultant physician numbers have increased over the past decade.[10] Consultant expansion was at its peak in 2008–9 when the NHS had a large increase in funding, but it has fallen in 2010–11 to 5.0%. This pattern follows the financial flows seen in the NHS and makes it unlikely that all of the doctors currently being trained will have jobs when they complete training.

The number of consultants working part time has increased steadily over the past 6 years from 12% to 18%. This is almost entirely due to the increase in the number of female consultants driven by changes in medical school intake. 38% of female consultant physicians work part time compared with 6% of male consultant physicians.[10]

36% of female medical registrars definitely plan to work part time when they become consultants and another 24% are considering working part time.[10]

Hospitals are in desperate need of consultants to staff the front door. More jobs in emergency medicine, acute medicine and geriatric medicine are advertised than in any other specialties, but less than half of these advertisements result in a successful appointment.

The need for a 7-day consultant-present service[6] has been made clear. Most consultant physicians spend most of their time in outpatient activity and sudden shifting of these doctors to the front door will cause a collapse of outpatient care. Funding of hospitals rewards outpatient and elective activity so hospitals need to continue to staff this activity. Additional staff will be needed if the consultant presence is to be increased out of hours.

Therefore it is likely that a radical rethink of how the medical workforce is trained and deployed will be needed to meet the needs of patients in the future. ■

[5] Centre for Workforce Intelligence. *Integrated care for older people. Examining workforce and implementation challenges*. London: CfWI, 2011. www.cfwi.org.uk/documents/integrated-care-for -older-people

[6] Academy of Medical Royal Colleges. *The benefits of consultant delivered care.* London: AoMRC, 2012. www.ficm.ac.uk/sites/default/files/SEVEN_DAY%20_CONSULTANT_PRESENT_%20CARE_AoMRCs%20Dec%204th%202012_1.pdf

Is medical staffing a postcode lottery?

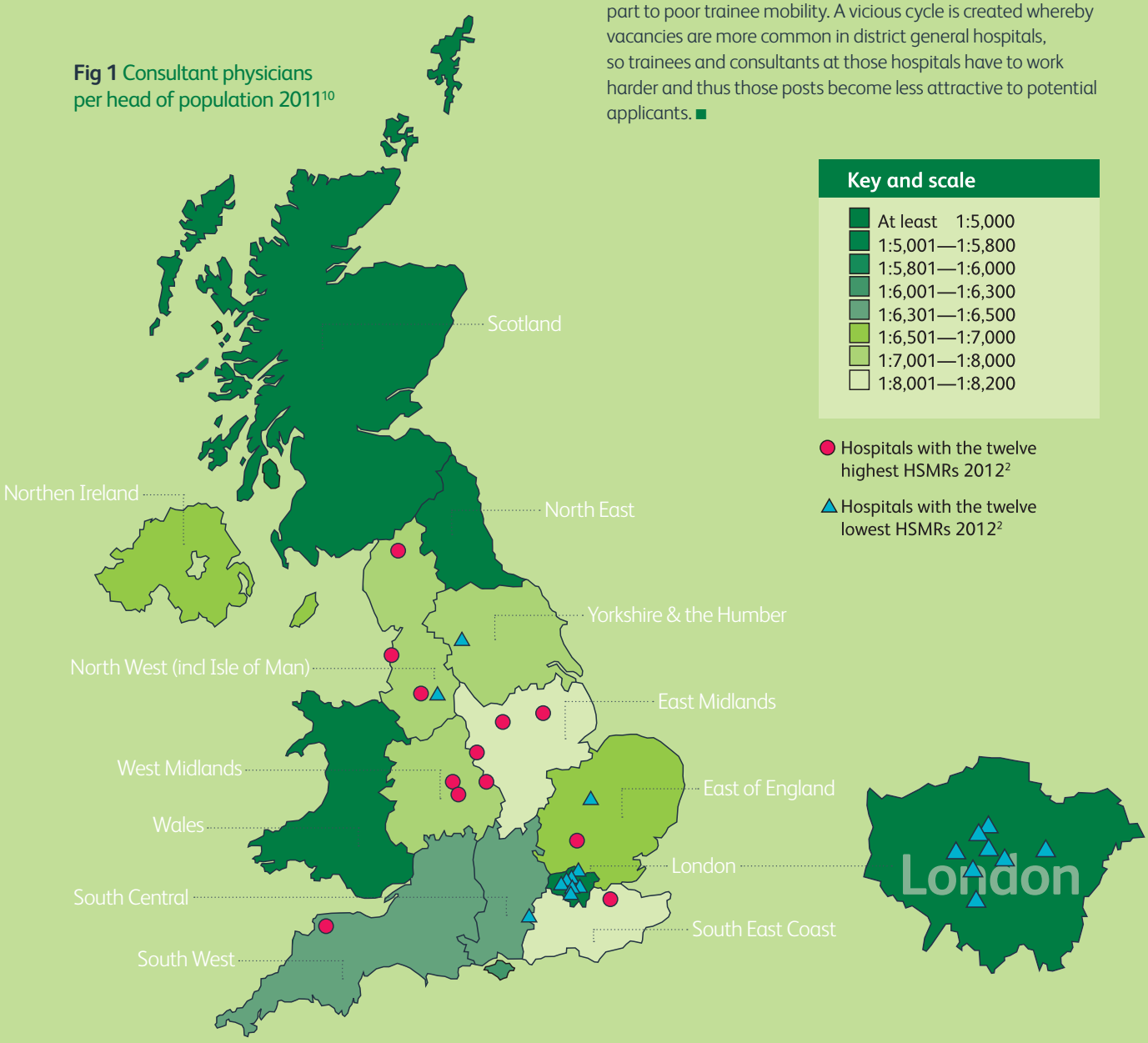
There is a large variation in the number of consultant physicians per head of the population across the country (see Fig 1). Patients in London have almost double the number of consultants as the East Midlands.

Given the association between senior hospital doctors and lower hospital mortality, such disparity across the country is concerning. There is a worrying correlation between hospital consultant staffing levels and hospital standardised mortality ratios (HSMRs) (Fig 1). This suggests that London has the right staffing levels and that the rest of the country needs to catch up.

The geographical variations in staffing levels for different specialties are mapped in the 2011 RCP consultant census.[10] There are big differences in the provision of different specialties throughout the UK. Some areas of the country have good levels of staffing for some specialties and yet poor levels for others. For example, the North East has good levels of staffing for gastroenterology and hepatology, but poor levels for renal medicine. Each specialty, therefore, has to be considered on its own merits.

Staffing for district general hospitals is much more challenging than for teaching hospitals, due in part to funding flows and in part to poor trainee mobility. A vicious cycle is created whereby vacancies are more common in district general hospitals, so trainees and consultants at those hospitals have to work harder and thus those posts become less attractive to potential applicants. ■

Fig 1 Consultant physicians per head of population 2011[10]



[7] Centre for Workforce Intelligence. *Shape of the medical workforce: starting the debate on the future consultant workforce*. London: CfWI, 2011. www.cfwi.org.uk/publications/workforce-planning-news-and-review/starting-the-debate-on-the-future-consultant-workforce

[8] General Medical Council. GMC warns over doctors' working hours. Press release. London: GMC, 2013. www.gmc-uk.org/news/14414.asp

Geriatric medicine – an under-resourced specialty

The increase in frail elderly people being admitted to hospitals requires a workforce that is skilled to care for the complex needs of these patients, many of whom suffer from conditions that do not fit into a simple diagnostic group such as pneumonia, stroke or heart attack. Geriatric medicine consultants provide the most effective and safe care for these patients.

However, in 2011 it was not possible to fill 50% of consultant posts advertised in geriatric medicine, due mainly to lack of applicants.[10]

There has been no significant expansion in the specialty over the past two years.[10] This is in part due to the expansion of stroke medicine as a specialty, because hospitals have had to staff 24-hour stroke rotas, and geriatricians with training in stroke medicine have moved from the provision of general geriatric services to stroke medicine.

Some expert healthcare policy observers[4,5] propose that many frail elderly patients could be cared for outside of acute hospitals, provided the infrastructure is put in place. Such 'non-acute' beds will need supervision by geriatricians. Thus, no matter where frail elderly patients are cared for, a significant expansion is needed in the number of physicians skilled in geriatric medicine. There is no evidence that this is likely to happen without urgent action. ■

Medical registrars – the unsung heroes

Medical registrars are seen by most trainee and senior hospital doctors as the most crucial doctors for safe and effective care of hospital patients out of hours. Even surgical specialties rely on the medical registrar to come to their aid when their patients become unwell during their stay in hospital.

37% of trainee physicians describe the workload of the medical registrar as unmanageable and 59% describe it as 'heavy' (Fig 2).[12] This high workload is dissuading many young doctors from pursuing a career in hospital medicine, and the thought of being 'on call' as a medical registrar is the most common reason cited for not specialising in hospital medicine.

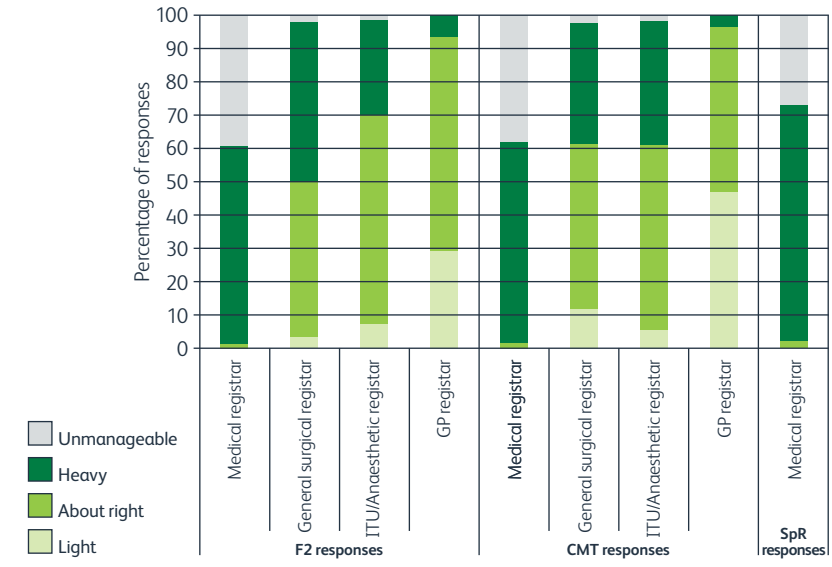
When asked if financial incentives, improved use of technology, or reduction in workload would make junior doctors more likely to become medical registrars, it is the reduction of workload that is cited by almost all as the most important factor.

Most hospitals do not have a clear job description for medical registrars and the training of these doctors in 'general medicine' is at best patchy.[9] This lack of identity is also seen by registrars as a significant problem. The work is enjoyable but extensive.

Much of the work done by medical registrars could be allocated to other (non-doctor) staff, such as physician associates, which would dramatically improve patient care and allow medical registrars to spend more time with the sickest patients and more time supervising the most junior members of the medical team.

All the quotes in this document are from medical registrars, and taken from *The medical registrar* report.[9] ■

Fig 2 How trainee doctors described the workload of on-call registrars[12]



F2 = foundation year 2 doctor; CMT = doctor doing core medical training; SpR = specialist registrar; ITU = intensive therapy unit.

[9] Royal College of Physicians. *The medical registrar: empowering the unsung heroes of patient care.* London: RCP, 2013. www.rcplondon.ac.uk/projects/medical-registrar-empowering-unsung-heroes-patient-care

[10] Royal College of Physicians. *Census of consultant physicians and medical registrars in the UK, 2011: Data and commentary.* London: RCP, 2013. www.rcplondon.ac.uk/resources/2011-census-summary

[11] Knapton A, Fraher E. *Migration patterns of the recently trained medical workforce. NHS Workforce* Review Team. NHS South Central.

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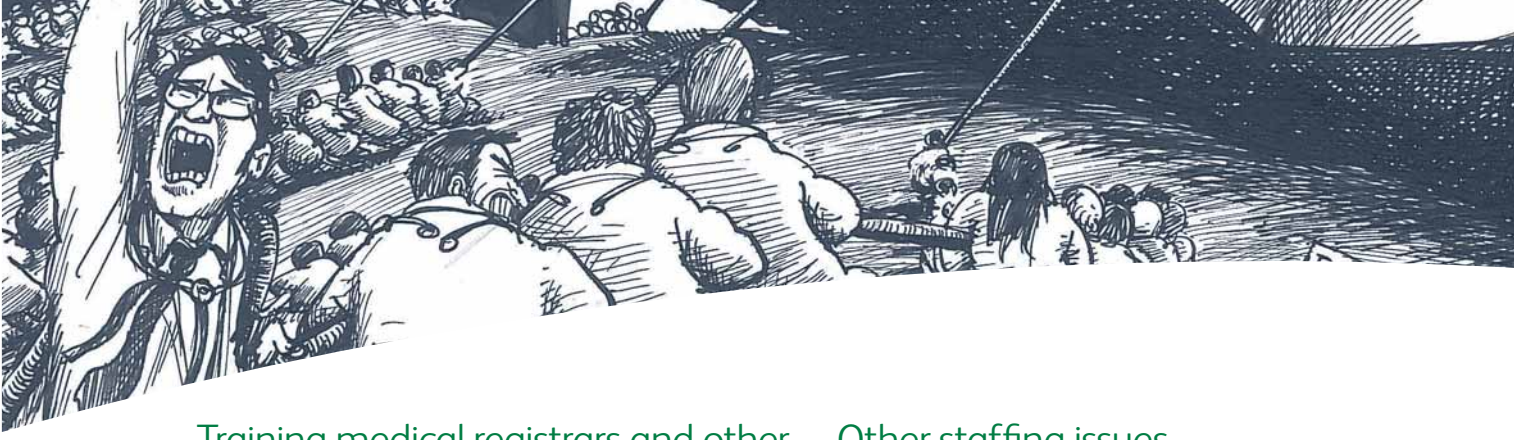

Training medical registrars and other junior doctors

The reduction in junior doctor hours enforced by the New Deal and the EWTD has reduced the learning opportunities for both medical registrars and the doctors they are supervising.

Medical trainees are not getting the chance to be involved in the management of common medical conditions. Of physicians in their fourth year of training after qualification, 1 in 8 have not been involved in the management of a patient with a stroke, while 1 in 5 have not been involved in the management of acute liver failure.[13]

Training in practical skills has particularly suffered. In the year before becoming a medical registrar, one third of doctors are unable to independently perform relatively simple procedures, such as drainage of abdominal fluid.[13]

Many registrars feel the lack of confidence is due to junior doctors being called upon to provide front-door care with relatively light supervision.[9] The lack of time for medical registrars to supervise their team is only part of this.

Extremely busy hospital rotas and insufficient senior staff availability mean that junior doctors rarely see the outcomes of their actions and thus fail to learn from them.[9] Unfortunately, only a large increase in senior staff numbers and a reduction in workload will allow improved training. Neither come cheaply. ■

Other staffing issues

The recent final report of the Mid Staffordshire NHS Foundation Trust Public Inquiry (the 'Francis report')[14] makes stark reading, and it shows that if hospital teams are poorly staffed and/or managed, patient care can suffer with tragic results.

Recent reports about excessive mortality, poor care and the levels of nursing staff[15] are of great concern to the RCP.

Effective patient care can only be delivered by effective teams of doctors, nurses and other allied health professionals working together. Thus, whilst hospital doctors are a cornerstone of the care for hospital patients, the problems described above need to be seen as part of a bigger picture of failing holistic care.

The current crisis in hospital care is an impetus to rethink how non-medical professionals work to support medically trained staff. Close collaboration between all professional groups will be needed to reduce the problems seen recently. ■

'I had 30 patients to review. It was a ridiculous number. I was unsafe… I can put my hands up. I think that's because of the work. I think medicine is unsafe at the moment.'

'We are already working 200% of our capacity; we haven't got enough flexibility. The biggest problem is massive workload.'

'I want more time with my SHOs, teaching them how to do lumbar punctures and things. At the moment, I think that probably the first thing to go when you are busy is teaching and training of others.'

[13] Mason NC, Chaudhuri E, Newbery N, Goddard AF. Training in general medicine – are juniors getting enough experience? *Clinical Medicine* (in press).

[14] Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. www.midstaffspublicinquiry.com/report

[15] Griffiths P, Jones S, Bottle A. Is 'failure to rescue' derived from administrative data in England a nurse sensitive patient safety indicator for surgical care? *International Journal of Nursing Studies* 2013;50:292–300.

Translating the medical workforce jargon

Many terms are used by the lay press, the professions and workforce planners when describing the care of medical patients in hospital and the staff looking after them. The following definitions aim to help clarify these terms for the purpose of this document:

'General medicine' describes the care of conditions needing treatment by hospital specialists that occur in men and non-pregnant women and do not require an operation or result from an accident. Patients with pneumonia, heart attack, stroke, diarrhoea, kidney failure and dementia are typical 'general medical patients'. 'General medicine' as a term is now being replace by 'internal medicine'.

'Physicians' are doctors who specialise in the care of general medical patients. Almost all physicians have an interest in diseases affecting a part of the body. For example, cardiologists are physicians who specialise in diseases of the heart, so are 'heart specialists'. Most physicians are trained to manage the broad range of diseases that make up general medicine as well as diseases in their specialty.

'Acute medicine' is a new specialty that concerns the care of general medical patients in the first 24–48 hours in hospital. Doctors in this specialty are sometimes referred to as 'acute physicians' and patients looked after by acute physicians are usually admitted to 'acute medical units' or 'medical assessment units'. However, not all hospitals have acute physicians and many hospitals also use general physicians to look after patients on such units.

'Consultants' are doctors who have completed their training and are employed by hospitals to be responsible for patient care in outpatient departments and on wards. Consultant physicians usually have the title 'Dr'. The title 'Mr' applies to surgeons who have passed a particular examination during training. Many trainee surgeons are therefore a 'Mr', and the title does not signify that those doctors are consultants.

'Registrars' are doctors who have completed the first 4–5 years of training after qualifying from medical school, and are training to be consultants.

'Medical registrars' are registrars who are training to be consultant physicians. They are usually the most senior resident doctors in a hospital at the weekend and at night and oversee the care of patients being admitted to hospital with general medical conditions, patients already admitted with general medical conditions and surgical patients who develop medical problems while in hospital.

'On-call doctor' describes doctors who are available to immediately provide advice or assessment of patients by telephone or in person. Doctors can be on call from home or when working a shift in hospital. When such shifts occur at night this is termed being 'resident' on call.

'Hospital-at-night' is a term used to describe the team of doctors, nurses and other healthcare professionals who are on call for patients in hospital at night. If a patient becomes unwell overnight the ward nurses will contact the hospital-at-night team to see that patient.

'Teaching hospitals' are large hospitals with a medical school that are usually found in large cities. **'District general hospitals'** are smaller hospitals without their own medical school. Teaching hospitals usually have more medical staff and provide a wider range of specialty services. ■

Conclusions

- A greater proportion of doctors urgently need to be trained in the skills of acute, general and geriatric medicine. Using historical models of training will *not* allow this and a *radical* rethink is needed.
- Training and ways of working have to change to cope with a more flexible workforce. If not, we risk losing many talented, dedicated and skilled doctors.
- An *urgent* rethink is required about the provision of hospital care for acutely unwell medical patients to allow safe, high-quality care of patients.
- The hospital workforce must be reorganised to meet the needs of frail elderly patients better. The balance between specialist and generalist skills must be considered. This will still be necessary, even if there is a considerable shift from hospital care to community care for older people, which is doubtful in any case.
- The role and esteem of the medical registrar must be re-assessed, and their role must be valued. They are the unsung heroes of hospital medicine and unless the role is developed and improved, patient care will suffer. Workload is the main problem and this must be addressed *immediately*.

The RCP's Future Hospital Commission (FHC) is reviewing models of hospital services to meet the needs of patients better, including many of the issues above. It will report in June 2013. ■

Join the debate

To address these issues, the RCP has launched the Future Hospital Commission. The Commission will undertake a radical review of the organisation of hospital services, releasing its recommendations in June 2013.

Join the Future Hospital debate

- Online at www.rcplondon.ac.uk/futurehospital
- Email comments, suggestions and examples of good and innovative practice to futurehospital@rcplondon.ac.uk

'I quite enjoy being the heart of the hospital so to speak, the person who can sort things out, deal with things.'

'I think the priority of the medical registrar should be to make sure that the sick patients are appropriately managed and that the juniors are properly supported.'

Royal College of Physicians