BMJ Open Commercial business and partnership aspects of general practice: the learning needs of First5 general practitioners in NHS Scotland-a qualitative study

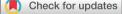
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ABSTRACT

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Objectives To identify the learning needs of recently qualified general practitioners (GPs) (First5) in National Health Service (NHS) Scotland concerning GP partnership and the commercial business aspects of general practice. It aimed to identify learning opportunities during General Practice Specialty Training and the first 5 years of work, and to explore their suggestions of additional resources that would improve their sense of preparedness for partnership. A secondary aim was to explore what influenced their current choice of employment model and place of work.

Design Qualitative research study using grounded theory methods. Recruitment was stratified to include First5 GPs from a range of NHS boards in Scotland including remote and rural areas. Participants were interviewed in small focus groups or individual interviews in person, or over the telephone depending on their preference. Interviews were audio-recorded and transcribed. Transcriptions were coded and codes developed into themes using Charmazian grounded theory methods. Data saturation was achieved and verified by the researchers.

Setting General practice in NHS Scotland. Participant GPs, within the first 5 years of completion of General Practice Specialty Training, who were working in NHS Scotland. **Results** Twenty-seven recently qualified GPs participated in the study. Three main themes were constructed: preparedness for partnership from experiential learning in General Practice Specialty Training; perceived commercial business learning needs and preferred learning styles (with learning needs arranged into five topic areas); considerations that inform decision-making about choice of employment model and of practice. Factors that influenced the decision to enter into specific employment models were identified.

Conclusion Lengthening the time spent in specialty training may help GP trainees gain more knowledge, skills and confidence about the commercial business aspects of general practice and of GP partnership.

INTRODUCTION

In the UK, after completing General Practice Specialty Training (GPST), general practitioners (GPs) qualify for the Certificate of Completion of Training (CCT) in general practice, issued by the General Medical

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Participants were drawn from 11 of the 14 National Health Service (NHS) boards in Scotland, and they had experience of working in a range of practices and employment models.
- ⇒ Participants had experience of working in areas of deprivation and remote and rural areas.
- ⇒ Social networks were used to recruit participants including those who attended a large NHS Education for Scotland conference aimed at First5 general practitioners; this may have biased their responses in interviews.
- ⇒ The study involved participants working in NHS Scotland only: the other three countries of the UK were not included in the study and it is known that employment opportunities in general practice differ among the four nations.

Council (GMC). Their names are added to the GMC's GP register and they are able to work independently in general practice. Newly qualified GPs are free to choose from a range of clinical career paths and contractual employment models. The most common options for GPs wishing to continue in clinical practice in the UK are: to become a partner, to accept a salaried post, to work as a locum or to work in the out-of-hours service.¹ GP partners are self-employed doctors who run their own commercial business with other partners, holding a contract with a National Health Service (NHS) board and providing general medical services to patients. Salaried GPs are directly employed by practices or NHS boards. Locum GPs are self-employed, usually offering short-term work to practices. Out-of-hours GPs have a contractual arrangement with an NHS board to work evenings and weekends. GPs may choose a combination of these roles, and some have non-clinical roles such as in medical education, management or university work.² GPs within the first 5 years of CCT have been termed First5 GPs



by the Royal College of General Practitioners (RCGP). The RCGP has called for investment and support for this group of GPs.^{3 4}

Partnership has been the predominant GP employment model in the UK for the last 100 years.⁵ In the last 10 years, there has been a persistent decline in the number of GP partners in NHS Scotland, falling from 3779 in 2010 to 3328 in 2020, with a corresponding increase in the number of salaried GPs from 483 to 1144.⁶ This is partly due to the growing trend of newly qualified GPs choosing salaried and locum work after completing training,^{7 8} although interest in partnership has been shown to increase later in their careers. While only 4% of GP trainees anticipated joining a partnership in the first 6 months after completing training, this increased to 33.9% some 5 years into their career⁹ with 45% of all salaried or locum GPs considering partnership for the future.¹⁰

The Scottish Government has published its new contract for GPs in Scotland and sees the independent contractor status of GPs as important in healthcare delivery for the future.¹¹ Another aspect valued by the Scottish Government is the concept of continuity of care, as promoted by Starfield, and the potential for long-term continuity to develop effective therapeutic relationships between GPs and patients.¹²

Reports are published regularly on the numbers of GPs in each employment model in Scotland.¹ However, little is known about the factors that influence the career choices of First5 GPs. Surveys of GP trainees, salaried GPs and locum GPs have identified the negative portrayal of general practice in the media.⁹ This, coupled with experiences derived from their time spent in training practices, and their perceptions of the work-life balance of partners and practice morale, were significant influencers on whether to pursue partnership.⁹ Personal factors such as being geographically unsettled,¹³ or plans to have children, were identified as reasons to postpone becoming a GP partner.¹⁴ Further deterrents to partnership included lack of training in business matters,^{7 8} unease regarding the associated financial risks,¹⁰ concerns that workload may exceed capacity and perceptions that the partnership employment model lacked flexibility. In a recent study, First5 GPs in NHS Scotland identified their perceptions of gaps in GP training that became apparent with their move into independent practice.¹⁵ The business of general practice was considered an area in which they felt they had gaps in their learning. For those First5 GPs considering partnership, perceived benefits of the model included freedom to innovate, a greater degree of influence within the practice and an expectation of a higher income.¹⁴

While the role of a GP partner includes running a business, there is no clear definition of what business skills are needed for this role. The RCGP curriculum for GPST includes: 'developing the financial and business skills relevant for your role'¹⁶ but does not elaborate further on what this may entail. GPST learning in this area is assessed through various components of the membership

examination (MRCGP): the Applied Knowledge Test, a leadership activity, quality improvement projects and workplace-based assessments.¹⁶ However, it is not known how prepared First5 GPs considered themselves to be for the business aspects of partnership.

This study aimed to identify the learning needs of First5 GPs in NHS Scotland relating to GP partnership and the business aspects of general practice. It aimed to identify the learning opportunities during their GP specialist training and in the first 5 years of post-CCT work, and to explore their suggestions of additional resources that would improve their sense of preparedness for partnership. A secondary aim was to explore what influenced their current choice of employment model and place of work.

METHOD

A qualitative research approach using Charmazian grounded theory methods was used to explore the perceptions and experiences of First5 GPs in relation to their learning needs of GP partnership and the business of general practice.¹⁷ A qualitative approach using semistructured interviews was considered appropriate as it allows researchers to question participants and identify the underlying reasons for their perceptions and experiences. This would not be possible using data collection instruments such as questionnaires. The study design consisted of a recruitment stage, data collection and data analysis, undertaken by three researchers.

The researchers

The first and second authors had some experience of qualitative research and were First5 GPs in clinical practice, one being female and one male. The third author is an experienced male qualitative researcher, with a doctoral qualification in this research field, and an experienced GP.

Recruitment

First5 GPs, who were working in NHS Scotland and had completed GP training in the UK within 60 months of the beginning of the research period, were included in the study. A purposive sampling strategy was used to maximise diversity of perceptions and experiences. A sampling grid was constructed that included remote and rural GPs, those working in areas of deprivation and the 14 territorial boards in NHS Scotland. The sampling grid included different employment models such as salaried GPs, partners, locum GPs and out-of-hours practitioners. First5 GPs were contacted by email by one researcher and invited to take part in a focus group or one-to-one interview. Focus groups allow for interactions between the individuals taking part in this type of interview, whereas in-depth interviews enable further exploration of individuals' thoughts and perceptions in a private setting.¹⁸ Their preferences and availability for either data collection method determined whether they took part in either

Box 1 Question topic guide

- ⇒ What are your thoughts about general practitioner (GP) training preparing you for the business and managerial aspects of being a GP partner?
- ⇒ How do you think GP training could be improved to better prepare trainees for the business and managerial aspects of being a partner?
- \Rightarrow What are your impressions of what it is like to be a GP partner?
- \Rightarrow What are some of the advantages and disadvantages of being a GP partner?
- \Rightarrow What are your thoughts on being a GP partner?
- \Rightarrow What would make you feel better prepared for partnership?
- \Rightarrow How would you like to learn about being a GP partner?
- \Rightarrow Who would you want to learn from?
- \Rightarrow When is the best time to start learning about partnership?
- \Rightarrow How much would you be willing to pay to access your preferred course?

method. Further recruitment took place at a conference for First5 GPs organised by NHS Education for Scotland (NES).

Participants were sent a study information sheet giving details of its aims. They signed a consent form giving permission for their discussion to be audio-recorded and transcribed. An assurance was given that discussions would be confidential and transcripts anonymised. A professional fee of £75 was offered to participants to compensate for loss of earnings in recognition that some were working as self-employed locums or working in out-of-hours services.

Data collection

A question topic guide (see **box 1**) for the semistructured interviews was constructed by the researchers, based on the current literature, and after discussions among the research team.

Individual interviews and focus groups were held in mutually agreeable settings or by telephone or using video-conferencing technology. Interviews were held several weeks apart allowing researchers time to listen to audio-recordings, examine transcripts and make adaptations to questions posed to subsequent participants, thus adopting an iterative approach. Transcripts were prepared by NES clerical staff. Recruitment ended when data saturation was achieved. This was judged by the research team when no new perceptions and experiences were found from participants as the interviews and analysis progressed and confirmed by undertaking two further interviews to be sure of this.

Data analysis

Transcripts were checked against the audio-recordings and corrections made by researchers. Transcripts were read and reread independently by researchers who undertook initial analysis of the interviews they had undertaken. Data analysis followed the grounded theory methods described by Charmaz: codes were constructed and brought together into themes.¹⁷ Coding was undertaken separately by the researchers who met at regular intervals to discuss and agree emergent themes. Any themes causing disagreement were discussed and talked through until the research team reached agreement. Analytical memos were written and shared by the researchers.

RESULTS

Twenty-seven First5 GPs participated in the study and were interviewed between August 2019 and November 2019. Seven participated in one-to-one interviews which took place in their GP practice or in their home. Twenty participants took part in three focus groups of six or seven participants, each lasting up to 1 hour, and held at the NES continuing professional development (CPD) conference for First5 GPs. There were no co-participants or observers. There were 18 female and 9 male participants who worked between 4 and 10 sessions per week (one session equates to approximately 4 hours of work¹⁹). Participants were drawn from 11 of the 14 territorial boards in NHS Scotland. Two participants were working in remote and rural areas as defined by the Scottish Government.²⁰ Participants worked across a range of different employment models, with 15 working in more than one model (see table 1). A few participants were acquainted with the two First5 GP researchers but none were known to the senior researcher. This was in keeping with the researchers being drawn from the First5 GP community in NHS Scotland. Participants were aware of the research topic via the study information leaflet.

Data saturation was achieved by the third focus group interview.

Three themes were constructed and are presented in box 2.

Preparedness for partnership from experiential learning in GPST

Some participants were attracted to general practice because it gave opportunities to develop business skills, but others did not see this as part of their role in the future. To some extent, this was influenced by First5 GPs' experiences during GPST. Most participants felt the focus of GPST was the development of a minimum level of clinical competence required to be a safe and independent clinician as reflected in the RCGP training curriculum and the MRCGP examination.

You spend your three years just trying to get through the AKT [Applied Knowledge Test] and CSA [Clinical Skills Assessment] and ideally you don't want to kill anybody when you become a GP. (Participant 26)

During GPST, participants were introduced to the nonclinical roles of a partner to widely contrasting extents. Some had no involvement in the business of general practice which contrasted with others who were regular attenders at practice business meetings. The quality of experience was dependent on the initiative of the trainee,

Employment model	Number of participants
Locum	7
Out-of-hours	8
Partner	9
Salaried	12
Other (advisory roles, specialist interests, clinical management, medical education, fellowships, military work)	8

the attitude and inclusivity of the trainer, and the business transparency of the practice.

Participants who were included in business discussions when trainees perceived a greater level of trust and belonging within the practice team, and were less intimidated by the future role of the GP partner. In contrast, others described being excluded from business discussions, perceiving these topics to be out of bounds for them as GP trainees. They described the complexity, risks and uncertainty surrounding the concept of partnership, and on completion of training lacking confidence in their ability to fulfil that role.

When I was a GP trainee, whenever they had their business meetings, I often got asked to leave the room. So, there's always this taboo as to what actually do you do in your tax meetings? (Participant 11)

When asked how they would like to learn about the business of general practice, participants had a preference for gradual exposure throughout training, grounded on reallife experiences, with more targeted learning nearing the point of transition to partnership.

I think if you had something that gave you an idea about what the kind of roles and responsibilities were, maybe even a couple of case examples, then that would be a good basis for which to build on that experience. (Participant 20)

Discussions using anonymised or fictitious business information were perceived as an alternative to disclosing sensitive business and financial information to GP trainees. Participants expressed reservations about tackling this topic in single standalone sessions. Day-release sessions, when GP trainees from an area attended for

Box 2 Identified themes

- ⇒ Preparedness for partnership from experiential learning in General Practice Specialty Training.
- \Rightarrow Perceived business learning needs and preferred learning styles (with learning needs arranged into five topic areas).
- \Rightarrow Considerations that inform decision-making about choice of employment model and choice of practice.

formal teaching, were seen as opportunities to gain insight into the differences between local practices. Other suggestions included increasing the time spent in general practice during the training programme and clearer guidance in the training curriculum on how this topic could be learnt.

Perceived business learning needs and preferred learning styles

Participants preferred to learn about the business of general practice from supportive and experienced partners in their training practice.

I do feel that it's on the job training that's going to allow you to do it. (Participant 15)

External educational resources were viewed as complementary to learning from the training practice: offering learning on how to mitigate against possible 'worst-case scenarios', opportunities to ask questions to subject experts and to learn from peers at a similar career stage. Preferred learning methods and resources included faceto-face courses, interactive small group online learning or teaching sessions that were scheduled during the working week.

It needs to be kind of smaller numbers of people to properly get their heads round it and ask questions. (Participant 12)

There was a preference for speakers to be GPs, practice managers or relevant professionals such as lawyers and accountants, and for presentations to be delivered without commercial attachments and contextualised to primary care.

I think I would definitely want a GP as one of them, and possibly a non-GP, someone that knows more about the business side or how other companies are run. (Participant 5)

Most were not opposed to paying up to £200 for a full-day learning event.

The learning needs of the business of general practice identified from participants were grouped into five topic areas and structured by the research team into specific learning objectives as shown in figure 1.

Considerations that inform decision-making about employment model and choice of practice

Each of the employment models shown in figure 1 was perceived to have its own advantages and disadvantages and these are listed in figure 2. Despite many participants expressing views on their preferred model at the time of completing training, as participants gained experience over time, they gradually changed their personal priorities.

I came out of GP training saying I was never going to be a partner. Famous last words! (Participant 14)

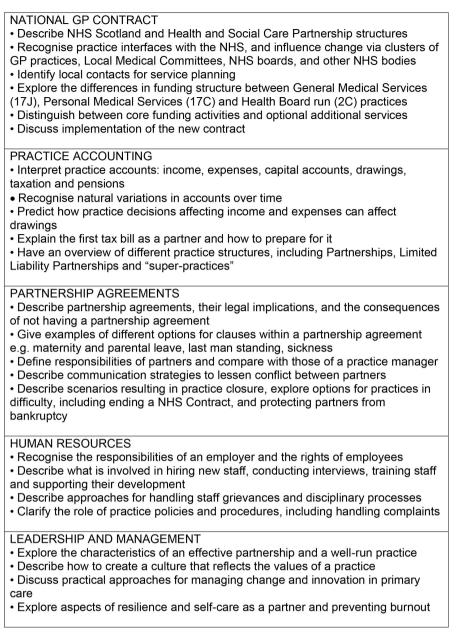


Figure 1 The learning needs of First5 GPs relating to the commercial business and partnership aspects of general practice. GP, general practitioner; NHS, National Health Service.

The decision-making process about each employment model was a complex one, taking into consideration their perceptions of what each role had to offer, their preparedness to settle in a geographical area, its compatibility with their personal life goals and whether an opening was available in their preferred practice. Partners were commonly perceived as having ultimate responsibility for the practice and the role was associated with a degree of permanence. Positive remarks about partnership included having a greater degree of autonomy over their working environment, setting the strategic direction of the practice and experimenting with new ways of working. Continuity of patient care and with the practice team was valued.

We can actually make change and then I can see that come out. (Participant 23)

Some described a sense of natural progression into the role of a GP partner with many considering partnership for the first time during their first 5 years. Negative perceptions of partnership included a feeling that partners were overwhelmed and overworked. Being responsible for keeping a practice running in an environment where recruitment was challenging, and the unclear consequences of the New GP Contract in Scotland, were seen as risky.

I think of people [partners] being under a lot of pressure and just bursting at the seams with roles and responsibilities and low on time and resources. (Participant 22)

The perceived advantages of salaried GP roles included having employment rights, such as maternity leave, and

PUSH FACTORS		PULL FACTORS
Overworked Difficult to recruit partners Difficult to leave Pressure on work-life balance More administrative work New contract uncertainty Lack of business knowledge	Partnership	Autonomy within practice Innovation Continuity of patients/colleagues Higher income Interest in medical education
Less influence in practice Lower income	Salaried	Clinical role only No business risk Guaranteed maternity leave Stable working hours Flatter hierarchy
Lack of income security Lack of continuity	Locum or Out-of-Hours	Flexibility Variety Portfolio careers

Figure 2 Summary of the push and pull factors of different employment models.

of having income stability. Salaried GPs were considered to have a greater sense of parity among members of the healthcare team particularly in NHS board-managed practices. The main disadvantage of this role was thought to be a sense of frustration with their lack of influence in decision-making within the practice.

I've come to realise, I want to be part of that inner circle. (Participant 20)

The greatest attractions to working as a locum GP and in the out-of-hours service were the desire to work in a range of different environments and to create time after the intensity of training. This allowed time to consider professional options and personal life choices.

We are in a culture now as GPs where we're very flexible, very sought after, very well paid as locums. (Participant 7)

Figure 2 is a summary of the push and pull factors that affected the choice of different employment models.

Participants were selective about the practice they considered for permanence and chose a practice they were familiar with: usually having spent time there as a trainee, or as a salaried or locum GP. This allowed for a period of observation when they assessed whether the practice had the desired characteristics they were looking for. These included having partners who demonstrated a good work–life balance, were receptive to innovation and were perceived as being supportive to new partners. An inclusive and experienced practice team in a desirable location was valued.

A practice I used to locum at has asked me to be salaried with a view to partnership next year. The reason I'm taking it on is because they're a great team. They've got a good working culture. They've got up to date admin protocols and they seem to have a good work/life balance. (Participant 21)

Factors that made partnership feel less risky included partnerships with stable finances, with no capital investment needed from new partners and where most partners were not approaching retirement.

DISCUSSION Main findings

This study identified three main themes from interviews with First5 GPs in NHS Scotland. First5 GPs had variable experiences of learning about the business of general practice during GPST. Learning opportunities varied considerably for GP trainees and some felt excluded from business meetings during training. We identified five main themes relating to the learning needs of the business of general practice. We identified the 'push' and 'pull' factors of a range of employment models and identified how these influenced First5 GPs in decision-making regarding their employment model and place of work.

Preparedness for partnership and perception of risk associated with partnership were heavily influenced by trainees' learning experiences during training. These were varied and unstructured and largely dependent on the initiative of trainees, trainers and the transparency of the practice. First5 GPs would like to have gradual exposure to the business of general practice throughout GPST with targeted learning at the time when they were considering partnership. For most participants, this was after CCT. First5 GPs preferred to learn from supportive colleagues and valued access to complementary educational resources contextualised to their work experience. They wanted to learn from experienced GPs, First5 peers and subject-area experts through mentorship or small group work. First5 GPs were interested in having an overview of topic areas identified rather than in-depth knowledge, with sign-posting to resources they could return to, as their learning needs evolved.

Strengths and limitations

This study identified a number of influential factors that determined the employment model chosen by First5 GPs and adds usefully to the scant literature of this area. Participants were drawn from 11 of the 14 NHS boards in Scotland, and they had experience of working in a range of practices and employment models. Participants had experience of working in areas of deprivation and remote and rural areas. Data saturation was achieved and confirmed. The research team combined current First5 GPs in NHS Scotland with an experienced GP researcher, bringing complementary skills and a range of viewpoints to the study. All three worked in different NHS boards in Scotland.

The study had limitations. Social networks were used to recruit participants including those who attended a large NES conference aimed at First5 GPs. This may have biased their responses in interviews. The study involved participants working in NHS Scotland only: the other three countries of the UK were not included in the study. Employment opportunities in general practice differ among the four nations. For example, NHS England has additional business models such as super-practices and practice federations which are not seen in NHS Scotland.⁵ Learning needs were assessed from the perspective of First5 GPs only: future research could consider how this perspective compared with the views of experienced GPs and trainers.

Comparison with existing literature

This study supports earlier findings that decision-making on choice of employment model is complex, and is influenced by training experiences.^{7 9 13 14} It takes into account perceptions of the advantages and disadvantages of different career options in relation to professional and personal goals. The findings complement the quantitative study which identified that the choice of employment model is fluid during the first 5 years.⁹ We have described how this is influenced by the accumulation of professional experiences and a weighing up of the opportunities that arise in the context of changing personal circumstances of the First5 GPs themselves.

Implications for further research and change in practice

In some countries in the UK, GP training schemes are set to extend the time spent in clinical general practice. It would be important to identify if this leads to greater exposure of GP trainees to the business of general practice and if there are improvements to their perceptions of readiness to enter partnership. Some participants considered that their learning experiences of the business of general practice during GPST did not allow them to gain the necessary confidence to enter partnership. Trainees' experiences varied considerably among participants. Those GP trainees who were trusted with confidential information and included in business meetings were more confident about these matters. UK training authorities should be more aware of this variation and encourage practices to be open and transparent about the business of general practice. Further learning opportunities at a local or regional level would be valued by trainees and training authorities should consider how best to deliver this education. Other learning materials and resources from accountants and solicitors regarding practice financial statements and partnership agreements would be welcomed by First5 GPs.

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Contributors DEC conceived the study, recruited the research team and searched the existing literature. RFL and GR collected the data and analysed it with DEC. RFL wrote the manuscript with contributions from DEC and GR. DEC edited the manuscript and is responsible for the overall content as the guarantor .

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Competing interests DC is an Assistant Director within NHS Education for Scotland and provides CPD resources to GPs and their teams in Scotland. GR was a medical education fellow within NES. All authors were practising GPs in NHS Scotland at the time of the research project.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

Ethics approval Under UK 'Governance Arrangements for Research Ethics Committees', ethical research committee review is not required for service evaluation or research which, for example, seeks to elicit the views, experiences and knowledge of healthcare professionals on a given subject area. Similarly, 'service evaluation' that involves NHS staff recruited as research participants by virtue of their professional roles does not require ethical review from an established NHS research ethics committee.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data sharing not applicable as no datasets generated and/or analysed for this study. No datasets were generated for this study.

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REFERENCES

- 1 Information Services Division. Primary care workforce survey Scotland 2017 NHS National Services Scotland, 2018. Available: https://www.isdscotland.org/Health-Topics/General-Practice/ Workforce-and-Practice-Populations/Workforce/national_primary_ care workforce survey.asp [Accessed 5 May 2022].
- 2 Gibson J, Sutton M, Spooner S. Ninth national GP Worklife survey 2017. Policy research unit in commissioning and the healthcare system 2017.
- 3 The Royal College of General Practitioners. First5. Available: www. rcgp.org.uk/first5 [Accessed 5 May 2022].
- 4 Taylor C, Parsons J, Sparrow N, et al. The first5 concept. Br J Gen Pract 2011;61:72–3.
- 5 Department of Health and Social Care. GP partnership review: final report. Available: www.gov.uk/government/publications/gppartnership-review-final-report [Accessed 5th May 2022].
- 6 Public Health Scotland. General practice: GP workforce and practice list sizes. Available: www.isdscotland.org/health-topics/generalpractice/workforce-and-practice-populations/[Accessed 5 May 2022].
- 7 Nosa-Ehima M. Through the eyes of GP trainees: workforce of the future. Available: https://www.kingsfund.org.uk/blog/2018/08/gp-trainees-workforce-future [Accessed 5 May 2022].

- 8 Hunter A. The future of general practice: the view of GP trainees. Available: https://www.kingsfund.org.uk/blog/2019/12/futuregeneral-practice [Accessed 5 May 2022].
- 9 Dale J, Russell R, Scott E, et al. Factors influencing career intentions on completion of general practice vocational training in England: a cross-sectional study. *BMJ Open* 2017;7:e017143.
- Wessex Local Medical Committees. GP workforce survey, 2018. Available: https://www.wessexImcs.com/gppartnershipreview [Accessed 5 May 2022].
- 11 The Scottish Government. GMS contract. Available: https://www.gov. scot/publications/gms-contract-scotland/pages/14 [Accessed 5 May 2022].
- 12 Starfield B. *Primary care: concept, evaluation and policy*. New York, NY: Oxford University Press, 1992.
- 13 Evans J, Lambert T, Goldacre M. GP recruitment and retention: a qualitative analysis of doctors' comments about training for and working in general practice. *Occas Pap R Coll Gen Pract* 2002:iii-vi, 1-33.
- 14 Bregazzi R, Harrison J. Factors influencing career choice: experience from GP career start in County Durham. *Educ Prim Care* 2002;13:477–89.
- 15 Cunningham DE, Ward C, Kyle J, et al. Learning needs, preferred learning methods and learning challenges of first five general practitioners in NHS Scotland: a qualitative study. *BMJ Open* 2021;11:e044859.
- 16 Royal College of General Practitioners. Training. Available: www.rcgp. org.uk/training-exams/training.aspx [Accessed 5 May 2022].
- 17 Charmaz K. Constructing grounded theory. 2nd edn. London: Sage, 2014.
- 18 Barbour R. Making sense of focus groups medical education 2005;39:742–50.
- 19 British Medical Association. Job planning for GPs. Available: https:// www.bma.org.uk/pay-and-contracts/job-planning/job-planningprocess/job-planning-for-gps [Accessed 5 May 2022].
- 20 Scottish Government. Scottish government urban rural classification, 2016. Available: https://www.gov.scot/publications/scottishgovernment-urban-rural-classification-2016/pages/2/ [Accessed 5 May 2022].