

Newly qualified doctors' views of their job shadowing experiences

Job shadowing and taking part in day-to-day clinical activities have varied considerably by university and deanery. This article looks at whether the introduction of a UK national mandatory paid shadowing week in 2012 increased new graduates' satisfaction with job shadowing.

Introduction

Newly qualified medical graduates take up their first hospital jobs as foundation year 1 doctors in the first week of August. Just starting full time work with no choice of start date is a stressor (Moss and Paice, 1999). The transition from medical student to junior doctor is also a stressful experience affected by factors which include medical school preparedness and support offered (Paice et al, 2002; Tallentire et al, 2011a; Salisbury and Frankel, 2012).

Transition times are associated with a 6% increase in patient mortality rate compared to the previous week (Dr Foster Intelligence, 2009; Pathiraja and Outram, 2011; Outram, 2012). These have been termed the 'August killing season' and have caused concern in other countries, being labelled the 'July phenomenon' in the USA (Prince et al, 2004; Haller et al, 2009; Phillips and Barker, 2010; Young et al, 2011). In addition, around 35% of graduates (2500 doctors) undertake training posts outside their medical school region and start work in unfamiliar clinical environments (Outram, 2012).

What is shadowing and how does it differ from induction?

Shadowing is the process of observing and contributing to daily duties by being with the current foundation year 1 doctor, learning about the facilities available, working

patterns, what is expected in the role and being able to ask pertinent questions (Gill, 2012; Outram, 2012). It is important to shadow the foundation year 1 doctor whose post the shadower is taking over in August that year (General Medical Council, 2009a, b). Shadowing aims to ease newly qualified doctors into their role and to provide safe, high quality care to patients (General Medical Council, 2009a,b; Outram, 2012).

The General Medical Council recommends that the shadowing period occurs as close as possible to the point of employment and is distinct from induction to the new job (General Medical Council, 2009a, b). At the start of a job induction ensures that new employees are conversant with the workplace-specific employers' local practices and policies, both clinical and non-clinical (British Medical Association, 2013). Usually there are both general hospital and departmental specific inductions. Unlike shadowing, induction does not involve going on ward rounds or hands-on experience of day-to-day clinical care.

Introduction of a national mandatory paid shadowing week

Although shadowing placements have occurred UK wide for some time, there has been wide variation in practice regarding timing, content and delivery (Outram, 2012). In July 2012, the Department of Health stipulated that all doctors taking up foundation year 1 posts should undertake a national mandatory paid shadowing week (Outram, 2012). This should consist of at least 4 days and include ward-based shadowing of the foundation year 1 job that the doctor would be taking up as well as completing corporate induction (Outram, 2012). This recommendation resulted from the Collins report, a review of the first 5 years of foundation training and previous General Medical Council recommendations (General Medical Council,

2009a, b; Collins, 2010). A little publicised national survey following the 2012 national mandatory paid shadowing week obtained a 34% response from foundation year 1 doctors who felt the most useful components were learning from the outgoing foundation year 1 doctor, scenarios about how to manage critically ill patients and teaching about the critically ill patient (Health Education England, 2013).

The authors undertook a study to investigate foundation year 1 doctors' views on shadowing to ascertain if the national mandatory paid shadowing week improved shadowing experiences and feeling prepared for clinical practice as a doctor compared to pre-national mandatory paid shadowing week and also if further improvements in shadowing placements were needed.

Method

This study was carried out at a single large hospital trust across two hospital sites. Foundation year 1 doctors have traditionally undertaken a 2-week period of shadowing in May or June before starting their post in August. This was stipulated by the local university (Birmingham) and by the hospital trust for other universities' graduates. In addition, foundation year 1 doctors had a 2-day induction programme before starting their post.

At the hospital's weekly foundation year 1 doctor protected teaching, volunteers were sought to participate in focus groups. Three focus groups were arranged in May and June 2012 to seek foundation year 1 doctors' views of shadowing from doctors who started work in August 2011 before the introduction of the national mandatory paid shadowing week. Foundation year 1 doctors who started in August 2012 at the hospital trust, who experienced the national mandatory paid shadowing week, were invited to discuss their shadowing

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experiences in a further three focus groups held in October 2012. This latter group of newly qualified doctors had two periods of shadowing: after completing undergraduate training and the national mandatory paid shadowing week. A semi-structured interview technique was used to conduct the focus groups.

Question for focus groups

- When did you do your shadowing?
- How long for?
- What did you learn and who did you meet?
- How useful was it? (Did it prepare you for the job – if not what was missing?)
- Did you shadow other posts as well as your first post?

Table 1. Verbatim quotes from foundation year one doctors on the value of shadowing

Value of shadowing	'How to write in notes and helping with jobs, so things like discharge summaries, taking bloods, putting in cannulas.' (pre-NMPSW)
	'I found it very useful just to be able to learn, you know, the actual roles of the FY1.' (pre-NMPSW)
Value of student shadowing	'It wasn't really shadowing a job. It was like just being on [student] placement again because we couldn't sign any prescriptions or do anything for ourselves. We needed to get everything signed off by the FY1 which cancelled out the point of being a shadowing junior doctor.' (pre-NMPSW)
	'We've just done our finals, the most important exams in our lives – then to have to spend 2 weeks in a hospital – you can imagine a lot of people won't be motivated.' (pre-NMPSW)
	'I was attached to a different consultant than the one I worked for – she [the FY1] was telling me how he liked things done, his surgery days and expectations of his juniors. When I actually came to work I worked for a different consultant.' (pre-NMPSW)
Value of the NMPSW	'I felt that what I learnt – in the national week – is what really mattered because the people will be the people you are working with.' (post-NMPSW)
	'We met most of the staff based on the ward so the nursing staff, the HCAs [health-care assistants] and the ward clerk. We met our registrars and a few of our consultants.' (post-NMPSW)
	'I went and asked for scans from the radiologists, I did all the requesting, I wrote in the notes and things which I found really really useful in preparation for my job.' (post-NMPSW)
	'When I did the 2-week shadowing 3 months before in May, I felt more like a spare part because we didn't have log ins for the computers and things.' (post-NMPSW)
	'It was also quite good as they were on-call several times... so that I could do the on-calls with them.' (post-NMPSW)
	'I think the one thing ... [for shadowing] is to do out of hours on-calls, so doing ward cover rather than clerking... [otherwise] you don't see sick patients or know what to do at 8 o'clock in the evening when someone goes off.' (post-NMPSW)

FY1 = foundation year 1; NMPSW = national mandatory paid shadowing week

Table 2. Verbatim quotes from foundation year one doctors about the need for guidelines and supervision

	'At the end of the week when I asked him [the consultant] to sign my sheets, he didn't really have a clue about what I had done.' (pre-NMPSW)
	'I think it [the experience] all depends upon the FY1 you were shadowing.' (post-NMPSW)
	'If the quality relies upon the FY1, just a few pointers for us – I've tried to tell them all the practical things and other things as well but I am sure there are things I've forgotten to mention.' (pre-NMPSW)
	'If we had some literature which went through our role for each part of our rotation, that would be very useful.' (post-NMPSW)
	'Get the FY1s to write down what we think is hard, e.g. insulin prescribing, warfarin – maybe common antibiotics like remembering to check gentamicin levels.' (post-NMPSW)

FY1 = foundation year 1; NMPSW = national mandatory paid shadowing week

- How could your shadowing experience have been improved?

Each focus group lasted about 60 minutes. All focus groups were digitally recorded and transcribed verbatim. Names were not disclosed during group discussions to maintain participants' anonymity. All transcripts were thematically analysed using principles described by Coffey and Atkinson (2006).

Results

Twenty two and twenty three foundation year 1 doctors participated in the focus groups pre- and post-national mandatory paid shadowing week respectively. The majority of foundation year 1 doctors (89%, 40/45) were Birmingham University graduates with the remaining foundation year 1 doctors qualifying from Peninsula, Warwick, Cambridge and Bristol medical schools.

Thematic analysis of transcripts produced 27 codes from which five themes emerged:

1. Value of shadowing to the foundation year 1 doctor (*Table 1*)
2. Need for guidelines and supervision (*Table 2*)
3. Patient safety (*Table 3*)
4. Impact of shadowing on speciality teams (*Table 4*)
5. Suggested improvements (*Table 5*).

Value of shadowing to the new graduate

Both pre- and post-national mandatory paid shadowing week shadowing helped

Table 3. Verbatim quotes from foundation year one doctors about patient safety

	'Everybody else senior in the team was in induction. No consultant came to the ward. It was just two FY1s looking after 45 patients that they've never met. That isn't safe and that's why I think the week's [NMPSW] needed so at least you've seen the patients before.' (pre-NMPSW)
	'My colleague and I were randomly pushing a trolley around. It took us hours to see patients because we had to start from scratch; when they came in, what happened.' (pre-NMPSW)
	'We got to know the patients in the week immediately before we started work. That was probably the most useful week as opposed to the 2 weeks we did after medical school.' (post-NMPSW)

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new graduates to know how to undertake a foundation year 1 doctor's duties (Table 1). In addition, those who had undertaken the national mandatory paid shadowing week had more hands-on experience and met staff who would be part of their team.

There was ambivalence about the value of shadowing undertaken in May, 3 months before the foundation year 1 post began, particularly as it was immediately after exams when students wished to have a holiday. This shadowing was viewed as a continuation of medical student experience and was not always with the correct team. In contrast, those who had undertaken the national mandatory paid shadowing week felt it was more beneficial because it was the week before their posts began. The national mandatory paid shadowing week was considered beneficial overall, with ward-based work and

working out of hours particularly valued. Foundation year 1 doctors' job survival tips were more useful than senior staff lectures.

Need for guidelines and supervision

In all focus groups, foundation year 1 doctors felt that shadowing periods needed guidelines for those who are being shadowed (Table 2). Consultants need to be present and help supervise the shadowing period. All participants were keen to have tips and written information from their predecessors, preferably as a pdf to download to a smartphone and be an aide memoir when undertaking ward duties.

Patient safety

Foundation year 1 doctors spoke about patient safety being the first priority (Table

3). The national mandatory paid shadowing week was advantageous as it was immediately before foundation year 1 posts started, enabling familiarity with patients' details and treatment. This was in contrast to the previous year's foundation year 1 doctors who were on their own looking after patients they had never met before while more senior colleagues were having induction.

Impact of shadowing on speciality teams

Having a student or newly qualified doctor shadowing has an impact on the medical team, in particular the foundation year 1 doctor in post (Table 4). The foundation year 1 doctors described both the extra responsibility and making their work slower because they had to check what the shadower had done.

Suggested improvements

These fell into three subthemes: organization, content and senior doctor interaction (Table 5).

Organization

There was general consensus in favour of a 2-week shadowing period. The timing of the national mandatory paid shadowing week, immediately before new graduates started work, was felt to be optimal. The national mandatory paid shadowing week had an intermittent lecture programme throughout the day. Foundation year 1 doctors often spent only an hour on the ward before going to lectures, making it difficult to get meaningful ward experience. Blocks of lectures and ward experience were felt to be preferable.

Content

Both pre- and post-national mandatory paid shadowing week, foundation year 1 doctors felt that on-call experience including weekends was helpful.

Interaction with senior doctors

Consultants needed to know about the national mandatory paid shadowing week and be involved in it. In addition, foundation year 1 doctors felt that shadowing week payment should be the same nationally and it was unfair that some trusts paid a salary while others had just given a bursary. Foundation year 1 doctors from medical schools outside the authors' region had

Table 4. Verbatim quotes from foundation year one doctors about the impact of shadowing on speciality teams

'If you are with people who have just started shadowing, it really does slow you down a lot.' (pre-NMPSW)

'It doubles the work because the medical student will do an EDS and it will take x amount of time and then has to call me. I check all the drugs, authorize them, read all the EDS, make corrections and then send it off.' (pre-NMPSW)

'You've always got to keep an eye on them because if they write something under your name on your behalf it's your responsibility.' (pre-NMPSW)

EDS = electronic discharge summary; NMPSW = national mandatory paid shadowing week

Table 5. Suggested improvements

Organization 'It should be closer to the time [of starting work], it should be 2 weeks.' (pre-NMPSW)

'We were there for an hour and they [the FY1s] couldn't really teach or show us anything as they were just trying to get on with their own jobs.' (post-NMPSW)

'I didn't learn a huge amount because we were in lectures so much. I missed nearly all the morning ward rounds, and that's the most busy part as an FY1.' (post-NMPSW)

'Not very continuous at all – it may have been better if we had had 3 days of continuous shadowing and 2 days of just lectures.' (post-NMPSW)

Content 'We were there for an hour and they [the FY1s] couldn't really teach or show us anything as they were just trying to get on with their own jobs.' (post-NMPSW)

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'On-calls – if perhaps you could do something like a weekend cover.' (post-NMPSW)

Interaction with senior doctors 'Especially in medicine, meet the consultants on your ward.' (pre-NMPSW)

'Consultants really haven't understood what was happening – I think they thought we were medical students or something.' (post-NMPSW)

FY1 = foundation year 1; NMPSW = national mandatory paid shadowing week

incurred considerable costs for the May/June trust 2-week shadowing period and felt that this should be replaced by the national mandatory paid shadowing week in future rather than having both.

Discussion

Ideal shadowing placements provide an opportunity for newly qualified doctors to familiarize themselves with the work environment, meet the clinical team and learn how to undertake day-to-day clinical care. Importantly, they also allow clinical handover of patients and continuity of care from the outgoing first year doctor to the newly qualified one. This study is the first of its kind to seek views of shadowing experiences both before and after the introduction of a national mandatory paid shadowing week.

Participants in this study valued time spent in getting used to the clinical environments, meeting the clinical team, writing in the medical notes, requesting investigations and getting used to the IT infrastructure. These are regarded as essential (Outram, 2012) and were in the 2013 guidance for shadowing produced by Health Education England (2013), which provides leadership for medical education and training.

Student assistantships and shadowing

Foundation year 1 doctors wanted consistency in delivery of the shadowing period with clear guidelines about content and organization. The 2013 shadowing guidance was more specific than that in 2012. The current findings that May/June shadowing placements were not particularly useful because nothing extra was learnt compared to that learnt on medical student clinical placements agree with the 2012 national questionnaire findings (Health Education England, 2013). General Medical Council (2009a) guidance states that 'the shadowing period should normally last at least one week and take place as close to the point of employment as possible'. There needs to be liaison between the postgraduate deaneries, universities and hospital trusts regarding shadowing placements now that a national mandatory paid shadowing week has been established to enable streamlining of the system rather than repeating experience.

The General Medical Council produced guidance additional to *Tomorrow's Doctors* (2009a) explaining the difference between student clinical placements, student assistantships and shadowing (General Medical Council, 2011). The previous May/June shadowing week should now be thought of as a student assistantship in which the student acts as a junior doctor assistant undertaking supervised duties. Unlike shadowing, in a student assistantship the supervising foundation year 1 doctor does not need to be the one that the student will be taking over from in August and the placement could be in any hospital rather than where the new graduate will undertake his/her first post (General Medical Council, 2011).

Out of hours experience

Taking part in out of hours work was felt to be beneficial by all study participants and many had arranged their own out of hours experience in either one or all three specialties of their first foundation year. They felt out of hours should be compulsory as it helped to know what to do with acutely unwell patients when not having a daytime team to call upon, in keeping with studies on preparedness for medical practice (Berridge et al, 2007; Brennan et al, 2010; Matheson et al, 2010). An out of hours shift was included in Health Education England's 2013 shadowing guidance.

Senior support

The majority of study participants reported lack of support from consultants and registrars. This support is an important component of shadowing and can provide reassurance and reduce anxiety as well as role modelling (Tallentire et al, 2011b). The General Medical Council (2009a) states that shadowing placements enable students to get to know their colleagues.

Prescribing guidance

Foundation year 1 doctors wanted the national mandatory paid shadowing week to have prescribing guidance. Prescribing is well documented as an area which foundation year 1 doctors find challenging and unprepared for by medical school (Tallentire et al, 2012). In the authors' deanery, foundation year 1 doctors undertake at least fifteen e-learning prescribing modules (SCRIPT) (NHS West Midlands, 2011). However, guidance during the

national mandatory paid shadowing week is necessary as foundation year 1 doctors write drugs from their first day. Perhaps some SCRIPT modules could be undertaken during the shadowing period.

Patient handover and safety

Patient safety is always a priority. The study foundation year 1 doctors valued handover of patients in the national mandatory paid shadowing week in contrast to their 2011 counterparts who started their first working day not knowing any of the patients. Making the care of the patient your first concern is stipulated by the General Medical Council with the public having the right to expect treatment by safe and competent doctors (Wass, 2005; Gill, 2012). Although patient handover is only one step in ensuring patient safety it is an important one which has been achieved by the national mandatory paid shadowing week.

Increased responsibility for foundation year 1 doctor being shadowed

The 2011 foundation year 1 doctors who were being shadowed in 2012 were uneasy as they had no guidance or support for this teaching role. There was a sense of increased responsibility especially as any errors made by the shadowing doctor would be the foundation year 1 doctor's fault. Foundation year 1 doctors now cannot take annual leave during the shadowing week (Health Education England, 2013) and this may lead to resentment particularly as the beginning of August is a peak time for senior colleagues including consultants to take their annual leave (Tate, 2009).

Composition of national mandatory paid shadowing week

It is not surprising that foundation year 1 doctors wanted to spend more time on the wards getting to grips with their clinical environment rather than spending time in lectures. In addition, they preferred ward time to be continuous and not interrupted. Matheson et al (2010) reported similar findings with 94% of respondents stating that uninterrupted ward shadowing was more useful than lectures or seminars. The authors' deanery has a mandatory 18 module e-learning induction package for foundation year 1 doctors and therefore it is possible that trust-specific induction could

be limited to 1 day (Nathavitharana, 2011). This would give 3 days on the wards.

Both groups of foundation year 1 doctors wanted the national mandatory paid shadowing week to be paid in the same way nationally and this appears to have been addressed for 2013 (Welsh, 2013). However, there has been no national move to extend the national mandatory paid shadowing week from 1 to 2 weeks.

Limitations to the study

This study was undertaken in one deanery and foundation year 1 doctors worked in a single hospital trust. There may be bias as a result of self-selection of participants who took part in the focus groups. Nevertheless, the dataset provided rich and detailed accounts of the foundation year 1 doctors' views of shadowing and the national mandatory paid shadowing week. It is vital to seek trainees' views rather than imposing change upon them so that year on year this experience can be improved.

Conclusions

Foundation year 1 doctors are key members of hospital teams. The implementation of a national mandatory paid shadowing week has met with their approval and been perceived as a positive development. Success is partly the result of timing immediately before posts commencing, thereby allowing patient handover and addressing an important patient safety issue. Key national mandatory paid shadowing week benefits over previous student shadowing placements were meeting staff with which the newly qualified doctors were going to be working and more hands-on practical experience.

Ongoing work is required to draw up detailed guidelines on the content of shadowing placements including liaison between deaneries, hospital trusts and universities,

address organizational issues regarding delivery and ascertain the optimal duration of shadowing. Foundation year one doctors being shadowed need to be equipped with teaching skills and given clear guidance as to what to teach as well as senior support being available during this period. **BJHM**

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KEY POINTS

- A national mandatory paid shadowing week is valued by newly qualified doctors.
- Optimal timing of the national mandatory paid shadowing week is immediately before the beginning of the newly qualified graduate's first post.
- Involvement in day to day clinical care, on call shifts and getting tips from the outgoing junior doctors were the most highly valued aspects of the national mandatory paid shadowing week.
- The national mandatory paid shadowing week would be enhanced by improvements in organization, content and senior doctor participation, the outgoing junior doctor receiving training in supervision of the shadower and clear guidelines for the week being available.
- Further work is needed to ascertain the optimum duration of national mandatory paid shadowing.