Clearing the Path

Report of a Board for Academic Medicine Short Life Working Group

on

An Academic Training Pathway for General Practice in Scotland

26.2.20

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Preliminary recommendations

The current GP academic pathway needs to be strengthened and made visible to undergraduate students, specialty trainees (GPSTs) GPs and University staff. The pathway needs to be clear for those who wish to pursue a career incorporating teaching and research. Members of BfAM including universities, NES, CSO, NRS, Health Boards and SGHD need to work together to achieve that goal. The recommendations below are listed by the group who may be asked to take responsibility for leading on delivery of the finalised proposals. A Force-field analysis (Appendix A) describes where in the pathway these recommendations would have their principal effect.

General

1. The Scottish School of Primary Care (SSPC) is well placed to advocate and co-ordinate evaluation of the implementation process and provide annual reports to BfAM.
2. Some of the specific activities recommended cannot currently be delivered with the current levels of academic and administrative staffing. A strengthened pathway involving investment in posts and reconfiguration of activity will require additional resources to enable progress. Some preliminary estimates of these requirements are provided though further work modelling future projections is required.
3. A single point of contact including a website enabling enquiries from academic and potential academic staff to be dealt with and responded to expeditiously.
4. The recommendations should ensure excellence and enable access to the pathway to everyone who may contribute to and benefit from an academic career taking into account rurality, gender, ethnicity and career stage.

Heads of Department/ Division/ Research Group (HoDs)

5. Provide more research exemplars, training opportunities for undergraduates (projects, summer studentships, intercalated BSc degrees).
6. Work with GP directors to integrate research methodology within the PG trainer development programme.
7. Increase clinical PhD student intake to 5-6 annually by applying for a Wellcome Trust Doctoral Training programme as well as existing routes.
8. Mentor doctoral students to obtain external competitive post-doctoral, intermediate and senior fellowship funding (MRC, Wellcome, charities) as well as NRS Fellows.

Heads of Teaching (HoTs)

9. Map current primary care research content of curricula and estimate feasible increase and timescale.
10. Introduce the concept of a portfolio career to UG students including research and teaching at an early stage of the curriculum.
11. Increase the number of teaching practices working in the academic hub and spoke model envisaged in the Gillies report.
12. Clinical tutors should have the opportunity for periodic review of their career and provided with opportunities to develop academic expertise in topic areas (e.g. palliative care, care of homeless people etc) and progress to substantive academic posts.

NHS Education for Scotland (NES)

13. All GP Specialty Trainees in general practices should be enabled and encouraged to teach undergraduates.
14. 24 Academic Foundation Year posts should be available annually.
15. 5% of GP training posts should be four year academic posts with the last two years spent 50/50 clinical/academic time. These should include education focused and research focused (SCREDS lecturer) posts.
16. Some current GPSTs in year 1 or 2 should be given the opportunity to convert their GPST3 post into a two year 50/50 Clinical/Academic post.
17. 8 academic fellowships should be available as part of the post-CCT GP fellowship scheme.

Deans

18. Enable a 50% expansion of the academic GP workforce by building additional substantive GP academic posts into medical school/ institute strategy.
19. Work with others to rationalise the current range of career titles for all GPs involved in teaching to improve academic visibility via titles such as honorary lecturer/ senior lecturer/ associate professor.
20. Facilitate re-establishing stronger links between teaching and research in medical schools.

Health Boards

21. Create more career start posts to enable First 5 GPs to gain early experience of a mixed clinical and educational portfolio career.

NRS

22. The Primary Care Network should survey research training needs of GPSTs and propose means of delivery.
23. Provide more NRS clinician posts to enable experienced GPs to enter academic careers

Chief Scientist Office (CSO)

24. Work with NES & HoDs to increase the number of two year Joint NES/CSO Postdoctoral Clinical Lectureships and provide equity for post-doctoral GPs to match the opportunity for high-flyers in hospital posts to apply for a 50% academic post (for 50:50 post-PhD SCREDS posts).

Scottish Funding Council

25. Create 14 'New blood' lecturer posts

Scottish Government

26. Ensure that funding for academic roles competes with similar stage clinical roles. The fact that GPs are currently excluded from the discretionary points system which creates inequity with consultants in Scottish hospitals and with GP academics in England should be addressed.
27. Review existing budgets to ensure changes to the academic pathway are adequately funded.

Additional work on these preliminary recommendations to be undertaken include:

- Modelling of projected numbers to deliver increased teaching required
- Further international consultation

These are suggested before the report is finalised by Mid-Summer 2020. Thereafter, annual reports should be provided by SSPC to BfAM and the strategy revised in 4-5 years.

Introduction

At its March 2019 meeting, the Board for Academic Medicine asked a short life working group: *to propose an effective and achievable career pathway that enables Academic General Practice in Scotland to recruit and retain sufficient academic staff to deliver world class teaching and research*. The main purpose in doing so was to enable the implementation of anticipated recommendations in Prof. Gillies's report to BfAM: *Undergraduate medical education in Scotland: enabling more general practice based teaching* in order to deliver on the Scottish Government's policies to increase **teaching in primary care to 25%** of contact time in the curriculum and the **number of GPs in Scotland by 800 by 2028**. This report has subsequently been published and its recommendations accepted by the Scottish Government [1]

A report prepared by CSO for that meeting noted that previous reports on the issue by **Ritchie in 2009** and **Mercer and Morrison in 2018** had not been fully implemented. [2], [3] As a consequence, Academic General Practice in Scotland is highly precarious, comprising less than 0.1% of the GP workforce with numbers falling and 13.4 (51%) of the current postholders are over the age of 55. Nevertheless, increasing numbers of Scottish graduates, foundation places, GP Specialty Trainee numbers and governmental policy imperatives mean that this report has the potential to make a substantial and sustained improvement to the academic GP career pathway on Scotland.

Approach to the review.

15 meetings with a range of stakeholders have occurred (Appendix B: Report Contributors, n= 37). Twelve interviews and seven focus groups (45 participants in total) with undergraduates, GP Specialty Trainees (GPSTs) and GPs were undertaken by a qualitative research team (Appendix C: What the stakeholders say) A survey of final year GPSTs and GPs in their First 5 years of independent practice (Appendix D: Survey) and a literature search (Bibliography). A force field analysis comparing the current situation with the requirements to achieve the policy objectives across the career pathway from undergraduate years to retirement has been prepared (Appendix A: Force field analysis).

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[1] https://www.gov.scot/publications/undergraduate-medical-education-scotland-enabling-more-general-practice-based-teaching/pages/3/

[2] http://www.sspc.ac.uk/media/Media_706928_smxx.pdf

[3] http://www.sspc.ac.uk/media/Media_705184_smxx.pdf

Some recommendations can be acted on immediately. Others require changes in policy and strategy which will necessitate longer term investment if the policy objectives are to be achieved.

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Appendix A: Force Field Analysis of Changes Proposed at different points on the Pathway

Report recommendation number	Current situation	What would be the ideal/sustainable	How can we achieve this	Principally Responsible	Time frame
Undergraduate Students 9 10	Variable exposure to identifiable Academic GP and GPs	Curriculum content to include more academic GP content. e.g. more direct contact between research active GPs and UG students; increase the discipline's visibility in the content of curricula. Better visibility for academic GPs. Rename tutors as Hon. - Clinical lecturers - Senior lecturers - Associate Professors[4] Needs a national framework to define criteria	Map current Curricula Introduce the idea of a portfolio career option at an early level.	HoTs	5 years
13	**Some GPSTs have recently started to incorporate UG teaching into their training**	**All GPSTs are prepared to teach UG students**	**Ensure STs are prepared. Local liaison between NES and medical schools**	**NES GP Directors & associate**	**2 years**

[4] https://www.admin.ox.ac.uk/personnel/staffinfo/academic/types/

5	GP often viewed by students as less intellectually challenging discipline	Every student is aware of high quality research topics and methodology in GP: past, present and needed in future.	**May need more space in academic hub practices** Provide more research training opportunities for undergraduates: - Projects - Summer studentships - Intercalated BSc	**directors with HoTs** HoD/Hots need to map existing and estimate feasible increase	5 years
Academic Foundation posts **11** **14**	**0/60 academic FY posts are in GP** **Most FY2 programmes offer GP experience – none academic** **LIFT projects[5] being piloted in Tayside** **Foundation School is undertaking a review of academic programs.**	**24 FY2 posts in academic hubs every year.** **8 practices take 3 each. 2 affiliated with each Academic Foundation Programme.** **4 days a week in practice 1 day a week in local academic GP unit.**	**Suitable Hub practices need to be identified with input from NES PG directors, HoDs and HoTs**	**NES GP & Foundation Directors** **May need Additional resource from SGHD to NES**	**As extra foundation posts are funded starting in 2021 so F2 in 2022 and increasing in 2023.** **With 1 or 2 academic hub practices linked to each Medical school**

[5] https://www.nwpgmd.nhs.uk/foundation/LIFT

	55 new posts currently planned.				
GPSTs/SCREDS Lecturers (4 year GP training programmes) 15 16	4- one every 2 years in ADEG. GP trainee intake increasing from 300 to 400 annually.	5% of GP trainees should be in academic posts with last 2 years split 50/50 clinical and academic time. Current GPSTs in year 1 or 2 should be given the opportunity to convert their GPST3 post into a 2 year 50/50 Clinical/Academic post.	As part of NES Budget increase to 400 GPSTs.	NES GP Directors & Deans HoTs and HoDs	3 years Start 2020
GPSTs who are not in SCREDS 22	**Research training course provided by NRS Primary Care**	**Identification of research training needs**	**Survey[6] and follow up. Consider starting PhDs during training**	**NRS PC**	**I year**
Academic Fellows 17	4 wte posts annually but availability uncertain until late in NES annual budget process	8 with a definite annual budget	NES Employ fellows	HoDs to liaise with NES over arrangements for employment by NES but location in GP departments	Start 2021 and increase wte by 1/year to target

[6] Potential funding https://acmedsci.ac.uk/inspire-round-5

UG Tutors

	Current situation	What would be the ideal/sustainable	How can we achieve this	Responsible	Time frame
Early career 1 12 21	**Unclear mechanisms about access to posts and for progression**	**Clear description on SSPC & each university website of how to become a tutor and vacancies. Clarify grade descriptors and criteria for progression in each medical school. Also relevant to later career progression.**	**HoTs review**		**2 years**
Late career 12	Variable support and CPD	Annual review and opportunities for development of expertise in topic areas	HoTs		2 years

PG Trainers

	Current situation	What would be the ideal/sustainable	How can we achieve this	Responsible	Time frame
6	**Some feel unprepared for role in supporting research ambition of GPSTs**	**Training the trainers in research issues as part of trainer induction and CPD for existing trainers**	**Integrate with PG trainer development program**	**GP Directors and research active GPs**	**2 years**

Research Focused

	Current situation	**What would be the ideal/sustainable**	**How can we achieve this**	**Responsible**	**Time frame**
Clinical PhDs 7 22	1-3 per annum	5-6 per annum	Add Clinical PhD program to existing routes	All to support BG in developing WT program	2-3 years
Post-doctoral posts **8** **23** **24**	**0-1 per annum**	**4-5 per annum**	**Maximise use of exiting sources and increase national pool of posts in all specialties** **CSO Budget increase**	**HoDs, CSO and NES**	**2-3 years**
Core University posts (L/SL/Prof.) 18 19 20 25 26	26 wte with new posts 0-1 per annum	Need increase to 40 to reverse recent losses and increase workforce to enable increased teaching and research. Increased collaboration with basic scientists and hospital specialists with appropriate content and methodological expertise will also be required.	Build expansion of GP into medical schools' strategy	SFC and Deans. 'New blood' lecturer posts may be appropriate and feasible.	3-5 years

Appendix B
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Appendix C: What the Stakeholders say…Background

In Scotland, there is a need to ensure we are recruiting and retaining General Practitioners (GPs). Rising workloads and higher patient expectations coupled with experiences in medical school (that focus on secondary care specialties) have reduced the number of early career doctors choosing primary care career pathways. [1,2] Furthermore, the rising demographic age profile in Scotland leading to new demands on clinical workloads, together with the proportionally reduced entry into a GP career means that there is continual need to attract and retain doctors in the specialty. [3,4] The increased day to day demands of fulltime clinical GP practice has led to a trend for GPs to develop portfolio careers, integrating specialist interest activities into their working week. [5]

For some GPs, this means undertaking and maintaining a portfolio of academic activity. This is done through a special interest in an area of clinical medicine; teaching either at undergraduate or postgraduate level; or by complementing practice with research [5,6]. Whilst the route to pursue a clinical academic pathway is clearly defined for most specialties, the route is less obvious for GPs wishing to combine a clinical and academic portfolio [7,8]. Academic general practice makes up a small proportion of the Scottish clinical academic workforce and the actual number is declining rather than growing [9]. Currently, 26.3 FTE were returned to Medical Schools Council classified as Academic General Practitioners (AGPs) compared to 35 FTE in 2013 (a 24.8% decline). In this most recent return, 13.4 (51%) FTE are over the age of 55. [10] This means the aging profile of the clinical GP workforce is more pronounced in the AGP workforce. This could lead to a crisis in expertise soon, should the trend continue.

There is no clear understanding of why there seems to be a crisis in recruitment to AGP. Clarity as to what factors are influencing choices of whether to become an AGP in the UK, from Medical School onwards, would enable the development and expansion of the current AGP career pathway and ensure it is fit for purpose.

What the Stakeholders Say…Purpose and Approach

The aim of this scoping exercise was to gain a snapshot of current activity and experiences in relation to AGP careers in Scotland. This scoping exercise will potentially influence the future direction of GP academic careers in Scotland.

The research sought to:

- Explore stakeholders' understandings of what an AGP career was.
- Explore what stakeholders considered important aspects of developing as an AGP.
- Explore facilitators and challenges to recruiting to and supporting AGP pathways.
- Explore stakeholders' opinions on what might be considered in the future when recruiting and retaining AGPs.

The approach taken

A qualitative approach enabled in-depth scrutiny of the experiences and opinions of stakeholders across the medical education continuum from undergraduate level to GP (see Appendix for detailed methodology).

This section of the scoping exercise included twelve interviews and seven focus groups with forty-five participants including: undergraduate medical students; graduate medical students; GP specialty trainees; AGPs; and GPs.

The interviews and focus groups proved a very rich source of information as participants were generous with their time. In the following section, we have made liberal use of excerpts from the interviews and focus groups to ensure that stakeholder voices are heard.

What the Stakeholders Say…Findings

Defining an AGP

Stakeholders had clear views with regards to what an AGP was, with few struggling to describe the role. Core to most definitions was ensuring the continuation of clinical practice, with most participants mentioning that this was a central component.

> *'I assume they'd be practicing.'* (Male undergraduate medical student)

> *'…I think of myself as a GP first and foremost and I think that is always what I say when I go to conferences and if I'm presenting whatever. I think that is to me so fundamental and so important that I'm a GP at the coal face seeing the patients….'* (Female AGP)

Alongside the clinical component, most participants mentioned the inclusion of a research component to an AGP role. More specifically, research should be primary care focused.

> *'…people who have trained as GPs who are undertaking research in areas of primary care.'* (Male GP)

Linked to these components, was a strong notion that research outcomes should be for patient benefit and that the work of AGPs could be expedited to primary care.

> *'…perhaps some crossover where they can actually try and look at putting their research into practice potentially.'* (Male graduate medical student)

> *'…. a role primarily based in research and…quality improvement associated with the outcomes of their research.'* (Female AGP)

Participants talked less often about including a teaching component. When prompted, some participants noted they hadn't considered it, but were positive about the inclusion of teaching. Some noted that teaching could be perceived as less important. Others had presumed that this would be part of the role and that this was the reason they had not articulated it explicitly.

> 'Interviewer: *…includes teaching role and research role and could an AGP be somebody who does one or other or do they have to do both?*

> Female GP: *I think they can probably do one or other, but I think ideally if you were doing something academic then it would be quite good to be teaching as well because we always need people who teach….*'

> '*…there's like less importance I think given to scholarship and teaching activities.*' (Female AGP)

> '*Oh yeah, absolutely. That goes without saying. Yeah, I would assume they are involved in some kind of teaching.*' (Male GP)

The current status: Defining current AGP pathways

Stakeholders were of the general opinion that no AGP pathway currently existed, with the onus being on GPs to access academic work of their own. Participants also indicated that there was also a lack of knowledge or information with regards to how an AGP career pathway was defined.

> *' … a lot of the information I have kind of come across* [is] *ad-hoc so my colleagues that are doing gastro who want to do research since they were in foundation year knowing exactly the pathway they needed to do. They knew about the funding grants and schemes they needed to apply for with a well-known gap between ST4 and a three-year PhD and it suggests this beautiful nice transition so it's just they've known that from you know from literally at foundation*.' (Male GP trainee)

For AGPs, this could mean there was a potential for isolation and lack of mentorship.

> *'…the issue is that there is no pathway. That's the problem for me…. there's no-one who's done this before. You go and you try and seek out like mentoring or coaching or you ask people above and nobody's doing what you're doing.'* (Female AGP)

> '*I don't think I've met anybody yet who's done exactly the same which again just tells you about the variety of people's jobs and the paths that they've taken.*' (Female AGP)

Participants had varying views with regards to when, or indeed if, they should complete a PhD. Many thought there was not enough time during specialty training to complete a PhD, some had been advised that a PhD was essential for an academic research career.

> *'…I was told that without a PhD, I wouldn't be able to get on. You can see that with people here so there's other clinicians… they haven't gone forward for higher degrees and…they're not gonna develop their careers. They're just going to be research assistants despite the fact that they have all these other skills and it [sighs] and that's one of the things that I think is kinda frustrating about academia.'* (Female aAGP)

A PhD was only seen to be possible following specialty training but to achieve this, funding would be required during and after a PhD to make it sustainable and many were unsure as how to go about applying for such funding.

> '*Well, I'm in the last year of my PhD and currently worrying about funding because I don't have anything at the end of it…'* (Female AGP)

To maintain this alongside academic work was thought to be challenging by some participants, particularly when they were considering how to achieve promotion in their academic role.

The current status: Accessing AGP work

As a medical student

It was noted that there was no pathway for AGP training during medical school. Indeed, it was perceived that there was little exposure to AGPs as role models in medical schools, meaning awareness of academic primary care for many did not start until after graduation from medical school or much later.

> *'If all of the people that you have selecting people for academic programmes are people who work in secondary care, they're not going to prioritise appointing people who work in primary care to do an academic programme which is difficult because to free up GPs or AGPs to be on those panels is more challenging because they tend to be less well-franchised than secondary care people.'* (Female aAGP)

Issues related to the hidden curriculum and clinical educators' attitudes to GP training were deemed pertinent in terms of it being seen as a low-value career path.

> *'I mean literally the sort of the hidden curriculum stuff was overwhelming. You know, you'd say you were interested in primary care and I literally had one consultant say, 'Oh, are you married?' and then I was like, 'Well, no,' and he's like, 'Oh, are you pregnant?' and I was like, 'Well, no,' and he's like, 'Why do you want to do primary care?''* (Female AGP)

However, it was acknowledged that the academic foundation training programme does exist for those who express an interest in academia. Many participants noted that their interest in an academic career started later than this and that primary care options were less well understood.

As a GP specialty trainee

At specialty training level, awareness of AGP as an option was patchy:

> '*Does Scotland do AGP training? Cause I know England does AGP training which is a bit like academic foundation, but I don't know if Scotland does.*' (Female GP trainee)

There was awareness of some opportunities for academic specialty training mainly through medical education routes. Stakeholders assumed that such an option would contain training in both research and teaching. Additionally, it was remarked on that standard GP specialty training did not prepare trainees for an AGP career. This was sometimes attributed to the lack of a clinical GP population.

> '*There is no academic component to GP training at all. There is nothing to encourage you to undertake any academic projects on the side really. If anything, there's the push to get you through with the three years as the earliest*

so you've got a lack of GP population out there, so the workforce builds up and develops and that's about it.' (Male GP)

Many stakeholders viewed academic training as an additional burden during specialty training as it was perceived to have to be accomplished within the same timeframe as standard training, meaning only a dedicated few would be attracted to it.

'*I think it does exist but you still need to tick all the boxes in the portfolio to get your CCT and GP. You still need to do all the regular stuff and then doing the academic stuff- so it is an extra like it's another thing which is fine if you want to do it.*' (Female GP trainee)

There was also the potential for a negative view of doing a 'non-standard' route during training, as coming out of the programme was thought to make it difficult to return.

'….*from my experience, getting out of programme experience is a bit of a nightmare within NES and within GP training.*' (Male GP)

The current exit options for those taking up academic specialty training were also not clear to participants. The above points resulted in the opinion that current specialty training options for the AGP could be unattractive for some. Indeed, GP academic pathways were considered to be more accessible after CCT.

'You're thinking right well why don't I just CCT, jump straight into a partnership. There's about a million partnerships going around in Scotland just now.' (Male GP)

As a GP

For many participants, how to gain an academic position was unclear. Issues such as who employed AGPs was not seen to be straightforward, with many discussing whether employment should be solely by universities, shared with NHS boards or by individual practices. Furthermore, there was lack of clarity about whether the position would rely on the individual obtaining their own research funding. Clinically, possible employment opportunities were perceived to vary from locuming, being a salaried GP, through to partner. There was a perceived variation in opportunities across geographical locations and some felt that opportunities were not advertised effectively between regions.

'*The majority we hear about them are the fellowship posts from NES* [in their own geographical area] *however we don't really hear about the other Deanery posts…we don't hear anything about what* [the] *opportunities* [are] *there…"* (GP specialty trainee)

Salaries were raised by several participants as an important factor within the pathway. A discrepancy between clinical and academic salary was noted by some participants, particularly if they had been a GP for several years before becoming an AGP.

> *'even if you are very academically inclined, you will think about financial implications that will help you so I think the finances thing is, as dirty as it may sound, is very important.*' (Male GP)

> *'I think there was quite a big discrepancy between what I earned clinically and what I earned academically when I first started. Not so much at the moment.'* (Female AGP)

Personal financial implications were a significant challenge to undertaking an AGP pathway. This was particularly relevant amongst mid and later career participants. The relative reduction in salary is a major limitation for GPs when considering an academic role.

> *'I can't make as much money out of it as I do as a partner in session doing anything else. That would be the main obstacle for me as an individual right now at this point of my career.'* (Male GP)

Finally, there were multiple remarks concerning the challenge of maintaining personal and professional life balance whilst engaged on a clinical academic pathway, to the extent that it had the potential to dissuade some from choosing that pathway.

> *'It's not like your clinical duties are lightened and even the people that I have spoken to that have sort of academic roles later on, often your on call rota doesn't get reduced.'* (Female GP trainee)

> *''I'm probably gonna have kids and thought well that's a really high-flying job. I might not want to do that and I'm not being negative about females in high-flying careers but that's my personal view.'* (Female GP)

Despite the challenges, some AGP participants clearly enjoyed the variation a portfolio career provides.

> *'but I personally don't want to go back to being solidly clinical because I know I don't enjoy that as much as I do enjoy mixing it up with academia and clinical.'* (Female AGP)

As a specialty

The academic culture, particularly relating to research was often perceived as different within primary care in comparison to other specialties. This was thought to be due, in

part to university research departments being associated with secondary care specialties and training pathways (academic and non-academic) linked to this. Unlike primary care trainees, secondary care specialty trainees were thought to be more immersed in a research culture and with an expectation to engage in it in a supported way.

> '*If you think about the consultants in hospital who are all doing research. I think they all get time. They are all given a session to do research and certainly the consultants I know who do research are all given time to do studies and time. We're not but I guess that's because we're self-employed as well so I don't know why we don't liberate time.'* (Female GP)

Stakeholders thought this resulted in less available opportunities for engagement in academic activities and indeed for academic activities in primary care to be picked up by other specialties which was perpetuated by universities.

> *'….to free up GPs or AGPs to be on those [specialty interview] panels is more challenging because they tend to be less well-franchised than secondary care people. They're just not invited to a seat at the table so it just perpetuates it.'* (Female AGP)

> *'…I think once you identify yourself in your junior years as being a doctor as maybe wanting to do GP then lots of opportunities for research are closed off to you because it's given to the trainees who are doing core medicine or surgical training…because to apply for higher surgical training or higher medical training, you need to have a level of research to do those applications so then it's selectively given to other people.'* (Female GP trainee)

This was seen to result in reduced appreciation of, and focus on, academic career pathways in primary care compared with other specialties.

> '*Well I think a lot of the information I have kind of come across ad-hoc so my colleagues that are doing gastro who want to do research since they were in foundation year knowing exactly the pathway they needed to do. They knew about the funding grants and schemes they needed to apply for with a well-known gap between ST4 and a three year PhD and it suggests this beautiful nice transition so it's just they've known that from you know from literally at foundation.*' (Male GP trainee)

Additionally, some considered GP specialty training too short to be able to fit in a PhD. Additionally, a perceived intense focus on skills during GP specialty training, left little time for exploration of special interests such as research or teaching:

> '*GP training is so short, you can't do a PhD realistically within GP training. So you're actually out of your training by the time you're doing it and a lot of the*

support for preparing the grant application is hard to come by unless you're actually in a funded job.' (Female AGP)

Some perceived logistical concerns regarding a pathway if you were a rural clinician.

'maybe there's people that want to do academics and rural and they're choosing one or the other because they're not yet compatible.' (Female GP trainee)

'I think how it works is that you're attached to university, so you've got to travel to Glasgow or Edinburgh.' (Female GP trainee)

Some stakeholders suggested that there was potential for practices to perceive that GP academics might underperform in their clinical roles due to time away from clinical practice.

'it's very tricky because I find some of these people who do academic work become very detached from clinical work and I think maybe they spend too much time in the academic roles.' (Male GP)

Conversely, others thought that there were benefits to practices that employed GP academics due to their active involvement in current research.

'I personally feel it would make a difference to have someone who is academic as a GP partner because I think that would improve my kind of take on medicine as a whole and hopefully that person would kind of say, 'Did you see the BMJ last week? That study was actually a relevant study…' and that would change my clinical practice.' (Male GP)

The future: The structure of an AGP pathway

Stakeholders commented on the importance of the presentation of a clearly structured national academic pathway. Potential GP academics should know what they would be signing up for in terms of job design and job profile.

'I think as GPs we quite like...or not as GPs, as doctors, we like things in black and white really so I think a clear kind of pathway for GPs in black and white really. So almost like a dossier or a national Scottish policy or a national Scottish AGP programme where you basically go onto the website. You say, 'A-ha! Right, this is what I need to do. This is what programmes are available in the area that I'm working, and this is a contact person.' (Male GP)

It was also expressed that a degree of flexibility should be maintained in terms of: timings of entry into the pathway; job split between clinical and academic sessions; the types of qualifications to be gained and geographical location. Many stakeholders were keen to express that there shouldn't be a 'prescribed formula' but there should

be opportunities to undertake a wide range of activities including teaching and research.

> '*I think it has to be entirely flexible and it has to be dealt with case by case really because the minute it starts being too prescriptive as in half and half then that might just put a lot of people off.*' (Male GP)

Stakeholders commented that doctors often select a GP career so that they can have some career flexibility. Many choose to locum after CCT, and this is perceived as an attractive feature of GP clinical pathways. Stakeholders felt an academic pathway should attempt to harness this desire for flexibility.

> *'one of the issues is sometimes they don't want to commit to a place or a location and I suppose, you know, if you could tap into that desire to be a locum in terms of an academic role so you signed up for a number of sessions or a period of time where you got a flavour for what it was like and you contributed something.'* (Male GP)

Stakeholders emphasised the importance of concrete terms and conditions that set out guaranteed funds for both clinical and academic aspects of the post. Indeed, parity in renumeration with clinical-only colleagues was an important factor.

> *'I think having easier or more available or more defined career structures would be helpful. I think a lot of people get lost at transition points. Certainly, for me, I wanted to do academic foundation programmes and I was literally interviewing in [name] and they said, 'What do you want to do as your specialty?' and I said, 'Academic primary care,' and they said, 'We don't offer that.''* (Female AGP)

> *'I won't be able to justify doing a self-funded PhD because it's a lot of time away from your family for no money and quite frankly, the bottom line is bills need to be paid which sounds very unromantic and very unambitious of me but these are the bottom lines of people's lives.'* (Female AGP)

Stakeholders thought that an AGP pathway should include explicit qualifications such as PG Certificates in Education and Masters-level courses. Some thought that a PhD might be less feasible to do especially if the pathway was part of a training programme due to the short length of training time. The key here was flexibility in the pathway to allow for different qualification levels.

> *'our trainee's finished now. She's done everything that she's needed to do and she's had three months at the end so there are three months at the end where she's just kind of twiddling her thumbs a bit. If you go to GP trainer's meetings, they are always saying what to do with your trainee for the three months at the end. How do you challenge the really capable trainee who has done*

everything? All the boxes are ticked. She's done or he's done. Yeah so maybe.' (Female GP)

'…with the caveat that if we prolong GP training, which I think is a good thing I think that's something we should do, we should focus that training in primary care and not just answer the problems that secondary care might have.' (Male GP)

PhD by publications were viewed by some participants as a more efficient use of time than a more traditional dissertation-based PhD for those with dual clinical and academic roles:

'*Interviewer: I mean there are…I mean there is such a thing as a PhD by publication…*

Female AGP: Maybe. We've had one or two here. My advisor was much more generous. She was very lovely and said, 'Well it's something. We don't like them but it's just perhaps more for people who've done their PhD or as their job you know or they've kind of done a job and then they've got papers out of it and so then they can do it.' So, I thought like okay that's you know that's fair enough but maybe it should be considered?'

Academic specialty training posts in primary care were reported to often reduce clinical exposure time to fit in academic training within the three-year timeframe, whilst the clinical hurdles remain the same. Other specialties have dealt with this by increasing the length of training time rather than reducing clinical exposure:

'…the posts that we've been emailed out to always kind of where you have reduced hours on clinical work. But on the other side, it's you know giving you time to spend time in the university or something like that to pursue the academic side and I think for most people that I've spoken to that are in other specialties for things like, not just GP, but say paediatrics or dermatology. They have a similar thing where it is that their training four years, they can [extend]that to eight years but half the time doing academic work.' (Female GP specialty trainee)

As previously mentioned, clinical work was a vital and defining component of the AGP pathway. There was no preferred proportion of clinical to academic time with variation of one to eight clinical sessions per week suggested. However, it was expressed that a threshold level of clinical work was required to be competent and safe as a GP, to allow case load management from the practice perspective (e.g. responding to blood results promptly) and to help maintain continuity of care from the patient perspective. Clinical practice was also seen to give AGPs insight into the most relevant and timely research requirements as well as maximising knowledge translation.

> ‘*Yeah, it’s gonna be personal but I think it’s important that there’s at least some clinical component otherwise you …lose touch a bit I think… it then turns into a bit of an echo chamber if you’re kind of hanging out only with academics.*’ (Female AGP)

Supporting an academic career pathway

Clear lines of support and mentorship from both clinical and higher educational organisations were seen to be important. In particular, the gold standard was support from another, more senior, AGP. Some participants perceived the academic component of the pathway as being managed by NES, but with input via mentoring from Universities, particularly for research.

> *‘I think it’s important that there would be both sort of a mentor from the academic side and a... or perhaps multiple mentors from the clinical side [….] at least a mentor with a very strong research background and a mentor or perhaps a mentor per block if you’re moving between different GPs or whatever.’* (Graduate medical student)

Stakeholders placed significance on structured contact with AGPs before and during an AGP pathway through mentoring and shadowing. This could include brief ‘internships’ where GP trainees could shadow AGPs to provide insight into their day to day working lives. Raising awareness of an academic career path option amongst GP trainers was seen as a useful route of information sharing and encouragement as they would know individual trainees and their career choices. Developing a community of practice of AGPs through planned events and activities was also seen to be essential.

> *‘A taster week. Yeah, you could have a taster week so like the intern [unclear] she actually went and became a listed medicine intern or whatever they are in the Scottish office and you actually saw what they did for a week.*’ (Female GP trainee)

> ‘*obviously with trainers, they very much know the shortage of GPs at the moment as well so they want as many to apply and retain in clinical work or you know out of hours work as much as possible rather than probably going into the academic side so maybe like explain to them you know that it's half and half and they’re not purely just academic. There is obviously clinical work involved. I think selling it to the trainers.*’ (Female GP trainee)

Additionally, it was important to be able to step out of the pathway in a supported manner without consequence.

Attracting doctors to and keeping doctors in an AGP pathway

Stakeholders were in general agreement that the pathway was potentially attractive because of the prestige attached to academic pathways. Again, having current AGPs visible and available to discuss and advise on entering such a pathway was vital to attracting doctors at all levels to the programme.

> '*I remember when I was considering that academic fellowship in [names place]. The person who I went and spoke to. She was lovely and I was like gosh you know she's normal! She's not a total academic nerd or geek that you picture in your head thinking gosh you know so that…*' (Male GP)

However, many also discussed how currently academic activity is often under-funded, and therefore doctors could remain reluctant to engage in such activity:

> *'there's a perception in some quarters that the teaching components of GP training etc are not properly funded and so yeah that then inhibits people putting in say goodwill or extra time.'* (Male, GP)

Participants saw structured activities that lead doctors to consider an academic pathway as key. Indeed, participants expressed the importance of a clear marketing strategy that advertises opportunities widely and explains what it means to be a GP academic.

> *'I would almost expect even something like you know a wee video saying a day in the life of an AGP. You know, why not?..... Alright, okay. This is something that I can do.' I mean it's not off bounds really but I think that the current myth which is a) you either have to be super brainy or you have to know the right people to get into academic general practice. It's probably deterring a lot of people to go into it.'* (Male GP)

For example, the Deanery website was seen as a place that could include adverts for positions for AGPs looking for a permanent post. But participants perceived that such positions could also be advertised by other routes, for example practices, GP trainers, cluster meetings or other regional meetings:

> *'So, and I don't know what the answer is to make it more visible to people who are sort of in the pre-contemplation stage although [name] does have a database of GPs who are research active because I have to fill it in every year.'* (Female AGP)

Stakeholders were keen that emphasis was placed on inclusivity, often this was as a result of perceived experiences of being excluded from academic opportunities as a student. Early exposure to the AGP path (at undergraduate level) was vital to change the notion that clinical and research are separate, and that doing research was not a compromise to a clinical identity.

'*I think, I mean we're doing primary care as our SSC block just now and I think it's quite a nice kind of gateway into academic primary care cause you get to choose your research topic and do it but you're more supported because there's a group of you rather than on your own.*' (Male undergraduate medical student)

'*Yeah, there's lots of careers fairs at university and things as well which I think would be very helpful because I think, like you said, a lot of people haven't really known it's a thing or an option to kind of go into that and I think a lot of people almost see GP and academia as not compatible with each other*.' (Female GP specialty trainee)

Participants expressed the view that, like other specialties, primary-care focussed research activities should be built into GP training, possibly in the secondary care clinical year to maintain the connection to primary care.

'*In secondary care it's usually linked, isn't it? I mean you know I know that there are you know departments of XX University for example that are very intrinsically linked with their relevant specialty. So, I don't see why it wouldn't be the same and that might potentially mean expanding those universities in a way that was relevant, but I think it would have to be….*' (Male medical student)

'Definitely because in most hospital departments you know if you think about the renal department. Gastroenterology department. They will all have written papers or done publications or done some kind of research and that would be sort of just standard and expected I think, as part of your training or as part of being a consultant, that you'd be involved in things. But in general practice, that's not the case and I don't really know why that is. It seems like quite unfair.' (Female AGP)

Many participants noted that doors shouldn't close if you didn't take up academic specialty training, with some participants reporting only wanting to become involved in academia following working as a GP and seeing clinical problems arising or becoming interested in teaching as a component of a portfolio career after some time in practice. Following training, there was still perceived to be a need to raise awareness of an academic career pathway for those GPs who had not considered it until that point:

'…there are really good pathways if you're a trainee and if you're coming out of foundation or coming out of the GP training programme- but if you're then at the other end of that…then you just are a GP and then you're like, 'Oh actually now I'm a GP. I'd quite like to do teaching or research or something,' but you realise that kind of throughout all your training, you've maybe not done that much research or know that much about it. It's really, really difficult to then access.' (Female AGP)

Sustaining AGP pathways

To enable such pathways to be sustainable at both trainee and post-training level, stakeholders perceived that practices needed to be on board, and there was some discussion of location of practices further away from Universities and whether these would be attractive bases for AGPs both during and following training. Participants on the whole seemed to perceive geographical location as less of a barrier, with the need for primary care research into rural care being highlighted. Many participants noted that the benefits of 'hosting' AGPs for practices and practice staff other than the AGPs could be articulated more helpfully. Information on which practices were open to 'hosting' AGPs would be beneficial for Universities:

> '*So possibly speaking to practices and asking them to come onboard and saying you know we would fund the academic side if you…I mean everybody's needing GPs so if you fund... maybe they're salaried. I'd imagine it would be easier if it was a salaried GP than a partner, but I suppose it could be a partner. So, either a salaried GP position or partnership position then whoever's doing the academic stuff would fund the academic stuff cause you wouldn't really get a practice to fund the academic side, I don't think.'* (Female GP)

> *'I think having a collaborative network approach would be the way forward so even practices link in to the university or you know so there's a network of practices that might be interested in looking into things and therefore there's an opportunity to feed ideas.'* (Male GP)

Fixed term dual role posts were called for to provide a step in the pathway, probably following specialty training at an early stage when the individual is exploring ideas in terms of research or educational training. Individuals could use such an opportunity to apply for PhD funding, fellowships or to ensure they were in a better position to apply for a more permanent education focused role:

> *'I would say offering initially a time-limited combined role where they don't have to choose one over the other. One post which encompasses the clinical work and the academic for a time-limited period and so they would get a chance, explore their ideas and potential and realise that potential and then they could move on because I have not seen any of these combination posts that were later abandoned and they moved on to doing something different.'* (Female AGP)

Appendix: Scoping Exercise Methodology

This scoping exercise utilised a qualitative approach to data collection. This enabled in-depth scrutiny of stakeholders' views on AGP pathways. A team from the Schools of Medicine at the Universities of St Andrews, Dundee and Aberdeen undertook the scoping exercise. The team included Professor Frank Sullivan (St Andrews), Dr Lisi Gordon (Dundee), Dr Anita Laidlaw (St Andrews), Dr Robert Scully (St Andrews) and Professor Jen Cleland (Aberdeen). All team members were experienced qualitative researchers with a working knowledge of AGP (both clinically and as researchers).

Data Sources

Our data sources included: notes from an AGP Career Pathway review meeting on 1st July 2019 at the RCGP in Edinburgh; and recordings and transcripts of twelve interviews and seven focus groups with 45 participants from across the GP continuum including undergraduate and graduate entry medical students, GP specialty trainees, AGPs and fulltime GPs. Of these sources, the interview transcripts became the primary source for gathering the perspectives of people.

Participants and data collection

Participants were invited by email by Ms Diana Donaldson (Project Administrator) to participate in a focus group and where not practicable to attend, one-to-one interviews were offered.

We developed an interview schedule of broad areas to discuss related to our scoping objectives but ensured participants had the freedom to direct the discussion as they wished and use their own words to frame prompts and questions. All interviews and focus groups finished with an open question to ensure participants had had adequate opportunity to share their thoughts. Ethical approval was sought from the University of St Andrews School of Medicine Ethics Committee and all ethical procedures were followed (information, withdrawable informed consent and assurance of anonymity).

A total of 45 participants took part in twelve interviews (6 face to face; 3 by telephone; 3 by Skype) and seven face to face focus groups. Focus groups and interviews lasted between 14 minutes and 47 minutes (average 32 minutes). All interviews and focus groups were audio-recorded and transcribed verbatim by Ms Donaldson. Basic participant characteristics are detailed in the Table below:

Participant Characteristic	Number
Gender: Male	15
Female	30
Role:	7
Undergraduate medical student	5
Graduate entry medical student	14

GP specialty trainee AGP GP partner	14 5

Data Analysis

First the research team read through a selection of interview transcripts and meeting notes and through discussion and negotiation developed a set of a priori themes. Using these themes, Ms Donaldson then coded the transcripts to these themes (using NVivo 12 data analysis software). This coding process was checked and confirmed by research team members.

Using the coded interview excerpts, we produced a 'compendium' of quotation materials totalling 360 pages (192,211 words) which was subjected to further, in-depth analysis by the research team, resulting in a draft report document that was further edited to remove overlap and repetition.

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Appendix D: GPST & 1st 5 Survey Report

Click to write the question text

Answer	Bar	Response
I consent, to begin the study 97.30%		36
I do not consent, I do not wish toparticipate 2.70%		
Total 100.00%		37

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.03	0.03	0.16	37	37

(A) Attitudes towards research and teaching in general, previous experience

Please rate the following statements:

#	Question						Responses	Mean
1		2	11	3	6	5		3.04
2	A2. I am interested in teaching.	-	3	1	10	13	27	4.22
3	A3. I consider learning of research and I or teaching skills important for professional development.	1	1	5	13	7	27	3.89
4	A4. As part of my further education, I am interested in topics related to research competences (e.g., assessment of study results, biostatistics).	5	3	8	9	2	27	3.00

Please answer the following questions:

A5. What content should be taught in such a seminar? (free text)

Text Entry
Practical applications of statistics
Small group teaching using an example paper and working way through it analysing its research methodology and the statistics used.
Research methods Referencing types How to use statistics tools like spss
Understanding stats better.
Small group sessions using a research paper as an example to work through
Tips for carrying out research Statistics
Not sure
Critical appraisal and statistical tools
basic understanding of research papers
practicalities of being involved in research eg developing research questions and designing ways to answer them, ethics approval etc - there is no teaching on this whereas there is teaching on critical appraisal etc already. Statistics would be useful.
Key teaching theories
Teaching skills.
There are a number of areas, including a more realistic understanding of appraising papers. We do this quite rarely and I often find at journal clubs that the appraisal is week and there is little challenging from colleagues, including senior colleagues. More importantly the papers being appraised are rarely compared to current practice, guidelines, and other research in the subject, which makes it an interest practice but with questionable value. Alongside this, I think a better understanding of qualitative research including ethnographic research, especially in the field of General Practice, would have big impacts on our work in our communities - when we talk about research we often think only of clinical research having impact on outcomes but forget that our patients live within

Please answer the following questions:

A5. What content should be taught in such a seminar? (free text)

Statistic	Value
Respondents	13

#	Question						Responses	Mean
1	A6. ...in topics related to medical education, for example for student teaching, workshops, lectures etc.	1	1	4	11	10	27	4.04

A7. What content should be taught in such a seminar? (free text)

Text Entry
Related to practical gp stuff
How to give feedback. Different teaching and learning styles. What curriculum is to be taught if teaching for a specific course.
Teaching and learning styles like honey and Mumford. Lectures styles
How to make presentations more interesting and involving. Mapping to the curriculum
How to give feedback. Teaching methods.
A brief overview of some tips for teaching, what works and what doesn't, signposting to resources for further info. Also information about opportunities for getting involved with teaching locally.
Learning style Tips on assessment of students Opportunities to get involved in teaching
communication, dealing with struggling students, making learning accessible
GP related/ clinical content, communication, reflective thinking
Medical education theory and modern techniques
basic teaching skills
I assume this refers to gps developing our own teaching. In that case keeping up to date, opportunities to see others teaching methods, practical tips.
.
I think there is not enough understanding of learning theory starting at undergraduate level. Doctors are by definition very smart individuals, and therefore a better understanding of learning theory is likely to impact on our own education, as well as have an impact on the teaching we give to our junior colleagues and medical students as we progress. Aside from this being part of good medical practice, we are involved in some teaching here and there, and especially as GPs we need to be empowered to become more and more invovled in teaching. Alongside this I feel it is an important point in improving GP recruitment by have more motivated educators within GP, which is

A7. What content should be taught in such a seminar? (free text)

Statistic	Value
Respondents	14

Please answer the following questions:

#	Question						Responses	Mean
		11	6	2	1	7		
24	A9. During post-graduate GP training, I was involved with research in practice.	9	10	4	2	2	27	2.19 2.52

(free text)

Text Entry
Audit (as required) I led a quality improvement project looking at rejected GP referrals to psychiatry (submitted to RCPsych conference this year) I led a survey of GPs and GP staff in Glasgow looking at their exposure to violence/aggressive behaviour in general practice (submitted to RCGP conference this year)
- I am not sure if I was taught by an academic GP as an undergraduate. - I have only done an audit during my time in GP training.
Only involvement in analysis of research or quality improvement work.
Attended LaMP course and am looking at a QIP in practice now.
I am unsure if I was taught by an academic GP as an undergraduate and I have only done an audit as part of GP
I did a small study myself without much interest from the GPs in practice, I think they felt that their day jobs were so busy that there was no time for additional work like research.
Audit
QI projects
Very little in postgraduate GP training as little opportunity in a rural area. Previously I have done an academic foundation program and PGDip in medical education.
Attended an academic university and completed an academic programme in medical education in England, moved to Scotland for GP training and have found it almost impossible locally to find / create opportunities to be involved in research or teaching - have actively discouraged from doing so and have had no further teaching or development .
More internal audit-use of AHPs in GP
Aside from the training-required Audit, I have not been involved in research during GP practice.

A10. If you have had experience with research questions in practice, please state your experiences.

Statistic	Value
Respondents	13

(B) Attitudes towards academic general practice

Please rate the following statements:

An important role of university departments for general practice is …

#	Question						Responses	Mean
1		-	-	1	10	16		4.56
2	82. … the education of clinical scientists.	3	3	14	5	2	27	3.00
3	83. … the implementation of research projects relevant to general practice.	-	3	2	13	9	27	4.04

84. If you see further roles of University Departments of General Practice, please state. (free text)

Text Entry
outreach in helping GPs in quality improvement and research
Involving those within general practice training in research and education, so as to maximise 1 and 3 above
The education of post graduate GP trainees
1. Improving the visibility of research in general practice 2. Improving access to research opportunities for GPs 3. Making the outcomes of research accessible to GPs in practice - this includes finding ways for the information to be understandable and digestible and applicable to their practice. for example - a good research department in scotland would undertake relevant research, involving where possible interested GPs working in the area, in subjects such as health inequalities, make the outcomes clear and easy to follow and have ways of disseminating

Statistic	Value
Respondents	4

(C) Willingness to work at a University Department of General Practice during post-graduate GP training

Please rate the following statement:

#	Question						Responses	Mean
1	C1. In principle, I support the possibility of recognising teaching and/or research within post-graduate GP training.	-	1	1	11	14	27	4.41

C2. In principle, I can imagine spending part of my post-graduate GP training at a university department of General Practice.

#	Answer	Bar	Response	%
1	Yes		14	51.85%
2	No		2	7.41%
3	Perhaps		11	40.74%
	Total		27	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	1.89	0.95	0.97	27	27

If you <u>can</u> imagine spending part of your post-graduate GP training at a university department of General Practice, please rate the following statements:

For working at a university department of General Practice, it is important to me that ...

#	Question						Responses	Mean
1		-	1	1	10	13		4.40
2	C4. … payment is made at an equivalent rate to other colleagues with similar levels of education I experience.	-	-	1	10	14	25	4.52
3	C5. … clinical training in a GP practice connected to a department is possible.	-	-	7	10	8	25	4.04
4	C6. … the academic work is recognised towards my post-graduate GP training	-	-	4	8	13	25	4.36
5	C7. … work-life balance is ensured.	-	-	1	7	17	25	4.64
6	C8. … my academic work is appreciated by my colleagues.	-	-	5	11	9	25	4.16

C9. If you have additional comments, please indicate here. (free text)

Text Entry
I would have loved to have done this.
.
I am not entirely clear what is meant by compatibility in C3 - but I do not feel this is especially important; though it would be ideal. A little variety is good.
It can be difficult for GP trainees to secure less than full time clinical training - there is variation across Scotland. Therefore some trainees may want to spend some time doing academic work/teaching and some time doing clinical practice but this may not be facilitated at a higher level.

Statistic	Value
Respondents	4

#	Question						Responses	Mean
		-	-	5	12	8		
21	C11. … a career opportunity (prestige).	-	1	7	12	5	25	3.84 4.12
3	C12. … the scholarly analysis of practical questions.	-	1	8	9	7	25	3.88
4	C13. … strengthening my teaching skills.	-	-	2	13	10	25	4.32
5	C14. … synergy effects between practice and academic work.	-	-	2	16	7	25	4.20
6	C15. …to contribute to strengthening the reputation of General	-	-	2	13	10	25	4.32

C16. If you have additional comments, please indicate here. (free text)

Text Entry

Statistic	Value
Respondents	0

If you <u>cannot</u> imagine spending part of your post-graduate GP training at a university department of General Practice, please rate the following statements regarding your hesitation to work at a university department of General Practice:

#	Question						Responses	Mean
1		7	1	1	3	-		2.00
2	C18. I have no interest in any research in general.	9	1	1	2	-	13	1.69
3	C19. I worry about an extension of my training.	5	2	4	1	2	14	2.50
4	C20. Research is not appreciated among colleagues.	3	7	3	-	-	13	2.00
5	C21. Research does not offer any additional career opportunities.	4	7	1	-	-	12	1.75
6	C22. Research does not offer financial incentives.	4	3	3	2	-	12	2.25
7	C23. I did not know about the possibility of post-graduate GP training at a university department of general practice	4	-	-	3	4	11	3.27

C24. If you have additional comments, please indicate here. (free text)

Text Entry	

Statistic	Value
Respondents	0

(D) Future participation in teaching and research

Please rate the following statements:

After completion of post-graduate GP training, I can imagine...

#	Question						Responses	Mean
1		5	5	6	10	1		2.89
2	02. ...working as a teacher, e.g. to train medical students I trainee doctors in my practice.	1	-	4	6	16	27	4.33
3	03. ...working as an academic at a university, e.g. to teach or to conduct research.	5	7	7	6	2	27	2.74
4	04. ... being active as a post-graduate trainer.	1	1	5	8	12	27	4.07

E2. Are you already a GP?

#	Answer	Bar	Response	%
1	Yes		4	14.81%
2	No		23	85.19%
	Total		27	100.00%

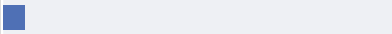
Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.85	0.13	0.36	27	27

E3. If yes, when did you receive you certificate of completion of training (CCT)?

Text Entry
August 2017
2019
August 2016
July 2018

Statistic	Value
Respondents	4

E4. If no, in which year of your GP training are you (please count part-time employment as a full-time equivalent)?

#	Answer	Bar	Response	%
1	1		0	0.00%
2	2		1	4.35%
3	3		16	69.57%
4	4		6	26.09%
	Total		23	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
2	4	3.22	0.27	0.52	23	23

If you work in a practice, we ask you to answer the following supplementary questions:

E5. Which type of practice do you work?

#	Answer	Bar	Response	%
1	General Medical Services 17J		23	92.00%
2	Personal Medical Service 17C		0	0.00%
3	Health Board Run 2C		2	8.00%
	Total		25	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	3	1.16	0.31	0.55	25	25

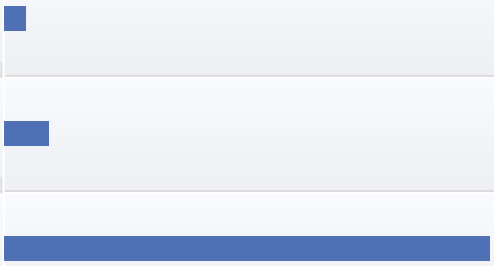
E6. Other (free text)

Text Entry
I am a locum GP

Statistic	Value
Respondents	1

E7. What is the average number of patients in the practice you work in?

#	Answer	Bar	Response	%
1	<500 patients		0	0.00%
2	>500-1000 patients		0	0.00%
3	1001-1500 patients		1	3.85%
4	1501-2000 patients		2	7.69%
5	>2000 patients		23	88.46%
	Total		26	100.00%



Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
3	5	4.85	0.22	0.46	26	26

ES. How many people live in the area where you work?

#	Answer	Bar	Response	%
1	<5000 inhabitants		2	7.69%
2	5001-20.000 inhabitants		12	46.15%
3	20.001 – 100.000 inhabitants		2	7.69%
4	>100.001 inhabitants		10	38.46%
	Total		26	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	4	2.77	1.14	1.07	26	26

E9. Do you hold an MD or PhD?

#	Answer	Bar	Response	%
1	Yes		2	7.41%
2	No		25	92.59%
	Total		27	100.00%

Min Value	Max Value	Average Value	Variance	Standard Deviation	Total Responses	Total Respondents
1	2	1.93	0.07	0.27	27	27

(E) Demographics

E1. You are:

#	Answer	Bar	Response	%
1	Female		16	59.26%
2	Male		11	40.74%
	Total		27	100.00%

	Min Value Max Value	Average Value	Variance	Standard Deviation	Total Responses	
1	2	1.41	0.25	0.50	27	27

Total Respondents