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The Deep End GP Pioneer Scheme: a qualitative evaluation

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ABSTRACT

Background. The Scottish Deep End Project is a collaboration between academic GPs and GPs in practices serving the most socio-economically disadvantaged populations in Scotland. The Deep End GP Pioneer Scheme was established in 2016 to improve GP recruitment and retention in these areas. The aim of this study was to qualitatively evaluate the experiences of participating lead GPs and GP fellows. **Methods.** Semi-structured interviews were conducted with nine lead GPs and 10 GP fellows, representing 12 of the 14 practices involved. Interviews were audio-recorded, transcribed verbatim, and analysed thematically. **Results.** Five main themes are presented: Recruitment to the Pioneer Scheme; Work motivation and satisfaction; Mitigating health inequalities; Retention and changes in work pattern; and Suggestions for the future. Key ingredients of the scheme were the additional clinical capacity (addressing the inverse care law), protected time for both GP fellows and experienced GPs to lead on service development initiatives and to share learning within and between practices, and the shared ethos and values of the Scheme. **Conclusions.** There was strong support for the Scheme as a mechanism to improve GP recruitment and retention in areas of high socio-economic disadvantage, and to improve quality of care in these areas. As similar schemes are rolled out across the UK, there is a need for further research to evaluate their impact on workforce and patient outcomes in deprived areas.

Keywords: general practice, health inequalities, inverse care law, primary care, professional development, qualitative, quality improvement, workforce.

Introduction

The inverse care law, coined by Dr. Julian Tudor Hart in 1971, states that 'the availability of good medical care tends to vary inversely with the need for it in the population served' (Tudor Hart 1971). The Scottish Deep End Project was established in 2009, and is a collaboration between academics and frontline GPs from the 100 practices serving the most socio-economically deprived communities in Scotland (Watt and Deep End Steering Group 2011). This was the first time in the history of the National Health Service (NHS) that GPs in deprived areas had been convened and consulted in this way. What followed was a growing sense of identity, solidarity and common purpose to address the inverse care law, which manifests as insufficient time [due to a well-described mismatch of resources to needs (McLean *et al.* 2015)] to adequately respond to the complexity of health and social problems in deprived areas.

Challenges for healthcare teams working in areas of severe socio-economic deprivation in Scotland are well documented and include: premature multi-morbidity [the onset of multiple long-term conditions occurs 10–15 years earlier than in less deprived areas (Barnett *et al.* 2012)]; increased GP stress and lower patient enablement (Mercer and Watt 2007; Mercer *et al.* 2012); and a relatively older cohort of GPs approaching retirement (Blane *et al.* 2015), such that the GP workforce 'crisis' – traditionally associated with remote and rural areas – is also felt particularly acutely in urban deprived practices (Fisher *et al.* 2022).

There are specific challenges related to undergraduate and postgraduate medical education in the most deprived areas (Blane 2018). There is evidence of an 'inverse training law', with practices in more affluent areas more likely to be training practices

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than those in more deprived areas (Russell and Lough 2010), although this has improved in recent years (McCallum *et al.* 2020). High workload in deprived areas is often cited as a barrier to involvement in training (McCallum *et al.* 2019). There are also particular training needs for GPs in deprived areas, which are not fully addressed by a 'one-size-fits-all' training program (MacVicar *et al.* 2015).

The Deep End GP Pioneer Scheme (the Pioneer Scheme from here on in) was set up in 2016 with funding from the Scottish Government's GP Recruitment and Retention Fund, in recognition of GP workforce issues in deprived areas. The aim was to develop a change model for general practices serving areas of socio-economic deprivation (the Deep End), involving the recruitment of younger GPs, the retention of experienced GPs, and their joint engagement in strengthening the role of general practice as the natural hub of local health systems (Blane *et al.* 2017).

Inspired by the example of the North Dublin City GP Training Scheme, a tailored training GP program for deprived areas and marginalised groups (O Carroll and O'Reilly 2019), the Pioneer Scheme included a bespoke academic program of learning related to 'Deep End' issues such as chronic pain, trauma, child protection and more. Early career GP 'fellows' worked either four or six sessions in Deep End practices and had one session of protected time, which alternated between the academic program of learning and working on service development projects with the lead GP from their practice. The lead GP in each practice co-ordinated the use of protected time for experienced GPs to work on service development projects (e.g. extended consultations for complex patients). The practices involved met every 6–8 weeks to share ideas and learning, supported by an overall lead GP for the project.

Between October 2016 and May 2020, there were two cohorts of Deep End GP Pioneer Fellows; the first cohort involving six early career GPs working in six practices and the second cohort involving seven GP fellows working in 11 practices (four GP fellows split their time between two smaller practices).

The aim of this research was to explore the views and experiences of the GP fellows and lead GPs from participating practices, as a qualitative evaluation of the Pioneer Scheme.

Methods

Approach

This was a qualitative study involving semi-structured interviews with lead GPs and GP fellows from the Deep End GP Pioneer Scheme in Glasgow, Scotland.

Participants

All GPs involved in the scheme were invited to participate. Fig. 1 shows how Deep End practices are situated in relation to all other practices in Scotland, in terms of the percentage of their patients living in the 15% most socio-economically deprived postcodes, identified by the Scottish

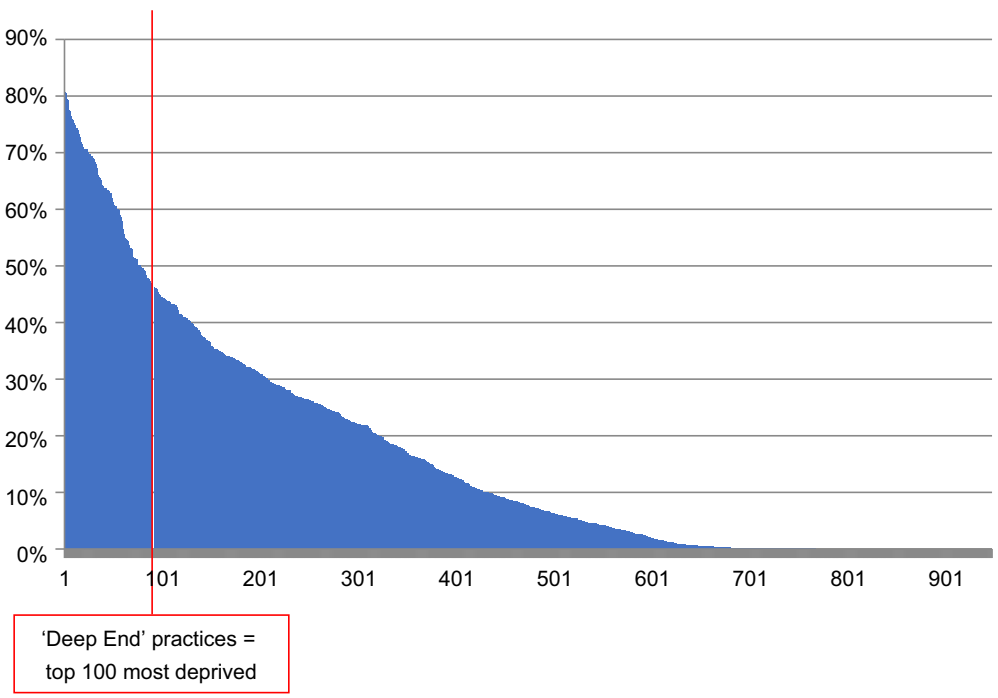

Fig. 1. Scottish GP practices ranked by percentage of patients in the most deprived areas.

Table 1. Pioneer Scheme GP practice characteristics.

Practice ID	Pioneer Scheme cohort	Practice deprivation status (% of patients living in the 15% most deprived SIMD postcodes)	Practice list size
Practice 1	A	High	Large
Practice 2	A	High	Medium
Practice 3	A	High	Large
Practice 4	B	High	Medium
Practice 5	B	Medium	Small
Practice 6	B	Medium	Medium
Practice 7	B	Medium	Medium
Practice 8	B	High	Small
Practice 9	A and B	High	Medium
Practice 10	B	Medium	Large
Practice 11	A and B	High	Small
Practice 12	B	Medium	Medium
Practice 13	A and B	Medium	Medium
Practice 14	B	Low	Small

Bolded practices had participants in the scheme evaluation.
A (2016–18), B (2018–20); low (40–50%), medium (51–70%), high (>70%); small (<4000 patients), medium (4–8000 patients), large (>8000 patients).

Index of Multiple Deprivation (SIMD). Approximately 80% of Deep End practices are in Glasgow. Table 1 describes the characteristics of participating practices, in terms of which cohort they were part of, practice deprivation, and practice size. Participating GPs were contacted by email, which explained the nature of the study and invited their participation. If interested, they were emailed further information and consent forms.

Data collection

A Clinical Teaching Fellow doctor with an interest in qualitative research (SD), but no prior relationship with the participants, conducted the interviews, which took place face-to-face at a time and place of the participants' choosing between January and February 2020. Interviews were audio-recorded with consent and lasted between 28 and 61 min (mean duration 41 min). They were semi-structured with the use of a topic guide, based on broad areas of interest (see Table 2). As well as general questions about what attracted participants to the Pioneer Scheme, we were interested in how being involved in the Scheme affected their work satisfaction and motivation, using the R.A.M.P. (Relatedness-Autonomy-Mastery-Purpose) framework (Marczewski 2013), which was based on Self-Determination Theory (Ryan and Deci 2000). Data collection stopped when interviews were no longer generating new themes (Saunders *et al.* 2018). The study was conducted and reported in accordance with the consolidated criteria for reporting qualitative research (COREQ) (Tong *et al.* 2007) (see Supplemental File S1).

Analysis

Verbatim transcripts were checked, anonymised and analysed inductively using a thematic approach (Braun and Clarke 2006). Analysis was conducted using NVivo 12 (QSR International) and was led by SD in collaboration with DNB. Interview transcripts were read and re-read and a coding frame was developed after coding several transcripts. This was then systematically applied to each transcript. Themes and sub-themes were derived from this coding framework through an iterative process and then named to capture the 'essence' of what each theme was about (Braun and Clarke 2006).

Ethics approval

This study was reviewed by the University of Glasgow College of Medical, Veterinary and Life Sciences (MVLS) ethics committee. Interviews were undertaken with appropriate informed consent of participants.

Results

Nine lead GPs and 10 GP fellows, working across 12 different practices, were interviewed (see Table 3). There were five main themes: Recruitment to the Pioneer Scheme, Work motivation and satisfaction, Mitigating health inequalities, Retention and changes in work pattern, and Suggestions for the future.

Illustrative data are provided to support the analysis, with data extracts identified by role (using LGP for Lead GPs and

Table 2. Summary topic guide for GP fellows and lead GPs.

Recruitment:
Factors affecting decision to participate in the Pioneer Scheme for fellows and lead GPs

- How did you find out about the Pioneer Scheme?
- What originally motivated you to become involved with the Pioneer Scheme?
- Why did you want to participate in the Pioneer Scheme compared to other opportunities? (Fellows)
- What were the particular things you were looking for in a job? Which aspects of the Pioneer Scheme addressed those?
- What did you hope to achieve? What did you think the Pioneer Scheme would help you achieve?
- Can you recall any uncertainties or concerns you had when applying for the job?
- How ready/equipped did you feel to start working in a Deep End practice?

Job satisfaction:
Factors affecting GP resilience and motivation (using the framework of relatedness, autonomy, mastery, and purpose)

- Can you reflect on your job satisfaction in the Pioneer Scheme?
- Can you reflect on your experience of intrinsic needs (relatedness, autonomy, mastery, purpose) and if you feel they were met in the Pioneer Scheme?
- Can you reflect on external factors which may impact your job motivation/satisfaction and how you have experienced these particularly within the Pioneer Scheme?
- Has the Pioneer Scheme affected your ability to cope with your day-to-day job? (resilience)

Capacity:
The extent to which the Pioneer Scheme built capacity of lead GPs and Fellows to tackle health inequalities in primary care through shared service development work

- Do you think the Pioneer Scheme enabled personal and professional development?
- Do you think the Pioneer Scheme has enabled health inequalities to be tackled/addressed?
- Can you reflect on your experiences encountering health inequalities? Do you feel more able to address health inequalities?
- Can you reflect on your experiences of the day release component of the Pioneer Scheme?
- What was the impact of this on an individual level and also to the Pioneer Scheme as a whole?

Retention/changes in work participation:
Lead GPs: Factors linked to the Pioneer Scheme affecting lead GPs' intentions to retire/to stay in Deep End or any general practice
GP fellows: GP Fellows' readiness to work in Deep End practices
Lead GPs

- After completing your fellowship/role in the Pioneer Scheme, what do you plan on doing?
  - Would you like to continue working in Deep End? Or with similar populations? Why?
  - Has your experience in the Pioneer Scheme affected this decision? If so how?
- What other factors influenced this personal decision?
- Can you reflect on what you think the future of being a Deep End GP will be like?

GP Fellows

- After completing your fellowship/role in the Pioneer Scheme, what do you plan on doing?

(*Continued on next column*)

Table 2. (*Continued*).

- Since being a part of the Pioneer Scheme, how ready (equipped/prepared) do you feel to work in Deep End practices/practices with high levels of socio-economic deprivation?

Future of the Pioneer Scheme

- How would you improve the Pioneer Scheme in the future?
- Are there particular things you would definitely keep as an integral component of the Pioneer Scheme and others which you feel are not necessary?
- Are there existing parts of the Pioneer Scheme that you would enhance? How? Why?
- At present, this Pioneer Scheme operates only within the context of the Deep End Group, do you think there would be value for certain aspects of this Scheme in other contexts? (i.e. across primary care settings)?
  - If so, which aspects and in which settings?
  - How would this add value in other settings?
- One of the Health Boards priorities is to support practices that are 'struggling' for a variety of reasons. What would be your view on the Pioneer Scheme being targeted to such practices in the future? And why?

GPF for GP fellows), gender, age range, as well as practice deprivation status (e.g. GPF, F, 30–39, SIMD 51–70%).

Recruitment to the Deep End GP Pioneer Scheme

This theme has two sub-themes reflecting the different factors that attracted early career GPs and experienced GPs to become involved in the Pioneer Scheme.

Attraction for early career GP fellows

The GP fellows were mostly attracted to the idea of support and mentoring from more senior GPs, as a transition from their GP training to progressively more independent practice. The access to a peer support network was an additional attraction for fellows, particularly for those who had moved from elsewhere and were newly practicing as GPs in Glasgow.

> [prior to the Scheme] I started working in a Deep End practice and the work was really interesting and the work was really challenging but I had no one to bounce ideas off of. In the way of peer support, people were really nice and everyone was doing their best, but it was really official firefighting. Everyone was just firefighting and I felt like there wasn't much connectivity between people. (GPF, F, 30–39, SIMD 51–70%)

Some fellows expressed the desire to seek out like-minded peers interested in addressing social exclusion and health inequalities. Many fellows expressed a pre-existing interest in addressing health inequalities and were attracted to the Pioneer Scheme as a mechanism by which they could feel more equipped to address these issues.

> I really was encouraged by the message of what it was trying to be a part of and thought it seemed like a really exciting

Table 3. Practitioner participant characteristics.

Participant ID	Gender	Age range (years)	Practice deprivation status (% of patients living in the 15% most deprived SIMD postcodes)
GP fellows ('GPF')			
GPF01	F	30–39	Medium (51–70%)
GPF02	M	30–39	Medium (51–70%)
GPF03	F	30–39	Medium (51–70%)
GPF04	F	30–39	High (>70%)
GPF05	F	30–39	High (>70%)
GPF06	F	30–39	Medium (51–70%)
GPF07	F	30–39	High (>70%)
GPF08	M	30–39	High (>70%)
GPF09	F	30–39	High (>70%)
GPF10	F	30–39	Medium (51–70%)
Lead GPs ('LGP')			
LGP01	F	40–49	Medium (51–70%)
LGP02	F	50–59	High (>70%)
LGP03	F	50–59	Low (40–50%)
LGP04	F	50–59	Medium (51–70%)
LGP05	M	50–59	Medium (51–70%)
LGP06	F	40–49	Medium (51–70%)
LGP07	F	50–59	High (>70%)
LGP08	F	30–39	Low (40–50%)
LGP09	M	30–39	High (>70%)

F, female; M, male.

> opportunity, something that I thought would be quite supported when you first initially [complete your GP training] because you have a mentor. And I liked the idea that it was clinical but also had developmental sessions that were protected. (GPF, F, 30–39, SIMD 51–70%)

As the above quote shows, access to high-quality continuing professional development (CPD), which focused on health inequalities and subjects not covered in postgraduate training, with protected time, was also attractive.

Attraction for experienced GPs

The lead GPs identified three main factors, which made the Pioneer Scheme attractive. First and foremost was the additional clinical capacity that was created by having a GP fellow, which in turn helped to address the inverse care law in a small way. It was noted that younger GPs often brought new ideas to the practice and could enrich the practice team. Second, the protected time that was created by having this additional clinical capacity was appealing, as it allowed experienced GPs the 'headspace' to think 'in a more creative way and therefore in a more proactive and preventative way'. (LGP, F, 50–59, SIMD 51–70%)

> I think the Pioneer Scheme probably fitted what we thought was needed for our practice which is extra capacity . . . a younger GP basically, and then also . . . what attracted us very much was to have the protected time for the partners because if you are in a partnership role in a practice you often see issues that you would like to address and you would like to improve . . . but there is a lack of time, so that attracted us as a practice to it. And the knowledge that we would like to give our patients a good service but it's hard under the current circumstances. (LGP, F, 50–59, SIMD >70%)

The third main factor that attracted lead GPs to the scheme was the desire to support recruitment to Deep End general practice, nurturing the next generation of Deep End GPs by sharing their insights.

> I was very interested to be involved in order to . . . free up some time for myself and also share learning with another colleague [. . .] you know. I do feel there is that obligation on me to want to share that before, you know, I'm off. (LGP, F, 50–59, SIMD 51–70%)

Work motivation and satisfaction

Participants were asked about the impact of the Pioneer Scheme on their work motivation and satisfaction, using the R.A.M.P. framework. We found that the four constructs resonated strongly with both GP fellows and lead GPs, and present evidence for each as sub-themes.

Relatedness

Both GP fellows and lead GPs agreed that the Pioneer Scheme had increased their sense of relatedness and connection. Participants described feeling part of something bigger, facilitated by the round table discussions that took place at both the fortnightly academic sessions (for fellows) and the 6–8 weekly wider-team meetings (for fellows and lead GPs).

> I think . . . knowing that you are part of something bigger has been quite nice as well, and almost knowing that the practices that have taken on a fellow seem to be in a similar mindset. So I guess that's been something good to know that where you are working we are all feeling the same things about deprived practices and the resources that we're looking into and trying to improve things for patients. (GPF, F, 30–39, SIMD 51–70%)

This was set in contrast to their prior experience of feeling increasingly isolated and disconnected from colleagues due to increasing work pressures, as illustrated in the quote below.

> Relatedness, I think a lot of the crisis in general practice is probably due to everybody is so stressed that we quite often

> forget to look after our [GP]partners, or resentments are building up much quicker than they would have done years before because everybody is struggling. So if you have a bit more time you, you can just spend time together at lunch, which you should all do but quite often we choose not to because we want to go home in the evening and feel we have, we have to basically work through lunch but you don't become effective. And having a bit more of a joined up team, and that's not only the GPs it's also with the admin team and our other clinical staff and attached staff, if you don't feel totally rushed, you don't feel harassed, you can connect to your whole team and the team is much more functional. (LGP, F, 50–59, SIMD >70%)

Autonomy

Early career GP fellows reported feeling more able and confident to contribute ideas at a practice level. For those fellows who worked across two practices, there was increased autonomy in the practice where they spent more time.

> When I moved into the practice I was in most of the time, in meetings I could make a suggestion and actually people would change things which hadn't happened before. I think that does reflect the practice applying for this, the role in the Pioneer Scheme, that they were forward thinking and wanting to change their ideas about things, open to suggestions of someone that is not very experienced but maybe has a different experience, or maybe actually that not being experienced is a good thing sometimes and that you've got fresh ideas. (GPF, F, 30–39, SIMD 51–70%)

Lead GPs felt that they also had more autonomy than before, with protected time to tailor service development initiatives to the needs of their practice population, and their professional interests.

> Immediately with the protected sessions we could choose to develop what we wanted to develop in the practice, tailored to our own needs. And there are lots of different examples, I've mentioned the migrant health already, we have done a lot on palliative care, cancer care, detecting cancer early, so all chosen out of the practice team, we have trained up an ANP. So there is lots of autonomy of how we can use these sessions and I think that is what we need and gives us the satisfaction and it's also extremely inspiring because you can see what else you want to do, we stick it on our whiteboard and then decide who is doing it and by when. (LGP, F, 50–59, SIMD >70%)

Mastery

GP fellows were particularly vocal about the increased clinical confidence, or mastery, that they had developed as a result of the Pioneer Scheme. They described different mechanisms underpinning this, including the dedicated academic sessions for professional development, the mentoring relationship with their lead GP, sharing of learning within and between practices (via team meetings and an online platform), and peer support.

> For example, if I wasn't so hot on what's the latest inhalers for COPD I can do that on a Wednesday afternoon [academic session], and I was actually being paid to do that and sit there and I could share that then with the practice so the other 3 GPs don't have to then look up that. Now there's new hypertension guidelines coming so there's time to summarise that, to share it, and that's better for the practice and your patients because you're up to date. (GPF, F, 30–39, SIMD 51–70%)

Increased knowledge of local resources and third sector organisations, and greater familiarity with referral processes, were other elements of mastery that participants felt improved patient care.

For lead GPs, too, there was a feeling of increased mastery, but this was less about clinical competence and more about having the time and headspace to feel present and compassionate during consultations.

> Mastery and feeling effective and competent, absolutely because if you have the time to address patients' needs and do it holistically you feel you are in the job. If you are a bit more refreshed, if you have this extra minute to think, quite often you feel so much more competent and you just don't feel rushed, you don't. What I hear from other colleagues is, I hear more and more that they are losing compassion and we basically I think are not only, could work on our competencies but we could also work on our compassion and that's a wonderful combination in what I say the mastery of medicine, the art of medicine. (LGP, F, 50–59, SIMD >70%)

Purpose

GP fellows reported feeling an increased sense of meaning in their work, which they ascribed to having an overarching goal (the Deep End GP vision of improving general practice in deprived areas) and the resources (time and learning) to facilitate efforts towards that goal, including advocacy work.

> In terms of purpose, coming along to the steering group meetings of the Deep End, you see the big picture of what the drive is for the Deep End. How you have to, you need leadership by GPs or primary care to lobby for change which you don't get to see when you are a trainee at all. (GPF, F, 30–39, SIMD 51–70%)

Many of the lead GPs had been involved in previous Deep End work, but also described renewed feelings of purpose in

their work as a result of the Pioneer Scheme. For instance, as reflected in the quote below, several practices were able to engage with student teaching opportunities.

> It's fantastic to be autonomous and do what we want to do and that has meaning and is important to us and also to discover new things like we were always reluctant to do student teaching but having this extra time we can suddenly show how attractive our job is, we can recruit students into general practice because we show a hidden curriculum that shows we love our job at the moment. (LGP, F, 50–59, SIMD >70%)

Mitigating health inequalities

Participants were asked about the extent to which they felt that the Pioneer Scheme addressed health inequalities. Both GP fellows and lead GPs acknowledged that making any meaningful impact on health inequalities is unrealistic in such a short timeframe and difficult to demonstrate. However, they all felt that there had been improvements in quality of care provision in their practice as a result of the combination of additional clinical capacity, protected time for service development initiatives (e.g. longer consultations for complex patients with multiple conditions), increased learning related to health inequalities and social determinants of health, and improvements in wellbeing and stress levels, which in turn increased capacity to deal with more complex and challenging consultations.

> For example, the extra knowledge that I am gaining so whether that's about chronic pain or about adverse child experiences or FGM [Female Genital Mutilation] I am taking extra knowledge to my patients [. . .] all of a sudden now I come with extra knowledge that then potentially gives them better care. So for me personally, on a one to one basis, I am definitely now better at treating the patient who is in a place of inequality. Taking it a bit bigger [. . .] I look at how busy our day-to-day job is in my practice and I know that I am four sessions extra and I think how could that not be a good thing for the patients who need it the most? So my answer would be I can't see how it couldn't be tackling health inequalities. (GPF, F, 30–39, SIMD >70%)

Several GP fellows highlighted their increased confidence to advocate on behalf of their patients and Deep End practices more generally. Lead GPs similarly expressed the hope that the Scheme would be successful in improving recruitment to Deep End practices, addressing (albeit on a very small scale) the inverse care law.

> You're specifically bringing in other GPs to have an experience of deep end practices with experienced GPs who have knowledge. [. . .] When you look at the number of training practices there's not as many within the deprived practices that's, you know that's a big gap. You're also bringing in for instance the [Psychological Trauma Service], talking about things that are specifically designed to help people in these circumstances so, you know, without a doubt it's helping to address these health inequalities. (LGP, F, 50–59, SIMD >70%)

A consistent response was that one Pioneer Scheme cycle was not sufficient to make sustainable changes and that in order to see larger more long-lasting change, the Scheme itself also had to be scaled up.

Retention and changes in work pattern

This theme is divided into sub-themes related to plans that GP fellows and lead GPs had following the Pioneer Scheme and, for the GP fellows, their readiness to continue working in Deep End general practice.

Post-Pioneer plans

At the time of the interviews, the first cohort of GP fellows had finished the Pioneer Scheme. Of the five that completed the Scheme (one withdrew after a few months for personal reasons), one had taken up a partnership post in the practice, two had become salaried GPs in their practices, one was doing locum work in different Deep End GP practices, and one had started a higher research degree. For those GP fellows who were in the second cohort, approaching the end of their involvement in the Pioneer scheme, they discussed pros and cons of partnership, salaried and locum GP options.

> I wouldn't have any intention to . . . become a partner because at the moment I think that the payoffs of that aren't [great]. It's unnecessary stress that the system is under pressure and it's going through a lot of changes with uncertainty. So it's high risk with what I see at the moment as very little reward. But to continue to work in [area of deprivation] on a session or a locum basis at probably about, you know, 6–8 sessions a week because again I think working full time isn't sustainable. (GPF, M, 30–39, SIMD 51–70%)

Other GP fellows noted the stability of partnership or salaried posts and the advantages of continuity of care and feeling part of a team. All fellows highlighted lifestyle factors such as balancing family commitments, commuting time, and risk of burnout with full-time work as key considerations for future work plans. Several described how the Pioneer Scheme had given them more confidence in their career decisions, as shown in this quote.

> I wouldn't have gone into partnership 2 years after finishing training if I [hadn't done the scheme], and I wanted to do it because I wanted to stay in the practice and I actually felt that was an easy step to make. It didn't really change much day to day to start with because in the Pioneer Scheme [...] it felt like you were much more involved in terms of looking at how the practice ran and given more responsibility than you would as a salaried doctor. So professionally I learnt much more about running a practice. (GPF, F, 30–39, SIMD 51–70%)

The potential influence of the Pioneer Scheme on future plans was discussed by lead GPs too; however, it was clear that these decisions are complex and influenced by both personal circumstances and the wider context of general practice workload pressures. Many lead GPs spoke of how the Pioneer Scheme had given them a renewed sense of purpose and enjoyment in their work, in the context of feeling previously worn out. This was accompanied by disappointment that the Scheme was short-lived and not a fundamental, sustained change in general practice.

> I like general practice, I think that was the Pioneer gave me back that, I think it is that joy and a sense of purpose and that it's easy to just kind of get a bit ground down by at times. I don't see myself moving, moving on, yeah, barring some huge, unexpected things happening, but yeah I'm happy where I am. (LGP, F, 40–49, SIMD 51–70%)

Readiness to work in the Deep End

All GP fellows interviewed expressed a desire to continue working in Deep End general practice and felt more equipped to do so after the Pioneer Scheme. There was recognition, however, that current workloads in Deep End practices – particularly those with a higher percentage of patients living in the most deprived postcodes – was unsustainable.

> So I think one thing that I've realised by the specific practice that I'm in, and I'm in one of the... most deprived, so it's around 80 plus percent deprived, is that I don't think that I could sustain a GP career in that level of deprivation. I'm very interested in [Deep End GP] but I think even dropping down to 40/50/60 percent of level of deprivation I think, I could imagine [would be more sustainable]. This is what I want to go and taste through locuming. (GPF, F, 30–39, SIMD >70%)

Suggestions for the future

Both GP fellows and lead GPs made helpful suggestions for improving aspects of the Pioneer Scheme. For instance, a better process for 'matching' of fellows to practices was recommended, with information about practice demographics and interests made available in advance. GP fellows valued the autonomy they were given to use their protected time;however, some felt unsure about what was expected of them and recommended more guidance.

> I've enjoyed the freedom of it and I feel like the expectation is fairly low so that's nice but maybe a little bit more kind of guidance from the scheme about what could be accomplished. There has been a lot of autonomy and that's been really nice, I've just felt a bit conscious of not necessarily knowing what the expectation is. (GPF, F, 30–39, SIMD >70%)

GP fellows who were split between two practices highlighted advantages of having more practices benefitting from the Pioneer Scheme, as well as being exposed to different practices. However, disadvantages such as reduced patient continuity and sense of 'belonging' to a practice team, and less ability to implement change while split across two sites outweighed these advantages.

There was a strong feeling – expressed by all participants – that if funding for the Pioneer Scheme ended (which it did in May 2020), then this would be counter-productive and may affect morale.

> The other thing about pulling the plug on something that people have got used to having [...] you kind of destabilise things. It's like any short-term initiative, people lose faith in the systems and it alienates people because they put a lot of effort into something and there's a psychological destruction when people's enthusiasm, commitment and innovation is not recognised and that is very disruptive to the psyche. (LGP, F, 50–59, SIMD 51–70%)

It was widely recognised that the Pioneer Scheme was positive for both GP recruitment and retention, as well as addressing the needs of Deep End populations. However, long-term benefits would only be seen by scaling up the Pioneer Scheme in terms of both the number of practices involved and sustained funding over a long period of time.

Discussion

Summary

This qualitative study of lead GP and GP fellow experiences of the Deep End GP Pioneer Scheme found strong support for the Pioneer Scheme as a mechanism to improve GP recruitment and retention in areas of high socio-economic disadvantage, and to improve quality of care in these areas. Key ingredients of the Pioneer Scheme were the additional clinical capacity (addressing the inverse care law), protected time

for both GP fellows and experienced GPs to lead on service development initiatives and to share learning within and between practices, and the shared ethos and values of the Pioneer Scheme.

Strengths and limitations

Strengths of the study include the high response rate, with 12 out of 14 participating practices taking part. A rigorous approach to qualitative analysis was followed, with the use of theory underpinning the section on GP work motivation.

A potential limitation of this study is that it took place before the second cohort had completed the Pioneer Scheme, but over a year after the first cohort had completed, so there may be issues of social desirability bias and recall bias, respectively.

Comparison with existing literature

The findings from the present study resonate with similar initiatives to address recruitment and retention in deprived areas (Blane 2018; O Carroll and O'Reilly 2019). For instance, key ingredients of protected time, sharing learning, and common values and goals are core components of the successful North Dublin City GP Training Scheme (O Carroll and O'Reilly 2019).

Although many previous studies have applied self-determination theory as an analytical framework to understand practitioner motivation, this is the first health services research paper that we are aware of that has used the R.A.M.P. framework, although it has previously been applied in gamification literature (Bravo *et al*. 2021). As well as the self-determination components of competence (mastery), relatedness, and autonomy, the additional component of purpose was felt to be particularly important to the participants in this study.

Our findings related to the constraints on GPs' ability to mitigate health inequalities have been described in previous qualitative research conducted with Deep End GPs (Babbel *et al*. 2019; Mackenzie *et al*. 2020).

Implications for research and/or practice

This qualitative evaluation of the Deep End GP Pioneer Scheme, an initiative to improve GP recruitment and retention in deprived urban areas of Scotland, has shown considerable enthusiasm for this approach among participating GPs. The Pioneer Scheme has inspired a similar program – called the Fairhealth Trailblazer Scheme (Fairhealth 2022) – across England. There is growing support to re-launch the scheme in Scotland too (Scottish Government 2022), and this provides an important opportunity for further research and evaluation of the impact on both GP workforce and patient outcomes in deprived areas.

Supplementary material

Supplementary material is available online.

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Data availability. Access to the anonymised transcripts can be made available upon reasonable request.

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