

Career choices of junior doctors: is the physician an endangered species?

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ABSTRACT – There are increasing concerns regarding the recruitment and retention within general medicine. National surveys were conducted among foundation year 2 doctors (FY2), year 1 and year 2 core medical trainees (CT1 and CT2) and medical registrars (StR/ST3+) exploring their enjoyment of medicine, overall satisfaction, career aspirations, influencing factors and perceptions of the medical registrar. The results highlight that many doctors at the FY2, CT1 and CT2 levels are being deterred from general medicine by the perceived unmanageable workload and poor work–life balance of the medical registrar. Medical registrars themselves are less satisfied in general internal medicine than they are in their main specialties. Therefore, priority needs to be placed on clarifying the roles, and improving the morale, of medical registrars. If current trends persist, these will have a significant impact on patient safety, patient care and workforce planning.

KEY WORDS: Training, physician, medical registrar, career choices

Background

Recruitment to general medical specialties has waned over recent years. Furthermore, retention of core medical trainees in higher specialist training schemes in general medical specialties has become more of a concern. Competition ratios for applications to core medical training (CMT) (approximately 2:1) are significantly lower than those in other specialties, such as anaesthesia, acute care common stem and core surgical training.¹ Numerous vacancies have appeared in medical training programmes nationally and rota gaps are being filled with locum staff on a regular basis.²

National surveys conducted by the Medical Workforce Unit at the Royal College of Physicians (RCP) have highlighted increasing levels of dissatisfaction among medical registrars and widespread concerns regarding training and future career prospects.^{3,4} A recent regional survey conducted among foundation year 2 doctors (FY2s) in the East Midlands deanery explored factors affecting applications to CMT (personal communication). The findings of this survey suggest that many potential candidates are deterred by the medical registrar role. If current trends persist, these will have a significant impact on patient safety, patient care and workforce planning.

Method

Questionnaires were developed following discussion forums with the RCP London (RCPL) New Consultants Committee, RCPL Regional Advisors Committee, RCP Trainees Committee, Heads of Schools for Medicine in England, RCP Patient Carer Network, medical registrars from the Severn Deanery and representatives from RCP Edinburgh.

Three electronic surveys using Vovici software were distributed via email to different training groups as follows:

- 1 Medical registrars, both specialty (ST3–ST7) and specialist (StR) in England and Scotland were identified from the Joint Royal Colleges Postgraduate Training Board (JRCPTB) database and sent a survey questionnaire on 20 October 2011. Weekly reminder emails were sent for four weeks after which the survey was closed and analysed.
- 2 Year 1 (CT1) and year 2 (CT2) core medical trainees in England and Scotland were identified from the Joint Royal Colleges of Physicians' Training Board (JRCPTB) database and were sent a survey questionnaire on 23 September 2011. Fortnightly reminder emails were sent for 4 weeks, after which the survey was closed and analysed.
- 3 Foundation Year 2 doctors (FY2) in England were approached via the UK Foundation Programme Office (UKFPO) on 9 November 2011 and survey questionnaires were distributed at the discretion of Regional Foundation Programme Directors.

The surveys explored several themes including: enjoyment of medicine; overall satisfaction; career aspirations; deterring and attracting factors; and perceptions of specialty registrars. The full survey questionnaires are available from the RCP website.^{5–7}

For some questions, participants were asked to reflect on their previous year of training. Owing to the timing of the distribution of the surveys, FY2s were asked to reflect on their FY1 year, CT1s on their FY2 year and CT2s on their CT1 year. In addition to the structured answer format, participants were given some opportunities to give free-text responses.

The results were analysed individually for each survey. A subgroup analysis of FY2, CT1/2 and medical registrar data was performed and these data have been presented where different questions have been asked, variations in response were noted or there was felt to be significant differing factors influencing responses between groups. Descriptive statistics of the survey findings are presented.

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Results

Registrar survey

Returned questionnaires were received from 2,315 registrars (37.2% response rate). Responses were received from registrars in all medical specialties and from all deaneries. In total, 49.6% of respondents were female and 50.4% were male. Of those surveyed, 60% were training in general (internal) medicine (GIM).

CMT survey

Returned questionnaires were received from 728 core medical trainees (23% response rate). Responses were received from both CT1 and CT2 trainees from all deaneries.

Foundation year 2 survey

Returned questionnaires were received from 212 FY2 doctors from the Severn, East Midlands and West Midlands deaneries (18% response rate).

Enjoyment of medical rotations in foundation training

When FY2s were asked about how much they enjoyed their FY1 general medical jobs compared with their FY1 non-medical jobs, 58% enjoyed them more or much more and 16% enjoyed them less or much less. When CT1s were asked about how much they enjoyed their FY2 general medical jobs compared with their FY2 non-medical jobs, 66% enjoyed them more or much more and 4% enjoyed them less or much less. CT1s were more likely to have enjoyed their experience of medicine during their foundation training than were FY2s, who were yet to select a specialty.

Satisfaction

In total, 96.9% of CT1s reported being satisfied with their choice of medicine as a specialty, compared with 81.5% of CT2s. When medical registrars were asked about job satisfaction, 85.7% reported being satisfied or very satisfied with their main specialty, but only 50.1% were satisfied or very satisfied with GIM (Fig 1). When asked whether they would recommend a career in medicine to a school leaver, 63.8% either agreed or strongly agreed (Fig 2).

Career aspirations

When FY2s were asked whether they were considering a career in a medical specialty, 27.0% answered 'yes definitely', 25.3% 'yes possibly', 16.3% 'unsure' and 31.5% answered 'no'.

When CMTs were asked whether they intended to pursue a career in a medical specialty (ie requiring membership of the RCP at the ST3 level), 76.5% answered 'yes', 16.6% were 'unsure', 6.4% were 'planning to change specialty' and 0.5% were 'planning to leave the medical profession'.

Of the medical registrars surveyed, 31.2% had considered giving up GIM training during the previous 6 months, compared with 17.1% who had considered giving up their main specialty.

Attracting factors to a career in medicine

When FY2s were asked to select factors that were actively influencing their choice to pursue a career in medicine, most felt that the following were attracting features: overall case mix (eg interest or variety; 89.8%), academic challenge (77.1%), influence of a role model/s (67.2%) and overall type of work (eg ward rounds, outpatient clinics and procedures; 66.7%).

When CMTs were asked to select factors that were actively influencing their choice to pursue a career involving general medicine as a registrar, most felt that the following were attracting features: overall case mix (84.3%), team working (80.4%) and emergency and/or acute care (74.8%).

Deterring factors to a career in medicine

When FY2s were asked to select factors that were actively influencing their choice to pursue a career in medicine, most (81.4%) felt that the work-life balance as a medical registrar was a deterring feature. There was no significant overall majority influence of the work-life balance as a medical consultant in this group (39.0% were deterred, 33.9% were attracted and 27.1% indicated no influence).

When CMTs were asked to select factors that were actively influencing their choice to pursue a career involving general medicine as a registrar, most felt that the following were deterring features: work-life balance (79.9%) and volume and/or intensity of workload (74.0%).

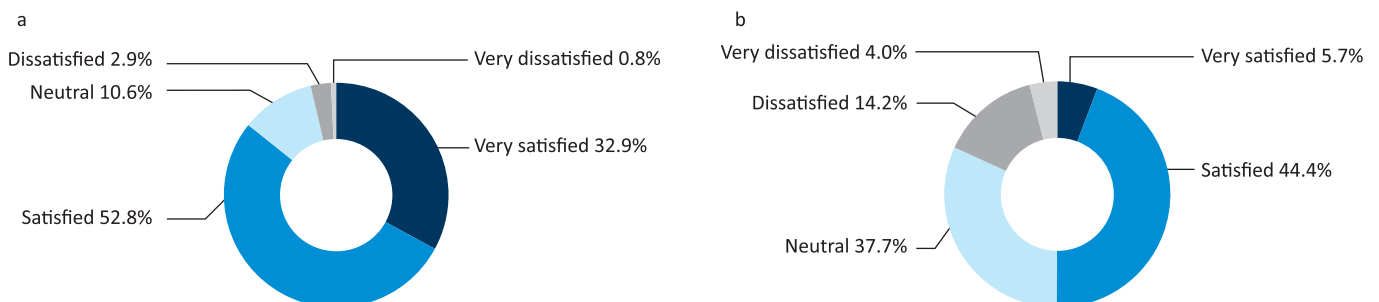


Fig 1. Job satisfaction of medical registrars in (a) main specialty and (b) general internal medicine.

The influence of 'being the medical registrar on call'

Of those FY2s uncertain of, or not considering, a career in a medical specialty, 78.0% were deterred by the prospect of working as the general medical registrar on call. This had no influence on 16.7% and attracted 5.3%. Of those FY2s who were deterred by the prospect of working as the general medical registrar on call, 60.2% would 'definitely' or 'probably' be more likely to consider a career in medicine if they did not have to fulfil this role. Of those FY2s considering medicine, 47.9% would prefer not to do a medical specialty that involved working as the medical registrar on call. However, 25.0% were not influenced by this and 25.0% would like a specialty that involved working as the medical registrar.

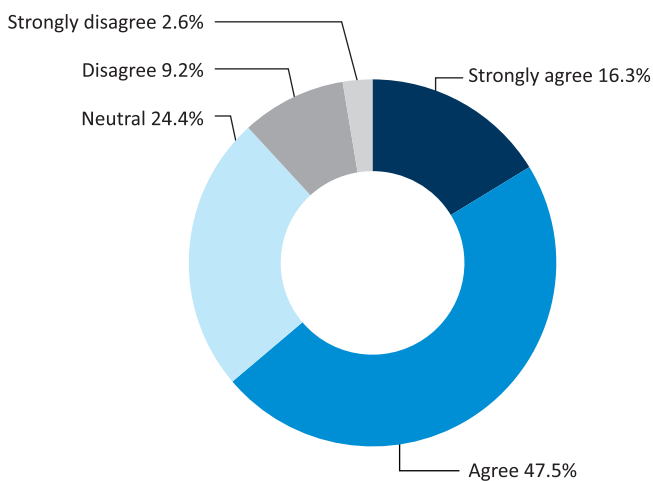


Fig 2. Medical registrars' agreement with the statement 'I would recommend a career in medicine to a school-leaver'.

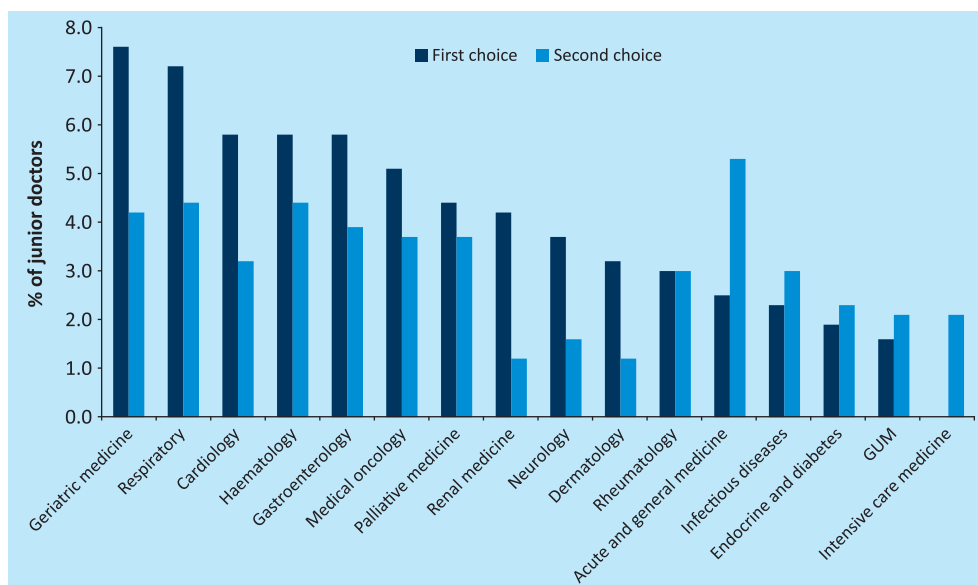


Fig 3. First- and second-choice specialties of year 2 core medical trainees. GUM = genitourinary medicine.

Of those CMTs uncertain of, or not considering, an ongoing career in a medical specialty, 74.3% were deterred by the prospect of working as the general medical registrar on call. This had no influence on 17.4% and attracted 8.3%. Of those CMTs who were deterred by the prospect of working as the general medical registrar on call, 75.5% would 'definitely' or 'probably' be more likely to consider a career in medicine if they did not have to fulfil this role. Of those CMTs considering medicine, 25.4% would prefer not to do a medical specialty that involved working as the medical registrar on call. However, 23.6% were not influenced by this and 25.4% would like a specialty that involved working as the medical registrar. Finally, 8.5% would not consider a medical specialty that involved working as the medical registrar.

Choice of specialty

CT2s who were intending to pursue a career in general medicine were asked to select their first- and second-choice specialties (Fig 3). The most popular first-choice specialties were as follows: geriatric medicine (7.6%), respiratory medicine (7.2%), and cardiology, gastroenterology and haematology (all 5.8%). The most popular second-choice specialty was acute medicine (5.3%), but this was less popular as a first choice (2.5%). However, 13.7% did not have a second-choice specialty.

Alternative careers

Of those CT2s considering leaving medicine, 72.1% were considering a career in general practice (GP), 18.6% were considering academic medicine and/or research, and 17.4% anaesthesia and/or intensive care medicine.

Perceptions of specialty registrars: workload

FY2s, CTs and registrars were asked: 'In general, what would you consider the workload of the following on call registrars?' (Fig 4).

FY2 doctors perceived the medical registrar to have a heavier workload compared with the other on-call registrars. Most felt that the workload of a medical registrar was 'heavy' or 'unmanageable' compared with the workload of registrars in intensive care units (ITU) and/or anaesthetics, or GP, which they generally perceived to be 'about right'. Most felt that the surgical registrar's workload was 'about right' or 'heavy'. Most striking was that

38.8% of FY2s felt that the workload of the medical registrar was 'unmanageable', and this figure fell to 1.7% for surgical registrars, 1.5% for ITU and/or anaesthetic registrars and 0% for GP registrars.

Most CTs (61%) felt that the workload of the medical registrar was 'heavy', whereas 37.4% considered it 'unmanageable'. Again this figure fell to 2.2% for surgical registrars, 1.5% for ITU and/or anaesthetic registrars and 0% for GP registrars.

Most medical registrars (70.6%) considered their workload 'heavy' and 26.9% considered it 'unmanageable', compared with 2.4% feeling that it was 'about right' and 0.1% 'light'.

Perceptions of specialty registrars: work-life balance

FY2s, CTs and medical registrars were asked: 'In general, what do you perceive to be the work/life balance of registrars in the following specialties?' (Fig 5).

In total, 69.6% of FY2s and CTs felt that medical registrars had a 'poor' work-life balance. In comparison, 52.8% felt that surgical registrars had a poor work-life balance, with this figure falling to 18.4% for ITU and/or anaesthetic registrars and 0.1% for GP registrars. In addition, 88.5% felt that GP registrars had a 'good' or 'excellent' work-life balance compared with 5.3% feeling the same about medical registrars.

Medical registrars perceived that they had a worse work-life balance compared with other registrars, including surgical trainees. They perceived GP registrars to have the best work-life balance, with 67.8% considering it 'good' or 'excellent', with this figure falling to 19.8% for ITU and/or anaesthetic registrars, 10.8% surgical registrars and only 5.2% for medical registrars.

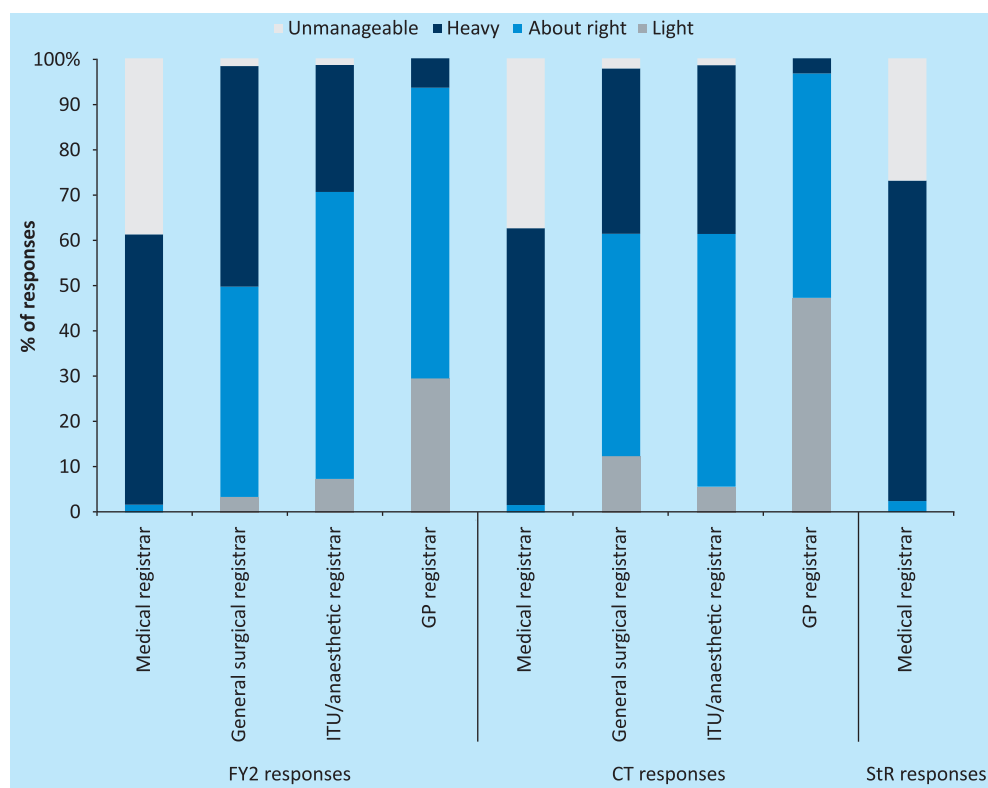


Fig 4. Perceptions of foundation year 2 (FY2), core medical trainee (CMT) and specialist medical registrars (StR) of the workload of registrars. CMT = core medical trainee; FY2 = foundation year 2; GP = general practitioner; ITU = intensive treatment unit; StR = specialist medical registrar.

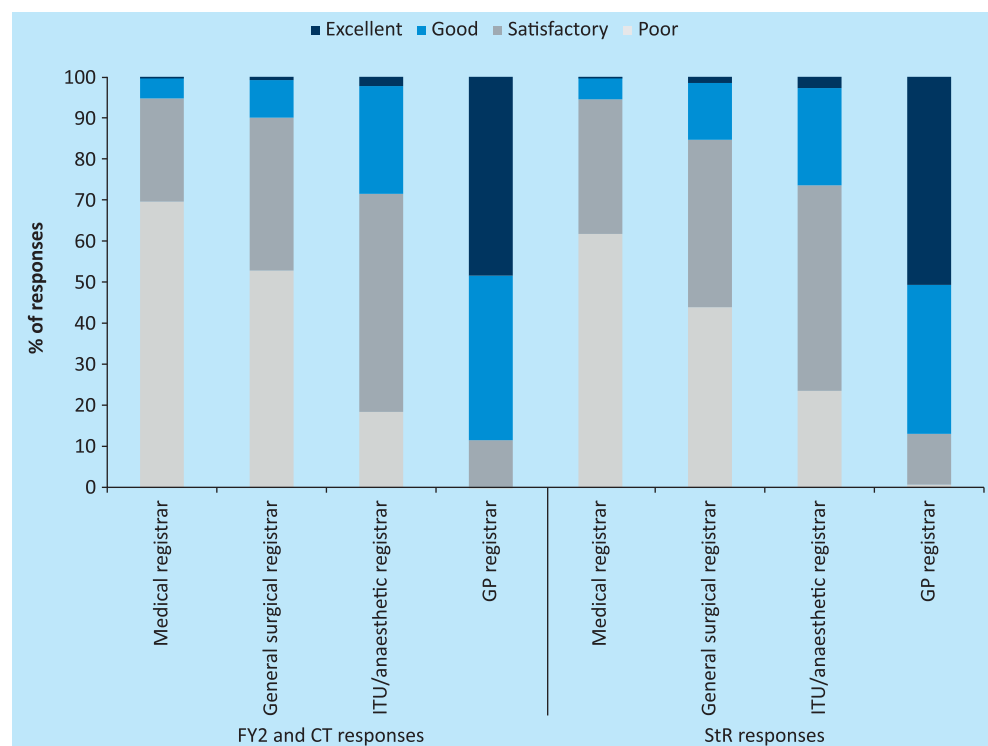


Fig 5. Perceptions of foundation year 2 (FY2), core medical trainee (CMT) and specialist medical registrars (StR) of the work-life balance of registrars. CMT = core medical trainee; FY2 = foundation year 2; GP = general practitioner; ITU = intensive treatment unit; StR = specialist medical registrar.

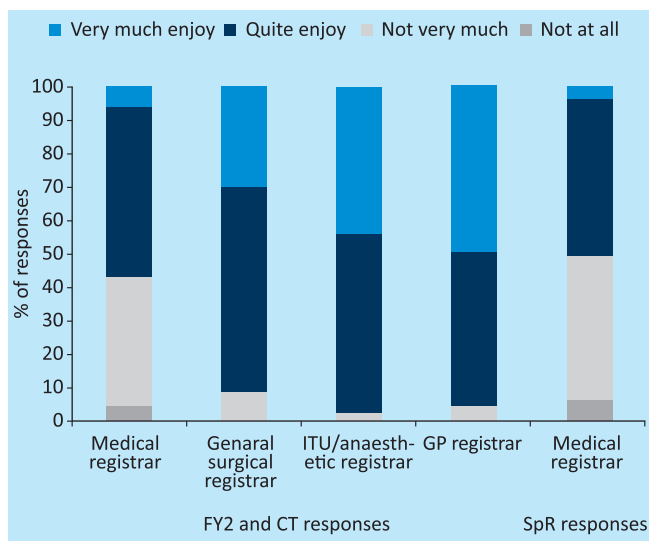


Fig 6. FY2/CT and medical registrars' perception of enjoyment of registrar work.

Perceptions of specialty registrars: contribution to training

FY2 doctors were asked: 'How valuable a contribution have the following on-call registrars made to your training to date?' GP registrars were not included in this question because they are not felt to have sufficient contact with Foundation doctors.

In total, 58.4% of FY2 doctors felt that medical registrars had made a 'marked contribution' to their training. Fewer felt that surgical registrars and ITU and/or anaesthetic registrars had made a 'marked contribution' (23.3% and 12.5%, respectively).

Perceptions of specialty registrars: being valued and respected

FY2, CT and medical registrars were asked: 'In general, how valued and respected within the hospital environment are the following on call registrars?'

Overall, junior doctors felt that the ITU and/or anaesthetic registrar was the most valued and respected, of those registrars included in this survey. Most FY2s and CTs felt that ITU and/or registrar and medical registrars were 'very valued' (77.3% and 63.1%, respectively). However, 12.1% felt that the medical registrar was 'not very valued'.

By contrast, 38% of medical registrars perceived that, in general, they were 'very valued', 43.2% 'quite valued' and 18.8% 'not very valued' within the hospital setting.

Perception of specialty registrars: senior support

FY2s, CTs and medical registrars were asked: 'In your experience, how well supported are the following registrars by their seniors?'

Most FY2 and CT respondents perceived that ITU and/or anaesthetic registrars and GP registrars were 'very well supported' by their seniors (71.2% and 69.2%, respectively), whereas 13.1%

felt that medical registrars were 'very well supported', 54.4% felt that they were 'quite well supported' and 32.5% 'not very well supported'.

By contrast, most medical registrars (67.2%) considered themselves 'quite well supported'. Only 10.4% felt 'very well supported' and 22.4% felt 'not very well supported'. This perceived level of support was consistent between different grades of training registrar.

Perception of specialty registrars: enjoyment

FY2s, CTs and medical registrars were asked: 'From your observations, how much do you think the following registrars enjoy their work?' (Fig 6).

Overall, FY2s and CTs did not perceive medical registrars to enjoy their work as much as other registrars. In total, 43.7% perceived that medical registrars did not enjoy their work very much, or 'not at all'; 49.1% perceived that GP registrars 'very much enjoy' their work, with this figure falling to 5.9% for medical registrars.

By contrast, only 3.2% of medical registrars felt that they 'very much enjoy' their work, 47% 'quite enjoy' their work, 42.5% 'not very much' and 7.2% 'not at all'.

Free text comments

There were multiple free text comments, from CTs in particular. The most commonly arising themes were:

- The perceived levels of stress of the SpR on call arising from being 'overburdened' by an intense and heavy workload.
 - 'Huge amounts of stress and workload. Generally seen as the worst job in the hospital.' (CT1)
 - 'Over worked at times with huge pressures from across the hospital, managers, A&E . . .' (CT2)
 - 'The individual responsibility/workload of the medical registrar is far higher than any other speciality registrar.' (CT1)
- A perception of a poor work-life balance as a SpR.
 - 'Med regs are almost always the most harassed and stressed people in the hospital who burn out easily, and have a poor work/life balance it seems. I do not wish to emulate that.' (CT1)
 - 'Very busy, stressful. Difficult to have life plans outside medicine during reg years.' (CT1)
- A feeling of inadequate preparation to become a medical registrar after CMT training.
 - 'Terrifies me. Don't feel I have enough experience or the confidence.' (CT2)
 - 'I feel underprepared to deal with the challenges of being a medical registrar on call.' (CT2)

Discussion

Most FY2 and CT trainees within these surveys appeared to enjoy at least some of their experience in general medicine. These results would support the idea that those who enjoyed

their experience of medical jobs during their foundation years are more likely to pursue CMT. Juniors were attracted to general medicine because of the broad case mix and the academic challenge of the specialty. They were positively influenced by role models and were attracted by the opportunities to provide acute care and work as part of a team.

However, when trainees were making decisions about their future careers, for many, the attractive features were being outweighed. Taking on the role of the general medical registrar on call appeared to be a major deterring factor for many potential recruits. Trainees were mainly deterred by their perception of an unmanageable workload and a poor work–life balance.

Is this a fair and accurate perception of the medical registrar? It would appear so. Within this survey, whereas over 85% of registrars were satisfied with their main specialty, only 50% were satisfied with their job in GIM. One-third of registrars had considered giving up GIM over the preceding six months. Medical specialties that do not require dual accreditation with GIM (eg haematology or oncology) were as popular as those that do traditionally dual accredit (eg care of the older patient and respiratory) and were far more popular as a first-choice specialty than were acute and general medicine. The implications of the declining popularity of GIM cannot be underestimated, particularly when it is becoming increasingly recognised that a generalist model might be the optimum way to provide acute care to the changing demographic of the UK.⁸

It is concerning that over a quarter of medical registrars felt that their workload was unmanageable when they were on call. It is recognised that the workload of the medical registrar is increasing for several reasons.⁹ These results imply that medical registrars regularly felt that they cannot meet their workload demands and, at times, cannot deliver patient care in a timely manner. This has important patient safety implications. Patient safety should be the priority of both clinicians and hospital managers alike. These results further support the importance of the ongoing work being carried out by the RCP Medical Workforce Unit looking into patient safety and the roles of the medical registrar on call. Work by Baldwin *et al*¹⁰ also indicates that the high workload of general medical registrars is associated with reduced satisfaction in career choice.

Most medical registrars surveyed perceived their work–life balance to be poor compared with anaesthetic and surgical registrars. One would expect all registrars to work a similar number of hours (including antisocial hours) following the introduction of European Working Time Directive (EWTD). Does the heavy workload of the medical registrar result in more of their non-clinical work (eg research, audit and teaching) being carried out during their own time? Some of this dissatisfaction might have arisen from the experience of shift working. Although shifts were used to reduce the number of actual hours worked in the advent of the New Deal and, subsequently, the European EWTD,¹¹ some evidence suggests that this way of working leads to increased job dissatisfaction, disruption to quality of life, increased levels of fatigue,¹² compromises training and might not necessarily improve the welfare of doctors.¹³

Those who are considering alternative careers are being attracted to GP and anaesthesia. These are specialties in which registrars are perceived to be better supported than in medicine, to have a more manageable workload and a better work–life balance.

So how can we improve recruitment and retention to general medical specialties? First, foundation and CT trainees might need opportunities to observe medical registrars working in (and enjoying) their main specialties. Junior trainees are probably maximally exposed to medical registrars during on-call and out of hours work. Consequently, their perception of the burden of this part of the work of a medical registrar might be over-represented.

Second, further work exploring the role of the medical registrar on call should be prioritised. We need to establish what the key roles of the medical registrar are and understand how best to fulfil them. Medical registrars need to feel valued in the workplace, supported by their team and well trained to become consultants in general medicine. This would greatly improve morale and make the role more attractive to juniors considering their career options.

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