

BMJ Open 'A Unique opportunity to test things out': a qualitative study of broad-based training in Scotland

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ABSTRACT

Objectives A recent review recommended UK postgraduate medical education should produce doctors capable of providing general care in broad specialties across a range of different settings. Responding to this, broad-based training (BBT) was introduced in Scotland in 2018 to provide postgraduate trainees with a grounding in four specialties. Introduced as an option for trainees after initial postgraduate 'Foundation' training, it comprises 6 months in general medicine, general practice, paediatrics and psychiatry.

This study addresses two key BBT outcomes. It examines how successful BBT is in developing trainees who perceive they are able to work beyond traditional specialty boundaries to care for patients with complex, multifactorial healthcare needs. Second, it explores how well BBT prepares trainees for their next stage in training.

Design A longitudinal qualitative study using semistructured interviews to collect data from BBT trainees, trainers and 'programme architects'. Fifty-one interviews were conducted, 31 with trainees (with up to three interviews per trainee across BBT and immediately afterwards (post-BBT)) and 20 with trainers. Data were subject to thematic analysis.

Results Two overarching themes were identified: (1) trainees able to work beyond specialty boundaries and (2) preparation for the next stage in training. BBT trainees were able to see the links and overlap between different specialties and understand the interface between primary and secondary care. They did not perceive that BBT (as compared with single-specialty early-stage training) disadvantaged them, other than in terms of specialty examination preparation. BBT was seen as a way to keep career options open in a system where it is difficult to switch training pathway.

Conclusions BBT has the capacity to create doctors who will carry on using their generalist skills to care for patients more holistically, even if they end up working in focused practice areas. BBT helps to keep options open for longer, which is beneficial in a highly structured training environment.

INTRODUCTION

Between 2008 and 2013, the *Shape of Training* review examined the structure of UK postgraduate medical education and considered what reforms might be necessary to continue

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ We gathered data from a large sample (n=20) of trainers as well as the broad-based training (BBT) trainees themselves, allowing us to assess perceptions of the programme from differing perspectives.
- ⇒ The longitudinal study design provided insight into the evolving and dynamic nature of career decision-making.
- ⇒ Doctors who apply for, and are successful in securing, a BBT post may have personal/professional characteristics, which distinguish them from their unsuccessful/uninterested peers.
- ⇒ BBT trainees may have provided positive responses to a researcher who is employed by the programme's administering body (NHS Education for Scotland); however, their willingness to provide criticism suggests this may not have been a significant factor.

to provide the best care for the needs of a changing patient population, one in which many more patients have chronic illnesses and multiple comorbidities.¹ One of the key findings of the report was that 'there was...a clear consensus about what change should deliver: greater flexibility, better preparation for working in multi-professional teams and more generalists'. A 'generalist' was defined as a doctor who is 'capable of providing general care in broad specialties across a range of different settings'.

The review led to structural reforms in postgraduate training across both medical and surgical specialties. In the case of medicine, for example, a new 3-year Internal Medicine Training (IMT) curriculum was introduced, with an emphasis on more generalist, generic skills in those first 3 years.² The review also recognised the inflexibility of postgraduate training, which can make it difficult for trainees to change specialties or take time out of a training programme. It was noted that this was a contributory factor in the decision by many early year trainees not to enter specialty

training straight after their 2-year postgraduate Foundation programme.³ Increasingly, many trainees do not feel ready to commit to a specialty at this stage; in 2019, for example, only 35% of those completing Foundation were moving straight into specialty or core training posts.⁴⁵

It was in this context that the Academy of Medical Royal Colleges introduced a new early years broad-based training (BBT) programme in England in 2013. The intention was to keep training broader for longer and to allow trainees to gain experiences in four key specialties before deciding on their ultimate career path. Trainees would undertake 6 months in IMT, general practice, psychiatry and paediatrics over 2 years after which they could choose to enter any of the specialties in the second year of that specialty training programme (known as ST2 or CT2 level). A unique feature of the programme was that 10% of time in each specialty would be spent in one of the other specialties, thus supporting trainees to work beyond artificial boundaries of healthcare and see the linkages between different specialties. The overall aim of BBT was to address: 'the patient's need for doctors with more generalist training who understand and can deliver healthcare across traditional specialist and service boundaries'.⁶ The BBT programme thus provided an attractive route to address both the need to develop practitioners with a broader perspective and to provide trainees with more time to achieve career conviction. An evaluation of BBT showed that it was producing trainees with an understanding of specialty complementarity, an ability to manage complex patients, and that it fostered a more holistic approach to patient care, with an appreciation of the whole patient journey.⁷ Despite this largely positive evaluation, the programme was scrapped in England in 2015 (it ran between 2016 and 2017 in Wales). The reason for this seemed political: a statement from Health Education England at the time outlined that it wanted to address immediate workforce shortages and to prioritise specialties such as general practice, psychiatry and emergency medicine.⁸

However, medical educators and managers in Scotland took on board the positive evaluation of BBT in England and saw the potential of the programme to not only provide trainees with a broad foundation in key specialties likely to be crucial for patient care, but also to offer them a more open training option post-Foundation. Scotland, therefore, introduced its own BBT programme in 2018 and the programme continues to run (it has also operated in Northern Ireland from 2019). A comprehensive longitudinal evaluation was undertaken alongside the roll-out to establish how well the programme was working and to assess how well it prepared trainees for the next stage in their training compared with 'traditional' trainees. The full results of this evaluation are reported elsewhere.⁹

The purpose of this paper is to examine two key aspects of BBT which are crucial to its success—namely the ability of the programme to: 'deliver a broad-based practitioner who is likely to be able to bring a wider perspective to healthcare provision' and its success in developing

trainees 'who are well equipped to progress successfully into any of the four specialties at CT2/ST2 level on completion of the programme'.¹⁰ Thus, the twin aims of the paper are to examine:

- How well does BBT develop trainees who perceive they are able to work beyond traditional specialty boundaries to care for patients with complex, multifactorial healthcare needs?
- How well does BBT prepare trainees for the next stage in training (specifically specialty training in general practice, internal medicine, paediatrics and psychiatry)?

METHODS

This BBT evaluation employed a longitudinal approach in which the first two cohorts of BBT trainees (2018 and 2019 intake) were followed throughout the programme. The first cohort was also followed up after they exited BBT. A longitudinal approach allowed insights into the transformative and dynamic nature of training and corresponding personal development in areas such as identity formation and career conviction.¹¹ As our aim was to explore perceptions of BBT rather than outcomes, qualitative data collection was deemed appropriate.

One focus group with seven participants¹² was carried out with the first cohort of BBT trainees 6 months after they began the programme (February 2018), to explore in depth their decision-making (BBT vs 'conventional' training) and early BBT experiences. The findings from the English BBT pilot were drawn on to develop the focus group topic guide. The information gathered from the focus group (which was audio recorded and transcribed) helped in refining questions for later one-to-one interviews. The focus group was also an opportunity to introduce the study to BBT trainees, and indicate that we would be approaching them to take part in an interview.

To explore their experiences in depth, all 21 BBT trainees were invited to participate in a semistructured, telephone interview via email. The aims of the interviews were to explore their experience of the programme and to examine their perceptions of the implications of BBT for their next stage of training. Interviews were longitudinal, conducted with trainees during year 1 and year 2 of BBT, plus post-BBT for cohort 1 (up to three interviews per participant in total (see online supplemental appendix for interview schedules)). Using a list of trainers provided by National Health Service Education for Scotland (NES), we also contacted and interviewed a sample of educational supervisors, training programme directors (TPDs), associate postgraduate dean (APGD) and key programme architects, to gain insight into their perspectives of the roll-out of the programme, its challenges and enablers. It was deemed important to gain their perspectives, which were likely to be more systems oriented¹³ compared with the views of trainees, which were likely to be more experiential. Written informed consent was obtained from every participant prior to interview/focus group participation.

We took a pragmatic approach to data sufficiency, by aiming for a sample of participants which was adequate (eg, in terms of being of sufficient size to allow transferability to other contexts), appropriate (ie, in terms of data being able to answer research questions) and aligned with our research questions and methodological orientation.¹⁴ We adopted a broadly constructivist stance, regarding knowledge as co-created between interviewer and interviewee (knowledge is created and negotiated rather than being merely ‘uncovered’ by the interviewer).¹⁵

We approached every trainee on both 2018 and 2019 cohorts and considered that the combination of detailed interviews (plus the fact that data collection in most cases involved at least two interviews per trainee), combined with our specific and focused research questions, provided sufficient ‘information power’¹⁶ to enable us to feel confident in our sample size.

Analysis

The focus group and interviews were conducted by experienced researchers with no connection to the BBT programme (PJ, SAS and JW). Data were transcribed, imported into NVivo V.12¹⁷ (qualitative data coding software) and analysed using thematic analysis.¹⁸ Analysis was iterative or data driven, rather than themes being decided a priori. We did not engage in formal respondent validation processes but fed back earlier discussions to trainees each time we met them, to orientate the discussion. This served the same purpose as ‘member checking’.¹⁹

Patient and public involvement

Patients or the public were not involved in the design, or conduct, or reporting, or dissemination plans of our research.

RESULTS

Qualitative data collection took place between February 2019 and November 2021. Table 1 shows the numbers and participant types who took part in the interviews. In total, 51 interviews were conducted, 31 with trainees (15 individuals, of whom 4 were interviewed three times, 8 at

two time points and 3 just once) and 20 with trainers/key programme architects.

Developing trainees able to work beyond traditional specialty boundaries

We asked trainees about the kinds of skills BBT was helping them to develop. It was clear from the responses that acquiring cross-specialty skills was an important part of the programme. Trainees talked about how skills acquired in one specialty were directly transferable when they rotated into their next specialty. For example, working in general practice gave them skills in time management and independent practice, allowing them to quickly assess patients and formulate a management plan; it also gave them an understanding of hospital discharge letters and an awareness of the key information these letters need to convey to a general practitioner (GP), experience which was valuable when back in the hospital setting. Also, a significant proportion of a GP’s caseload comprises children, so the 6 months in paediatrics was seen as hugely valuable. GPs also see many patients experiencing mental health difficulties, and the experience of a psychiatric placement enabled trainees to feel confident in assessing these patients and in managing risk. One trainee also mentioned that psychiatric knowledge had been useful during their general medicine block because they sometimes encountered patients with low mood as a result of chronic pain, and they were able to advise them in a more meaningful way about how to manage that. The following quotes highlight these points:

It’s also been really helpful having a psychiatry job before now... for example in rheumatology clinic, I’ve met lots of people with chronic pain, and kind of mood disturbance and anxiety, and I felt it’s been very helpful having that experience and knowing how to approach that... (BBT3, Cohort1, Int1)

Paediatrics is quite useful in general practice, you see quite a lot of kids out of hours, it’s built my confidence in seeing kids and making management plans for children. And then psychiatry is so useful in GP

Table 1 Participants in qualitative data collection

BBT trainees	Year 1 interview	Year 2 interview	Post-BBT interview
2018 cohort	7 participants	6 participants	5 participants
2019 cohort	7 participants	6 participants	Not applicable*
Other participants	Number of interviews		
Educational supervisors	7 participants		
Programme architects	4 participants		
Training programme directors	8 participants		
Associate postgraduate dean	1 participant		
*The project timeline meant that the second cohort could not be followed through into their subsequent BBT career (so no post-BBT interview for 2019 cohort).			
BBT, broad-based training.			

because you see quite a lot of mental health things in GP, it sort of gave me the skills to risk assess people which I think, if I hadn't done psych I would have been really uncomfortable with those scenarios in general practice. (BBT4, Cohort1, Int2)

In psychiatry, just having an idea of risk assessment, and detention, yeah, definitely that's something I wouldn't have had if I just went straight into medicine. Having an idea of how primary care works, because you know, not all Foundation trainees do GP, but it's actually pretty essential to know what the GP needs to know, and what they don't need to know for discharge letters and things, or communication with General Practice. (BBT13, Cohort2, Int2)

Crucially, trainees spoke about how the combination of specialties that makes up BBT gave them greater awareness of the pressures and constraints in each specialty, leading to, in particular, a greater understanding of GP referrals to hospital as a result of seeing the limitations under which GPs work:

Not doing a GP job before, I would maybe question some of the patients that the GPs are sending in, but actually being in a GP job and then having that appreciation of, of actually the limited resources there and that you do have no other choice than to send this patient in, because you are concerned about them. (BBT10, Cohort2, Int1)

Trainees also found that their BBT experience gave them awareness of how different specialties fit together and relate to each other, and gave them broader systems knowledge:

I do feel more confident, in doing certain things, and discharging certain patients home, because I have seen so much more with other rotations and I know what happens in the management bit. So I know what would happen to that person if and when they get discharged back to GP, or happy for that child to go through to paediatrics, or when they are going to get a follow up in this clinic or that, that's been really useful, if you know what happens to them, they don't just fall into this imaginary ether, if you follow me. (BBT1, Cohort1, Int3)

The importance of the '10% time' in developing generalist skills

A unique feature of BBT is that during each 6-month placement, trainees are required to spend 10% of their time in one of the other specialties, enabling them to expand their knowledge of different aspects of each specialty and gain experiences few trainees get access to (which were then useful once back in their base specialty). Examples of some of the placements trainees undertook included: dermatology clinics, palliative care, sexual health medicine, clinical genetics, microbiology, oncology, Child and Adolescent Mental Health Services, a week shadowing a GP in the Outer Hebrides, time in a

'Deep End' practice, child protection and sports medicine clinics. Undertaking the 10% time in tandem with the trainee's main placement allowed them to appreciate links between the two specialties:

... So I did some general medicine, (for the 10% time) during my first psychiatry block, and it is interesting to be able to see where there's overlap in the different specialties, ... I think that makes you think about things more as a whole, rather than concentrating on the particular specialty that you're in. (BBT11, Cohort2, Int1)

I think it is, it is a unique opportunity to try, to gain experience in a specialty, but particularly in an area that you wouldn't normally be able to gain experience in, so for example, when I was in GP, I attended some dermatology clinics, which is useful for both medicine and GP, which I don't think I would be able to do in any other circumstance, so I think it's been useful to try and broaden my experience. (BBT10, Cohort2, Int1)

Trainees were able to cast the net widely and think creatively about how they wanted to use their 10% and some used the opportunity to gain experience in remote and rural settings, which expanded their ideas about whether they would like to work in such settings in the future:

I actually contacted Dr X ... and went to his (name of hospital) hospital, just to see a bit of remote medicine, see how it works, in a slightly smaller hospital, which was really useful, and I'm just wondering whether I want to do that in future, it's a good opportunity to just have a look at what it's like for remote medicine. (BBT13, Cohort2, Int2)

I was able to organise five days on the island of X, and see what their, I suppose, the definition of rural GP was like. So they have three GP practices out there, and a community hospital, so I was able to do a day in each of the practices, and then a couple in the community hospital too, so it was a whole flavour of life as a GP outside of a big city.

Interviewer: Yeah, I mean is rural general practice something you think you would be interested in?

It has become a theme, yes ... yeah, definitely. (BBT15, Cohort2, Int2)

Finding ways to incorporate generalism into ongoing career

Although BBT trainees are required to make a specialty choice after the 2-year programme, it was noticeable that when asked about their future careers, several of them wanted to incorporate elements of other specialties into their career choice. In other words, they seemed keen to continue with generalism as a part of their skill set. For example, one trainee who had enjoyed psychiatry but ultimately opted for general practice, noted that they wanted to: 'find a way in the future to have mental health as part of my job' and wanted to explore options around doing

1 day a week with mental health teams (BBT1). Another trainee who also opted for general practice, but who had enjoyed paediatrics, said that they were planning to do a Diploma in Child Health: 'to kind of have a sort of semi-specialist interest in paediatrics as well' (BBT6). Another thought they would ultimately train as a GP but wanted to do core IMT first to gain more hospital experience, again finding a way to incorporate more than one specialty into their long-term career plans (BBT13). In addition, another, who also opted for IMT, was keen to explore options for 'a specialty with a physician-type, secondary care-type specialty' (BBT3).

Preparation for the next stage in training

Level of experience

Our second research question focused on how well BBT prepares trainees for the next stage in their careers. At this point, their route to whichever specialty they choose will have been somewhat different to conventional training—when joining the second year of their desired specialty, they will have had 6 months less experience in their chosen specialty compared with 'traditional' trainees (although they will have an extra year of training overall). Of all the four specialties, trainers in paediatrics saw entry into their specialty as potentially the most challenging option, as did BBT trainees themselves. In addition to the extra 6 months, many 'traditional' paediatrics specialty trainees have already done locum paediatrics posts prior to specialty entry, so they could seem well ahead in terms of experience compared with a BBT trainee. Several educational supervisors thought that it would be challenging for a BBT trainee coming into paediatrics in the second year and if they were not in a hospital environment where there was the opportunity to offer them a bespoke year to catch up on any missing skills, then they might struggle. Anxieties expressed by BBT trainees concerned the expectation that they would move up to the registrar rota after just 1 year as an ST2; however, it was noted that the structure of training is changing (Shape of Training reforms), with expectations for the ST3 year possibly becoming less demanding, and one trainee had been assured that it is not automatic that they would become a registrar in their ST3 year: 'if you're not ready they will work with you on things, and that is reassuring' (BBT4).

One educational supervisor was concerned that some BBT trainees may have done their full 6 months in paediatrics alone (rather than 3 months paediatrics and 3 months neonates), disadvantaging them at ST2 because they would arrive with no neonatal experience at all. However, another did also point out that paediatrics is a well-supported specialty, and trainees tend to be well supervised—reinforcing the idea that trainees will be given time to catch up on any areas they lack experience in. Two paediatrics TPDs and an APGD, who were encountering the first BBT trainees exiting into their specialty, noted that the trainees were mature individuals, but in common with educational supervisors, they had concerns

about their level of experience, particularly given the fact that some of them had done their paediatrics BBT post in quieter locations. They did acknowledge that it was too early to tell how they might perform down the line:

I've had good reports from Educational Supervisors, you know, in the regions elsewhere, looking at BBT, because I think they are a sort of slightly more considered mature lot, but ... you can be as considered and mature as you like, but you have to have a certain experience under your belt in order to be happy around about managing certain middle grade decisions out of hours, on your own. That's what we've yet to evaluate. (APGD1, paediatrics)

A BBT trainee who chose paediatrics noted, in their final interview, that there had definitely been a period of 'reorienting' into the specialty (especially since they had done paediatrics as their first BBT rotation). However, they considered that they were getting on well and they were being very proactive in gaining experiences:

...so cannulating babies is obviously a very unique skill that you don't do elsewhere, so then I felt like I was kind of starting from zero again with that, but what I did, was just seek out every opportunity, every cannula that needed to be done, I volunteered to do it, and you quickly, quickly sort of got back up to, back up to skill level with that. (BBT4, Cohort1, Int3)

Concerns around the skill level of ex-BBT trainees entering paediatrics were perhaps compounded by the fact that it was a popular choice for the first two cohorts of trainees. Almost half of trainees opted for paediatrics (10) from the first two cohorts (while eight chose general practice). However, no trainees chose paediatrics from the most recent 2020 cohort, so it may be that the spread of specialty choices evens out over time.

Potential concerns around a lack of experience in comparison with 'traditional' specialty trainees at the same level were not mentioned to the same extent for the other three BBT specialties. Indeed, an educational supervisor in general practice thought that a BBT trainee choosing general practice may have an *enhanced* skill set because they may have, potentially, done more hospital posts than a conventional general practice trainee. The three BBT trainees who took part in a final interview who had chosen general practice all felt that their experiences gave them a head start compared with some of their peers:

... I do think BBT's provided me with a lot more confidence in communication and things like that. I certainly think it has been beneficial for general practice, I know speaking to a few of my friends who've done GP training and would have finished last August, you know, I think I have a lot more experience compared to a lot of them, certainly probably I think I'll be a lot more confident when I do qualify, compared to them. (BBT6, Cohort1, Int3)

This point about a potentially greater level of experience among ex-BBT trainees was also highlighted by a TPD in medicine who thought that in IMT, trainees who had come from the BBT route might be ahead in some ways:

They'll probably be ahead of the game in terms of internal medicine trainees when it comes to outpatients, given that they've done six months of general practice, and psychiatry is a kind of mainly outpatient-based specialty I suppose. (TPD4, IMT)

However, this TPD did acknowledge that there could be areas where BBT trainees needed to do some catching up—for example, ensuring that they had completed any mandatory training they may have missed (for example, simulation boot camp) and addressing any areas they were weaker in:

I think it would be probably unfair on the trainees to put them straight in to the senior tier of the rota, but I think quite quickly with that extra year of generic experience, an extra year of maturity, and extra year of generic medical experience they'll catch up really quickly. (TPD4, IMT)

Examinations

One additional area where BBT trainees may have a little catching up to do concerns passing specialty examinations. Both of the medical TPDs who were interviewed raised this as a potential issue, but one pointed out that, with core medical training being expanded from 2 to 3 years, it gives *all* trainees more time to achieve the necessary examinations. Some educational supervisors stressed that it would be important for a BBT trainee to make a start on examinations in their second BBT year once they had made a decision about which specialty they wanted to enter, as the following quote highlights:

I don't think from a clinical perspective they're in any sort of, more of a disadvantaged position. Where I think the disadvantage might come from is the time that they have left to complete the other components, so things like exams. So if they haven't decided to do their paper 1 exam in that first last year of BBT, and they only start doing the exams when they enter into CT2, they're going to be quite tight for time. (EdSup5, psychiatry)

Several of the trainers made the point that, given that BBT trainees decide early on in year 2 what specialty they want to do afterwards, discussions should be held with them at that point to help them prepare during their final BBT year; for example, to help them get ahead with examinations, direct them to specific courses they ought to attend or advise on how best to spend their 10% time to maximise its utility for ongoing training.

Motivated trainees

A notable aspect from speaking to trainers about BBT was the frequency with which they mentioned the calibre,

commitment and motivation of the trainees who have chosen the programme, as the following quote indicates:

I've been very impressed by the calibre of the trainees, without exception, every trainee that we've had that's come through has, you know, was an exceptionally high calibre. They've been very motivated, organised and engaged in training and I'm always very impressed by their levels of clinical skills and autonomy. (EdSup5, psychiatry)

The design of the BBT programme certainly entails a good degree of organisation and self-directed learning because of the 10% time, which trainees have to organise and plan themselves. Trainees had to make sure their 10% time was accounted for in the rota and had to seek out opportunities for themselves. Several of the BBT trainees highlighted this and saw it as an advantage for their ongoing development:

I think there's, there's been a lot of transferable skills, just being in broad based training, and kind of having to do a wee bit of your own advocating for yourself ... we've had to do a lot more of the organisational side of things ourselves, which has probably been very useful, in kind of developing skills from that point of view as well. So as well as the clinical skills, there's been a lot of non-clinical skills that we will have developed, more than some other trainees as well. (BBT6, Cohort1, Int2)

... a lot of your 10% time falls to you to organise, and it's sort of initially trying to find the days that fit within your rota, and then it's where you'll go and what you'll do, ... it sort of forced you to reach out to people to try and decide what it was you wanted to do, and to think probably a bit more strategically about what's useful for me in the long term. (BBT15, Cohort2, Int1)

DISCUSSION

This paper has highlighted the potential benefits to both trainees and patients of a 2-year BBT programme. Our in-depth qualitative study has allowed us to see why such a programme is popular and how it fills a particular need for trainees who want to commit to a training programme but are still uncertain about specialty choice. Trainees emphasised how the programme fostered the development of cross-specialty skills and how skills acquired in one specialty were directly transferable when they rotated into their next specialty. This process was enhanced by the unique feature of spending 10% of their time during each 6-month placement in one of the other specialties, gaining experiences which were useful once back in their base specialty.

Once the BBT programme has finished and trainees move onto their desired specialty, there were some concerns (among trainees and trainers) that those

moving into paediatrics might face a challenge in terms of catching up to a similar level to 'traditional' paediatrics trainees, but this was not seen as a problem in the other specialties and there was a recognition that it is too early to tell whether any perceived disadvantage persists. In order to counter any potential problems, trainers recommended that early in year 2 of BBT, discussions should be held to tailor that year to final specialty choice with regard to examination preparation and best use of the 10% time.

Strengths of this study are that we gathered data from a large sample (n=20) of trainers, as well as the trainees themselves, allowing us to assess the merits of the BBT programme from these differing perspectives. The longitudinal nature of the study also allowed us to track how individual doctors' views of the programme and their career decisions evolved. Weaknesses are that the study time frame only allowed us to follow the first BBT cohort a few months into their final specialty, so we were unable to follow the long-term impact of having chosen BBT.

BBT had been introduced in England and Wales prior to its adoption in Scotland, so we were able to model our study, to some extent, on the longitudinal approach taken by Bullock *et al.*⁷ We adopted a wholly qualitative approach (as opposed to the mixed methods of the English study) and our pool of potential participants in Scotland was smaller. However, we spoke to a wider range of stakeholders in addition to trainee doctors (educational supervisors, TPDs and programme architects) so our analysis benefited from multiple viewpoints.

A key finding of both our study and the earlier English evaluation was that BBT trainees are able to bring a holistic approach to their role: 'by considering both the psychological and physical needs of the patient, trainees felt able to adopt a more holistic approach'.²⁰ Bullock (lead researcher for the English study) expressed the hope that in time, BBT would be reintroduced in England.²¹ A 2016 editorial in the *British Journal of General Practice* also expressed disappointment at the scrapping of the 'promising' BBT in England. Focusing on child health, it noted that only about one in three GPs has received any postgraduate specialist paediatric training and children are 'being failed' as a result, whereas a BBT trainee exiting into general practice would have had 6 months of specialist paediatrics.²²

Despite the abandonment of BBT in England and Wales, it is the case that some new initiatives to embed the concept of generalism into early years postgraduate training have been recently introduced. Health Education England's *Future Doctor Report* emphasised that one of the key themes in future medical education reform is to create doctors who possess 'confidence in a greater breadth of practice across disciplines and specialties due to a strong base of generalist skills',²³ and it has led to plans to embed generalist skills into Foundation rotations, such as the East of England School of Generalism.²⁴ Meanwhile, there are integrated clinical apprenticeships being offered to fifth year medical students at Imperial

College London, who spend a day a week in primary care with their own caseload of patients.²⁵ In Scotland, the intention is to continue with BBT, with the numbers remaining stable at 14 posts per year across the country.

These are all early years' training initiatives, and in the longer term, the road to career specialisation seems hard-wired into UK medical training; indeed, Bullock *et al* wondered if: 'these doctors are being trained for roles that do not yet exist in the UK context, where health-care organisation in hospitals is still largely based on discipline-based specialisation'.²⁶ However, several trainees in our study seemed open to finding a way to make a secondary or subspecialty interest a part of their future career plan, because they had enjoyed the breadth of specialty experiences BBT had given them. It seems that they are keen to continue their generalist mindset and find a way to incorporate it into existing healthcare structures. In part, this may be because some of these trainees found it difficult to decide between two specialties and so wanted to keep an interest in both.

As well as promoting the concept of generalism, an important additional benefit shown by our evaluation is that BBT can play a role in keeping trainees who might be lost to Scotland and lost to a training programme both in the country and in training. BBT provides an appealing alternative to an 'F3' year, providing another option alongside the staff grade or fellow posts many post-Foundation doctors undertake.²⁷ The emergence of the F3 year as a phenomenon shows that opportunities to keep training broader for longer have a significant role to play in a world where trainees welcome more time to decide on their ultimate career.

Of particular relevance to Scotland is a need to recruit trainees to remote and rural locations and there is a suggestion that the unique '10% time' embedded into the BBT programme may encourage trainees to seek experiences in remote areas and thus increase the likelihood that they may consider a move to a rural location to practise in the future. Further follow-up of the programme will be required to determine whether this is indeed the case. One limitation of this evaluation is that the study duration meant we were unable to follow trainees further than 1 year post-BBT, to see where they end up. Future research could usefully track these trainees to see if there is any impact on location of training. It would also be useful to track the specialty choices made by subsequent cohorts to see if general practice and paediatrics continue to be the chief long-term beneficiaries (although for the most recent 2020 cohort, general practice has been the most popular option, while none chose paediatrics). So far, the inclusion of psychiatry in the programme does not seem to have increased recruitment into that specialty. However, it is clear from the interviews with BBT trainees that experience in psychiatry is something that will be extremely valuable no matter what specialty they end up choosing.

Where BBT seems to create some tension is around the possibility that in any one cohort, there is the potential

that trainees may disproportionately opt for one particular specialty. If this is a small and competitive specialty (such as paediatrics in the west of Scotland), this could cause resentment among other applicants to that specialty as a result of BBT trainees being automatically guaranteed a place in year 2 of specialty training. As more cohorts come through the programme, it will be possible to gain a sense of whether this is likely to be an ongoing source of tension. Paediatrics trainers have suggested that ex-BBT trainees wanting to pursue paediatrics could be encouraged to train in less popular areas and have suggested that health boards currently not participating in the programme could be encouraged to do so to spread out any influx of trainees.

Future research could usefully track these early cohorts of BBT trainees to see if there are any prolonged advantages or disadvantages to having undertaken BBT. It will also be important to monitor patterns of specialty choice as fresh cohorts pass through the programme, to determine whether some of the early trends (the popularity of paediatrics, the unpopularity of psychiatry) persist and if so, how best to address this.

CONCLUSION

This evaluation has shown that the experiences gained by trainees during the BBT programme give them a set of skills that they perceive will be extremely valuable for their ongoing careers and their understanding of the NHS as a whole system. They were able to see the links and overlap between different specialties and understand the interface between primary and secondary care. This gave them an important understanding of the GP referrals system as well as an understanding of the patient journey when they are discharged back into the community. The importance of doing a psychiatry placement was emphasised because trainees will encounter psychiatric conditions in whatever specialty they ultimately choose. Once in their post-BBT specialty, several of the trainees indicated a desire to develop a secondary interest in one of the other BBT specialties, highlighting that they were keen to continue the generalist mindset once they had embarked upon their onward specialty. There is a clear sense that a programme such as BBT has the capacity to create doctors who will carry on using their generalist skills and who will have the ability to care for patients more holistically, even if they end up working in focused practice areas. Finally, for the many doctors who feel unsure about their choice of specialty after Foundation, BBT helps to keep options open for longer, which can only be a good thing in a highly structured training environment where inflexibility and difficulty in switching training are still cited as concerns for trainees.

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