

## EDUCATION AND TRAINING Supporting the transition to becoming a medical registrar

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### ABSTRACT

#### Introduction

Physician training is seeing increasing numbers of doctors adopting the role of medical registrar. Non-clinical as well as clinical responsibilities are a source of great anxiety prior to trainees assuming this role.

#### Methods

A standardised, blended, 1-day course to address the needs of doctors transitioning to become a medical registrar was designed and delivered across four hospitals. A mixed methods evaluation approach was employed to assess the effect of the course.

#### Results

Thirty-four trainees approaching the transition to becoming a medical registrar participated. Quantitative and qualitative analysis of participants' written feedback showed a significant pre- to post-course increase in candidates' self-reported confidence in undertaking the medical registrar role along with learning in non-technical skills.

#### Discussion

This course was shown to be effective in helping to improve the confidence of trainees approaching the medical registrar role. The carefully designed standardised format may facilitate wider expansion of such training.

**KEYWORDS:** medical registrar, internal medicine training, medical education

**DOI:** 10.7861/fhj.2020-0177

#### Introduction

National postgraduate educational agendas for physicians, particularly the Shape of Training review and Future Hospital

Commission report, set out a framework for refocusing training towards internal medicine with generalist skills relevant for an ageing population with increasing multimorbidity.<sup>1–3</sup> As such, an altered model for physician training was introduced in 2019, consisting of 7 years post-foundation level training, leading to a certificate of specialist training in internal medicine with a speciality.<sup>4</sup> This includes mandatory training in the 'acute unselected take' for the vast majority of physicians, including many who previously would not have done so while training in specialties such as neurology and palliative care. After completing the first 2 years of internal medicine training (IMT), all such doctors automatically assume the role of medical registrar provided there are no other concerns limiting progression.<sup>4</sup>

The role of medical registrar has often been acknowledged to be a challenging one; however, priority roles have been outlined to include leadership of the medical take, communication with the wider hospital team, clinical decision making, and provision of support and advice to junior doctors.<sup>5</sup> A significant majority of these roles are not currently required to be assessed prior to this transition.<sup>4</sup>

Transition periods in clinical training are stressful and associated with increased rates of psychiatric morbidity.<sup>6,7</sup> With the pressure of rising hospital admissions and changes to the working environment, the role of medical registrar has been perceived as one of the busiest and most demanding in the hospital. National survey data has demonstrated that medical registrars feel demoralised and undervalued with trainees approaching the role with trepidation.<sup>8,9</sup> While trainees have been required to acquire technical skills in preparation for becoming medical registrars, it has been recognised that non-technical skills (such as the skills of leadership and decision making) account for the majority of the responsibilities of the role and that more effort should be devoted to training such skills.<sup>5,10,11</sup> We describe the development and evaluation of an educational course specifically designed for medical trainees in this regard.

#### Methods

A standardised 1 day course was developed by an interdisciplinary working group of interested educationalists and physician trainees and trainers from a variety of specialties who volunteered to take part in the project. The learning outcomes for the course (Box 1) were identified based on data from a pilot survey of 25 core medical trainees' experiences, apprehensions and views about becoming a medical registrar. The working group then met to formulate its structure. A blended, multi-modal approach

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### Box 1. Learning outcomes for the course

To improve trainee confidence and competence in:

- > taking referrals
- > providing telephone advice
- > prioritisation of tasks
- > management of an ever-changing team
- > interacting with other key members of the hospital@night team.

To provide leadership training.

To give a structure to clinical decision making.

To provide resources and strategies to combat burnout.

To inspire confidence in trainees that they have the necessary skills and attributes to perform the medical registrar role.

To encourage trainees not to avoid the medical registrar role due to apprehension.

(incorporating lectures, workshops, case-based sessions, interactive panel discussions and peer-led practical advice sessions) was employed in order to provide a variety of thought-provoking and reflective opportunities for trainees (Box 2). Standardised case studies were generated by the working group to reflect common scenarios experienced by medical registrars. These were 'worked through' in small groups, after which, course attendees were prompted to identify common themes and areas of difference in their groups and provide feedback about what they learned about the registrar role. Trained facilitators led discussion around these issues and their implications. The course was delivered on four separate occasions at four different centres across London between June 2019 and July 2019 in a standardised fashion by the same faculty from the King's College Hospital postgraduate medical and dental education (PGMDE) department.

Participants were given paper pre- and post-course semi-structured questionnaires to rate their confidence (on a 10-point numeric rating scale) in being a medical registrar and provide free-text feedback about their concerns, learning and appreciation of the course. Anonymised records of free-text feedback were transcribed into MS Excel spreadsheets. Each response was kept as a separate datum point. All text was thematically analysed by two of the authors. Themes were developed by iteratively reading and

### Box 2. Course structure and outline

Welcome, introduction and course outline.

Plenary session and workshop: How to take referrals from the emergency department.

Workshop: How to manage your team.

Plenary session: Managing the hospital@night.

Small group case-based work: The responsibilities of the medical registrar and clinical decision making.

Interactive panel discussion: How to deal with other specialities and give advice.

Workshop: How to manage yourself, plan your career and structure your day job.

re-grouping the data and were not determined in advance. Each coded theme was discussed and checked by two of the authors; any discrepancies were discussed and if necessary re-evaluated for alternatives. A single response could be and often was coded against multiple themes.<sup>12</sup> Thematic analysis was employed as a primary evaluation of data collection in view of the opportunity to 'generate interesting findings beyond the specific research questions for which the study was designed'.<sup>13</sup> Non-parametric quantitative data were compared using the Mann–Whitney *U* test. All candidates gave written informed consent for feedback data to be aggregated for research purposes. The study met the criteria for service evaluation under the Health Research Authority decision tool and was undertaken under the governance of the King's College Hospital PGMDE department.

### Results

Thirty-four medical trainees approaching the transition to becoming a medical registrar participated. Candidates' free-text completion of pre-course semi-structured questionnaires yielded 86 individual responses which were coded into six themes with a total of 145 codes. The top three themes were dealing with responsibility, management and leadership, and lack of confidence (Table 1). Candidates' free-text completion of post-course semi-structured questionnaires yielded 70 individual responses which were coded into five themes with a total of 116 codes. The top two themes were inspiring confidence and sharing experiences (Table 2). Quantitative analysis showed a significant pre- to post-course improvement in median (interquartile range(IQR)) self-reported confidence in undertaking the role of medical registrar (4 (IQR 3) vs 8 (IQR 1);  $p < 0.001$ ). Ninety-seven per cent of candidates commented that the course should be a mandatory part of IMT.

### Discussion

This study demonstrated the benefit of a multi-modal, educational initiative, designed to meet the needs of medical trainees approaching the transition to becoming a medical registrar. Both quantitative and qualitative analysis confirmed the course to be effective in helping to improve trainees' confidence to adopt this role. Thematic analysis of pre- and post-course feedback emphasised the importance that attendees placed on sharing experiences with other doctors at the same stage in their career and senior clinicians who had successfully negotiated such a career path previously.<sup>14</sup> Sharing experience can be both cathartic and invaluable, and the near-peer nature of this course fostered a non-threatening environment in which trainees could seek reassurance.<sup>15</sup> The other key theme identified was around inspiring confidence in trainees to undertake this role. Offering practical advice, tips and reassurance around the role has been described historically; however, this course offered a more intimate, interactive setting in which to provide this.<sup>5,7,11</sup> Feeling more confident in being a medical registrar may also alter career choices; halting a recent desire for physician trainees to choose specialities that avoid this role, as well as reducing anxiety around this transition period.<sup>6,9</sup>

The need to widen the focus from clinical skills and knowledge training to human factors training is paramount, and without a specific focus on the challenges and practicalities of the role of medical registrar, trainees will continue to find this transition a source of great anxiety.<sup>5,11</sup> At present, there is no agreed

**Table 1. Thematic analysis of pre-course questionnaire free-text feedback**

Theme with examples	% of responses accounted for by theme
<b>Theme 1: Lack of confidence</b> <i>'I need help!!'</i> <i>'Lack of confidence, anxiety ++ about the role.'</i> <i>'To increase confidence in non-technical skills.'</i>	24
<b>Theme 2: Management/leadership</b> <i>'Managing multiple tasks, eg unwell patients AND the medical team.'</i> <i>'Improve confidence in organisation/ leadership as medical registrar.'</i> <i>'What to accept, knowing local hospital pathways.'</i>	22
<b>Theme 3: Dealing with responsibility</b> <i>'Daunting, dealing with questions/ situations that you can't answer or know how to deal with.'</i> <i>'Huge responsibility about feeling that the buck stops with you.'</i> <i>'Feeling out of my depth, making the wrong call.'</i> <i>'Lack of control, getting things wrong and not knowing what to do.'</i>	21
<b>Theme 4: Training has not addressed transition to the medical registrar role</b> <i>'No teaching on what the job is and isn't.'</i> <i>'Little experience in managing a team or running cardiac arrests.'</i> <i>'You are mainly service provision.'</i>	15
<b>Theme 5: Clarifying role and sharing experience</b> <i>'Not knowing what to do alone in a district general hospital overnight.'</i> <i>'Interest/experience from people who have done it.'</i> <i>'Information about the role.'</i>	10
<b>Theme 6: Taking referrals and giving advice</b> <i>'Not knowing the answers to other colleagues' questions.'</i> <i>'General practice referrals and advice over phone.'</i> <i>'Help giving advice.'</i>	8

curriculum on how to prepare trainees for this role, and many trainees approaching the role have never previously taken referrals, given advice to other specialties or had to supervise trainees.<sup>5,8</sup> Expecting them to adopt this role for the first time in clinical practice as a registrar is a huge demand. With the advent

**Table 2. Thematic analysis of post-course questionnaire free-text feedback**

Theme with examples	% of responses accounted for by theme
<b>Theme 1: Inspiring confidence</b> <i>'I was very anxious about being on a general medical on-call rota and it had been part of my career choice. This helped make me think I could be the medical registrar after all.'</i> <i>'More positive and more achievable, reassured – had some significant imposter syndrome but can now see that you're all human!'</i> <i>'More positive. It will be tough but the day has given me coping methods and made me realise it is very rewarding.'</i>	36
<b>Theme 2: Sharing experiences</b> <i>'It's great to know other people feel the same regarding making the jump.'</i> <i>'Knowing there's no "one way" to be the medical registrar.'</i> <i>'Knowing what other people are worried about.'</i>	22
<b>Theme 3: Reassurance that you are not alone</b> <i>'Less terrified.'</i> <i>'Explained a lot of points I was worried about. Gave me more confidence that there is always someone to reach out to.'</i> <i>'That it is ok to ask for help!'</i>	15
<b>Theme 4: Non-clinical tips/advice</b> <i>'Some great advice on soft skills and key questions.'</i> <i>'Really great overview of a lot of the non-clinical aspects of being a medical registrar.'</i> <i>'Gave practical tips and realistic advice.'</i>	14
<b>Theme 5: Clarification of the role</b> <i>'Demystified the impossible role of medical registrar.'</i> <i>'Very honest views on what being a medical registrar involves – dispelled myths about needing to be perfect.'</i> <i>'Consolidated my knowledge regarding expectations of medical registrars.'</i>	13

of a new curriculum for IMT, a programme still in its infancy, now is an opportune moment to act to ensure trainees are equipped and feel able to approach the next stages in their careers.<sup>4</sup> With more trainees than ever now required to adopt the role of medical registrar, we have a duty to train and prepare trainees for the role

and this course could easily be incorporated into the IMT teaching programme.

The strengths of this study include the careful design of the course by an interdisciplinary working group of educationalists and physician trainees and trainers, and the employment of a blended, multi-modal educational approach and mixed-methods evaluation. Efforts were also taken to use a standardised faculty and delivery of teaching across four centres. The course concentrated on the issues that trainees wanted to be addressed and pre- and post-course thematic analysis demonstrated the benefits. Similar programmes have addressed transition periods between medical student and foundation training with good effect and have set a precedent for this style of training.<sup>15</sup> Alternatives include high-fidelity simulation training and shadowing 'step up' programmes but these have been suggested to be costly and involve considerable rota planning for both trainees and trainers.

This study is limited by the small numbers of trainees who attended. In addition, there may have been a selection bias in those individuals attending the course and their perceived confidence. It could be postulated that trainees attending may be lacking in confidence and looking for a way to remedy this; however, addressing this remains an important and valid learning outcome of the course. In addition, themes were not determined in advance and, therefore, although thematic analysis suggests that many of the pre-course concerns were addressed with a high pre- and post-course thematic concordance, post-intervention thematic analysis may be prone to bias.

Despite clinicians' major fear of technical limitations, an appreciation of the importance of and development in non-technical skills is crucial. Trainees no longer should have to learn the hard way by being thrown into the deep end as a medical registrar. This study goes some way to addressing the human factors that have long been part of medicine's hidden curriculum, and that now (at long last) are finally being recognised as vital requirements for training. The standardised format of the course is widely generalisable to all transition periods in any medical training programme and could be easily used as a template for the wider expansion of such training. Course materials can be made available to any interested parties upon direct request. ■

## References

- 1 Department of Health. *Delivering high quality, effective, compassionate care: Developing the right people with the right skills and the right values*. DoH, 2016. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/559940/HEE\\_mandate\\_2016-17\\_acc.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559940/HEE_mandate_2016-17_acc.pdf) [Accessed 01 June 2020].
- 2 Future Hospital Commission. *Future hospital: Caring for medical patients*. Royal College of Physicians, 2013. [www.rcplondon.ac.uk/projects/outputs/future-hospital-commission](http://www.rcplondon.ac.uk/projects/outputs/future-hospital-commission) [Accessed 01 June 2020].
- 3 Shape of Training. *Securing the future of excellent patient care*. Shape of Training, 2013. [www.shapeoftraining.co.uk/static/documents/content/Shape\\_of\\_training\\_FINAL\\_Report.pdf\\_53977887.pdf](http://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf) [Accessed 01 June 2020].
- 4 Joint Royal Colleges of Physicians Training Board. *Shape of Training and the physician training model*. JRCPTB. [www.jrcptb.org.uk/new-internal-Medicine-curriculum](http://www.jrcptb.org.uk/new-internal-Medicine-curriculum) [Accessed 01 June 2020].
- 5 Royal College of Physicians. *Acute care toolkit 8: The medical registrar on call*. RCP, 2013. [www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-8-Medical-Registrar-call](http://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-8-Medical-Registrar-call) [Accessed 01 June 2020].
- 6 Bruce CT, Thomas P, Yates BJ. Burnout and psychiatric morbidity in new medical graduates. *Med J Aust* 2005;182:599.
- 7 Blackmore C, Austin J, Lopushinsky SR, Donnon T. Effects of postgraduate medical education 'boot camps' on clinical skills, knowledge and confidence: a meta-analysis. *J Grad Med Educ* 2014;6:643–52.
- 8 Taske F, Newbery N, Burr B, Goddard A. Survey of core medical trainees in the United Kingdom 2013 - inconsistencies in training experience and competing with service demands. *Clin Med* 2014;14:149–56.
- 9 Royal College of Physicians. *The medical registrar: Empowering the unsung heroes of patient care*. London: RCP, 2013.
- 10 Gowland E, Birns J, Bryant C, Le Ball K. Trials and tribulations of the ARCP - lessons learned from core medical training in London. *FHJ* 2017;4:92–8.
- 11 Smith LJ. How to survive as a medical registrar. *Br J Hosp Med* 2012;73:C104–8.
- 12 Braude P, Reedy G, Dasgupta D *et al*. Evaluation of a simulation training programme for geriatric medicine. *Age Ageing* 2015;44:677–82.
- 13 Yardley S, Irvine AW, Lefroy J. Minding the gap between communication skills simulation and authentic experience. *Med Education* 2013;47:495–510.
- 14 Lockspeiser TM, O'Sullivan P, Teherani A, Muller J. Understanding the experience of being taught by peers: the value of social and cognitive congruence. *Adv Health Sci Educ Theory Pract* 2008;13:361–72.
- 15 Hafiz S, McManus H, Buston G, Baker P. Evaluation of "Asked to see patient": a regional near-peer teaching programme. *FHJ* 2018;5:52–7.

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