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# Why UK junior doctors defer postgraduate training

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#### **ABSTRACT**

**Objectives:** National surveys have identified a declining trend in UK Foundation Year 2 doctors (FY2s) entering directly into training positions. Last year, less than half entered training directly. We aimed to investigate the reasons why current FY2s choose not to enter training directly.

**Methods:** This is a qualitative study using semi-structured interviews. We used thematic framework analysis to code the data into themes for analysis.

**Results:** "Feeling unprepared for training" and "lack of flexibility" were the two main themes identified from the interviews as the reasons to delay training. A lack of clinical exposure and career advice were cited as the reasons to feel unprepared. Flexibility was very important in terms of family considerations, working abroad, and financial reasons which were felt to be absent from a rigid training program.

**Conclusion:** Defering training after FY2 appears to have become normalized in the UK. Many other international training programs appear less structured than the UK and expect juniors to spend time in non-training jobs prior to entering training. It is impossible to say which system is superior but it appears no system can dictate the speed of postgraduate medical training.

#### **ARTICLE HISTORY**

Received March 25, 2018 Accepted September 17, 2019 Published October 12, 2019

#### **KEYWORDS**

Postgraduate medical education; work-life balance; specialty training; career choice

## Introduction

The UK program (UKFP) organize an annual national junior doctor survey to monitor the career aspirations of the next generation of clinicians [1]. Over the last 7 years, there has been a concerning trend of year on year decline in FY2 doctors entering directly into training positions. Only 37.7% of last year's FY2s made the transition. In 2011, this figure was 71.3% [1]. Large numbers of FY2s leaving to work in Australia is a commonly held misbelief. According to the UKFP survey, only 11.3% had either secured or were applying for jobs outside the UK a figure that has remained relatively static over the last 10 years. The big changes have been in those FY2's taking a career break from medicine (14.4% vs. 4.6% in 2011) and those taking up non-training jobs in the UK (17.6% vs. 2.3% in 2011) [1].

It is important to understand how the current UK postgraduate training model came to be. The European Working Time Directive (EWTD)

mandated the reduction in junior doctor working to 48 hours a week along with the rules on periods of rest. This was introduced between 2004 and 2009, before which juniors were working upward of 90 hours a week. This was introduced roughly around the time of the current training model: Modernising Medical Careers (MMC), which was implemented in the UK in 2005 [2,3]. It was introduced mainly because of concerns about significant numbers of junior doctors languishing for years in non-training jobs at Senior House Officer (SHO) grade while they waited to be accepted onto a specialty training (ST) scheme. The aim of MMC was to add structure to these early junior doctor years and streamline training by moving toward a competency acquisition model with "fully trained" Consultants providing more service delivery [4]. The foundation program (FP) represents the first 2 years after medical school and is made up of six 4-month rotations through different specialties. FY1 is the first of these years and FY2 the second. These junior doctors are collectively known as Foundation Trainees (FTs). The FP aimed to provide a wide basic grounding in clinical practice and a broad exposure to career opportunities, with the FP acting as "a bridge between medical school and specialty training [2]." Following the FP doctors, complete between 3 and 8 years of supervised ST. ST is typically in one geographical region but will see a doctor rotate through several different hospitals. On completion of a set training, curriculum and examinations a doctor is deemed fully trained and eligible to apply for permanent job as a Consultant. In the UK, a Consultant is fully accredited by the relevant governing body to work in their specialty without clinical supervision.

Internationally, Australia has the most similar post-graduate training scheme to the UK. Their medical graduates spend one year called Postgraduate year 1 (PGY1) experiencing different specialties before entering training. It is, however, expected that on completion of PGY1 junior doctors will spend at least another year rotating through specialties in a public or community hospital, as training jobs are in high demand and very competitive. This is desired to build their experience while simultaneously addressing service needs [5]. This is similar to the UK system prior to MMC. In the Netherlands and Germany, junior doctors achieve full medical registration on completion of medical school enabling them to enter specialty training directly, although most choose to work in non-training positions first to build experience [6].

#### **Aim**

To explore the reasons why UK FY2s do not enter training positions directly upon completion of the FP.

#### Method

### **Ethical considerations**

This study was approved by Health Education England's Research Governance Committee.

### Design and setting

We used semi-structured interviews rather than focus groups or questionnaires. We felt interviews would give everyone an equal voice and produce richer insights. We conducted the interviews in an average sized UK district general hospital in July 2017 just before the end of foundation training.

#### Recruitment

We approached FY2s at their weekly hospital teaching to explain the project, issued them with intention to participate forms and information booklets on the project. This explained that interviews would be audio recorded and transcribed. Transcriptions would contain no identifiable information and audio files would be deleted once transcription completed. All interested FY2s signed an intention to participate form to take part (n = 18). We didn't exclude FY2s entering training from being interviewed to reduce selection bias and hear alternative insights. Of the 18 FY2s that agreed to take part 11 answered the video call, confirmed consent verbally and were interviewed.

#### **Procedure**

Pilot interviews with two FY2s were conducted to ensure the interview structure produced data to satisfy the aim [7]. The final tool was revised following the pilot.

Interviews were conducted via Skype, which was more convenient for the interviewees compared to face to face. Video was preferred to telephone by the research team for its ability to promote a more trusting interview environment [8].

The interviews were audio recorded and transcribed. The lead author conducted all 11 interviews to maintain consistency. Open questions and a pre-prepared structure were used to keep the interview on theme. Thematic framework analysis [] was used to create common codes. We adhered to established techniques of data capture and analysis to ensure credibility and transferability. Two authors (GHJ and MD) independently interrogated the anonymous transcripts independently to add reliability to the results [10]. In areas of disagreement, the two authors deliberated until agreement was reached.

#### Results

Semi-structured interviews were carried out with seven male and four female FY2s. Thematic analysis of the transcribed interviews generated a series of codes, grouped into two thematic categories demonstrated in Table 1. Nine FY2s out of our cohort of eleven were not entering a training position.

### Feeling unprepared for training

Several FY2s were not willing to apply for a training job in a speciality if they had not experienced it during the FP. This was despite having an interest in it: "I wanted to get more experience before I got

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**Table 1.** Thematic codes grouped into two main categories based on analysis of the interview transcripts.

Category	1 Feeling unprepared for training	2 No Flexibility
Codes	1.1 Clinical experience	2.1 Friends and Family
	1.2 Career support	2.2 Financial
	1.3 Employment rules	2.3 Travelling/ Working abroad

into core surgical training. I've never had a surgical SHO job"—FY2 A. Some FY2s were aware of "taster weeks" as a way to do work experience in speciality outside of the six allocated specialities in the foundation programme. Those who did manage to do this work experience only managed a couple of days and felt this to be too short: "Taster weeks—that would have been really helpful for me"—FY2 B.

There was also a frustration that the majority of time during the Foundation Programme was spent completing paperwork rather than having hands on clinical experience: "Doing paperwork like 80% of the job doesn't give the correct amount of exposure to commit"—FY2 E. The FP didn't give the junior doctors a true reflection of what a Consultant job was like in that speciality.

A poor understanding of the employment regulations for training jobs was another commonly cited reason to take time out before training. If FY2s had a spouse or partner applying for jobs, they often wanted to delay applying for their own job until they knew where their spouse or partner's job was. They were unsure whether a dual application with a spouse or partner was possible. The FY2's interviewed reported a poor understanding of the rules surrounding speciality and location transfers once a training job had started: "(If transfer) rules were a bit clearer then that would make applying easier"—FY2 G

### No flexibility

Specialty training was perceived as very rigid by the FY2s interviewed. They were worried that once training had started there would be no opportunity to take a training break or switch location if life circumstances changed. Every FY2 we interviewed expressed a desire to travel and work abroad. It was generally felt that it was better to travel with no family or professional ties. It was felt that travelling might not be possible during or after taking up a training job for fear of negative stigma by senior clinicians and future employers. Travelling and working abroad was believed to be exciting, fun and financially lucrative: "Being abroad is just more

exciting. Better work life balance. Plus, the money is better as well"—FY2 J.

Family planning later in life was another reason why FY2s wanted to travel before entering training. "I've got no ties down here at the moment, if you do that later on in your career, it could be more difficult"—FY2 A

UK-based non-training jobs, commonly paid by the hour (locum) were financially beneficial to FY2s. Being paid more enabled them to work less and this was important for their work life balance. Being paid better also enabled them to pay off student debt and save up for house deposits or exam fees. "The exams are expensive and I've got student debt to pay off"—FY2 H

### Discussion

### Feeling unprepared for training

Choosing one's specialty is a huge decision that most FY2s interviewed were not ready or prepared to make. What "life is like" as a consultant is an important career consideration which is often not realized during the FP. Application for specialty training is about halfway through FT so many FY2s do not apply as they have not yet experienced all six rotations. Others take a year out to work in a specialty which they didn't get to experience in the FP. "Taster weeks" of work experience in a choice of specialty were brought in to provide this experience but according to our cohort are difficult to achieve and provide only a flavor of the career.

Mentorship of FTs appears to be lacking in the FP. This may be down to the mismatch between FTs out of hours shift working and Consultant job plans which are not exclusively but mostly weekdays 8 am to 5 pm. This reduces opportunities for junior doctors to attend experiences, such as clinic or theatre, which better reflect the reality of a specialty. Simultaneously, this reduces interactions with consultants and opportunities for career discussions. Recent surveys of junior doctors and consultants support this theory and felt shift working was detrimental to training [11,12].

Today's FTs are faced with a large burden of clerical tasks, which is multifactorial. One might wrongly believe that the workload for junior doctors has fallen given that the numbers of medical graduates increased in the UK from below 5,000 in the year 2,000 to above 7,500 in 2012 [13]. The number of junior doctors physically on the wards at any one time has conversely fallen dramatically over that time. This is because of two factors. First,

the halving of working hours since EWTD was introduced. Second, the unintended consequence of abolishing the SHO grade mean today's juniors pass through to specialty training in less years compared to their predecessors. Simultaneously, the amount of clerical work associated with each patient is felt to have increased. Patients in today's ageing UK population have more complex health needs and together with increasing beuracratic regulation means more clerical tasks per patient. NHS IT systems are frequently cumbersome and prone to failure, further increasing the burden. FTs can go all shifts without speaking to a patient, forced instead to sit in front of a computer completing clerical tasks. While we acknowledge learning opportunity in performing referrals, investigation requests and discharge letters this needs to be balanced with adequate patient interaction. Studies have described how excess clerical work reduces acute clinical care responsibility reducing specialty experience [14]. With a reduction in clinical exposure, it can be expected that junior doctors feel anxious about future underperformance in a chosen specialty. Research looking specifically at FTs is lacking but we know that when clinical experience at medical school is improved it reduces the stress felt by junior doctors when starting the job [15]. Extrapolation of this principle supports the previous point of increased performance anxiety, which is another reason to feel unprepared to apply.

It would be helpful to today's FY2s if training rules such as deanery or specialty transfers were easier to understand and more accessible. Career guidance should be improved with senior trainees and junior consultants being utilized more as career mentors. They are likely to be best placed to advise on the training pathway, interview requirements and end job specification. We should be concerned that despite a 4-month rotation some FY2s do not get a real feel for a specialty. Anti-social hours and the clerical burden appear to be having a detrimental effect on clinical exposure. This presents a real challenge but is essential to the NHS that junior doctors are retained and well trained to maintain care standards.

There are only a few countries worldwide (UK, Australia, New Zealand, and Ireland) that use an internship (rotating through a mix of specialties) at the beginning of their postgraduate training. The rationale for an internship is robust as it should enable new doctors insight into different specialties. As our research shows this insight is not guaranteed. In countries not offering an internship,

medical students will apply for positions directly with a hospital and build up experience until applying for a training position in a specialty of their choice [6]. In these countries, the delay for entering training is typically because the application process is competitive and time is required to build up experience. In the UK, completion ratios have fallen across all the specialties with some specialties experiencing gaps. The delay in the UK as our results demonstrate cannot be blamed on over competition but in part because of poor experience during the FP (internship).

## No flexibility

In his report titled "Unfinished Business," which preceded MMC, Liam Donaldson, the Chief Medical Officer at the time, suggested a time limited, broadbased program to address the unstructured "SHO" grade. He emphasized the importance of flexible training that facilitated movement between training pathways with sufficient opportunities for parttime training [3]. This report heavily influenced the design of the current training program and it is interesting that we are re-visiting the themes identified as pitfalls a decade ago.

Many junior doctors undertaking early postgraduate training are at a stage in their lives when their personal circumstances are rapidly changing, with many starting families, moving geographical location, starting a new job, or looking to travel abroad. Training programs are perceived to be rigid by junior doctors, which discourage them from applying for further training for fear of being trapped in a specialty that later turns out to be ill-suited. A good work-life balance is important to today's junior doctors with recent graduates valuing domestic circumstances higher than their predecessors (43% vs. 20% said it held a "great deal" of influence on career choice) [16]. This phenomenon has been reported internationally. In Germany, 50% of medical students would like the option to work part time in order to spend more time with family and they disliked rigid hospital hierarchies [17,18].

Family planning is a key consideration in the lives of many junior doctors. It undoubtedly influences the timing of training application, with couples obviously wanting to be in the same geographical area before starting a family. This may force them to hold off applying for a training job until one in an appropriate area comes along. Inter-deanery transfers are available to mitigate for this problem but are not easy to obtain and not widely advertised by employers.

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Financial considerations also play a key role in career decision-making. University debts are increasing while privileges once enjoyed by junior doctors, such as free accommodation and parking, have disappeared. Earning money early in one's career is important to pay off university debts and enter the property market. Junior doctors can earn more working as a locum or abroad, which appeals as a short-term way to address monetary issues.

Travelling and working abroad has always been an important part of postgraduate medicine. The world is becoming a smaller place and doctors are in demand globally. A recent World Health Organization report stated a shortage of 2 million doctors worldwide. Improved pay and working conditions along with excitement and a perception of better lifestyle are commonly cited reasons to leave the UK. A national survey found 60% of junior doctors, 3 years post qualification were "not definitely intent on remaining in UK medicine." Reassuringly for the NHS a recent GMC working paper reported that nearly 90% of doctors are back in training within 3 years of taking a break after FY2 [19]. However, with rota gaps and service requirements increasing, can the NHS cope with thousands of doctors emigrating for up to three years?

The UK is not alone when it comes to loosing doctors abroad. High-income countries, such as Ireland, Austria, and Iceland, have all experienced high levels of emigration. Commonly, cited reasons include more structured training, better pay, better work-life balance, and uncertain domestic career progression [20–23]. From our research, the UK junior doctors concurrently cite better work-life balance and pay as reasons to emigrate but did not feel unstructured training or poor career prospects were issues.

### Limitations

A limitation of the study is that it is from a single centre. It was never intended to be generalizable but could inform future research at a regional or national level. The lead author and interviewer (GHJ) is a senior surgical trainee with an interest in medical education. Having recently been through the FP, we felt GHJ would be able to relate to the FY2s and ask pertinent follow up questions during interview. The potential drawback is the perceived questioning from a recent FY2 may be seen as leading. By piloting the interview questions to ensure, the most pertinent questions were asked we guarded against this. SR and JB, both experienced in publishing

qualitative research, supervised the structure of the interviews and analysis. The themes identified are aligned with previously published studies and the author's personal experiences. A co-author (MD) independently analyzed the transcripts to ensure the same themes were identified to ensure interrater reliability. We, therefore, believe our findings are credible and trustworthy.

#### **Conclusions**

This year, the numbers of FY2s progressing directly into training dropped to 37.7% the lowest figure ever recorded. Taking time out of training, after FY2, appears to have become normalized. The main reasons cited by the cohort we interviewed as reasons not to apply for training positions were linked to feeling unprepared and a perceived lack of flexibility in training. Based on existing evidence and reflected in our results, it appears that MMC may have failed in its objective to streamline training. Certainly, we know an overly rigid FP with high service demands will deter not attracts junior doctors. Other postgraduate training systems around the world appear to be less complex with less structured stepping-stones on the way to full qualification. Junior doctors in these systems take responsibility to build experience before applying to a training job. It is unclear which system is better for doctors and patients but it appears that no system can dictate the speed and direction of junior doctors and their training.

### **Conflict of interest**

The authors declare that they have no conflict of interest.

### **Subject consent**

All FY2s signed an "expression of interest" document following written and verbal explanation of the study. This was followed up with verbal consent just prior to the interview.

### **Data sharing statement**

The transcript data are available on request from GHJ.

#### **Ethical considerations**

This study was approved by Health Education England's Research Governance Committee on 11th May 2017.

#### References

- [1] UKFP. Career Destination Survey 2018 [Internet], 2019. Available via http://www.foundationprogramme.nhs.uk/sites/default/files/2019-01/F2%20Career%20Destinations%20Report\_FINAL.pdf (Accessed 30 July 2019).
- [2] Department of Health. Modernising medical careers the next steps the future shape of foundation, specialist and general practice training programmes [Internet]. Department of Health, London, UK, 2004. Available via http://webarchive.nationalarchives.gov.uk/20110929193948/http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/@dh/@en/documents/digitalasset/dh\_4079532.pdf (Accessed 19 August 2017).
- [3] Donaldson L. Unfinished business; proposals for reform of the senior house officer grade [Internet], 2002. Available via http://webarchive.nationalarchives.gov.uk/20110929193926/http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/@dh/@en/documents/digitalasset/dh\_4018808.pdf (Accessed 10 December 2017).
- [4] Temple J. Time for training a review of the impact of the European Working Time Directive on the quality of training [Internet], 2010. Available via https://www.hee.nhs.uk/sites/default/files/documents/Time%20for%20training%20report\_0.pdf (Accessed 19 August 2017).
- [5] Department of Health. Medical training review panel: seventeenth report [Internet]. Available via https://www1.health.gov.au/internet/publications/publishing.nsf/Content/work-pubs-mtrp-17-toc (Accessed 14 August 2019).
- [6] Weggemans MM, van Dijk B, van Dooijeweert B, Veenendaal AG, ten Cate O. The postgraduate medical education pathway: an international comparison. GMS J Med Educ [Internet]. 2017; 34(5).
- [7] Denscombe M. The good research guide: for small-scale social research projects: for small-scale social research projects [Internet]. McGraw-Hill Education, New York, NY, 2010.
- [8] Weller S. The potentials and pitfalls of using Skype for qualitative (longitudinal) interviews [Internet]. NCRM, 2015. Available via http://eprints.ncrm. ac.uk/3757/ (Accessed 14 March 2019).
- [9] Ritchie J, Lewis J, Lewis PSPJ, Nicholls CMN, Ormston R. Qualitative research practice: a guide for social science students and researchers [Internet]. SAGE Publications, Thousand Oaks, CA, 2013.
- [10] Cohen L, Manion L, Morrison K. Research methods in education [Internet]. Routledge, Abingdon, UK, 2011.
- [11] Maisonneuve JJ, Lambert TW, Goldacre MJ. UK doctors' views on the implementation of the European Working Time Directive as applied to medical practice: a quantitative analysis. BMJ Open 2014; 4(2):e004391.

- [12] Tsouroufli M, Payne H. Consultant medical trainers, modernising medical careers (MMC) and the European time directive (EWTD): tensions and challenges in a changing medical education context. BMC Med Educ 2008; 8:31.
- [13] BMA—UK medical workforce [Internet]. Available via https://www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/uk-medical-workforce/uk (Accessed 28 July 2019).
- [14] Wakeling J, French F, Bagnall G, McHardy K. Is Foundation training producing competent doctors? What do Foundation trainees, educational supervisors and nurses in Scotland have to say? Scott Med J 2011; 56(2):87–93.
- [15] Brennan N, Corrigan O, Allard J, Archer J, Barnes R, Bleakley A, et al. The transition from medical student to junior doctor: today's experiences of Tomorrow's Doctors. Med Educ 2010; 44(5):449–58.
- [16] Smith F, Lambert TW, Goldacre MJ. Factors influencing junior doctors' choices of future specialty: trends over time and demographics based on results from UK national surveys. J R Soc Med 2015; 108(10):396–405.
- [17] Hartmannbund—Umfragen [Internet]. Available via https://www.hartmannbund.de/fileadmin/user\_upload/Downloads/Umfragen/2012\_Umfrage-Medizinstudierende.pdf (Accessed 23 August 2019).
- [18] Schmidt CE, Möller J, Schmidt K, Gerbershagen MU, Wappler F, Limmroth V, et al. Generation Y: recruitment, retention and development. Anaesthesist 2011; 60(6):517–24.
- [19] General medical council. Training pathways: analysis of the transition from the foundation programme to the next stage of training [Internet]. Available via https://www.gmc-uk.org/-/media/documents/training-pathways-1---final2\_pdf-72695703.pdf (Accessed 17 May 2018).
- [20] Clarke N, Crowe S, Humphries N, Conroy R, O'Hare S, Kavanagh P, et al. Factors influencing trainee doctor emigration in a high income country: a mixed methods study. Hum Resour Health 2017; 15(1):66–66.
- [21] Scharer S, Freitag A. Physicians' exodus: why medical graduates leave Austria or do not work in clinical practice. Wien Klin Wochenschr 2015; 127(9–10):323–9.
- [22] Humphries N, McAleese S, Matthews A, Brugha R. "Emigration is a matter of self-preservation. The working conditions . . . are killing us slowly": qualitative insights into health professional emigration from Ireland. Hum Resour Health [Internet] 2015; 13(1).
- [23] Solberg IB, Tómasson K, Aasland O, Tyssen R. The impact of economic factors on migration considerations among Icelandic specialist doctors: a cross-sectional study. BMC Health Serv Res 2013; 13(1):524.

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