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Primary care transformation in Scotland: qualitative evaluation of the views of
general practitioners and multidisciplinary team staff members

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Abstract

Background

The Scottish Government’s vision to transform primary care includes expansion of the primary care multidisciplinary team (MDT), formalised in the new GP contract in April 2018.

Aim

To explore views on expansion of MDT working in Scotland.

Design and Setting

Qualitative study with GPs (n=8) and a range of MDT staff (n=19) working in three different population settings in Scotland conducted between May and June 2022.

Methods

In-depth semi-structured interviews with thematic analysis.

Results

Internal challenges facing MDT staff included adapting to the fast pace of primary care, building new relationships, training and professional development needs, line management issues, and monitoring and evaluation of performance. External challenges included the ongoing effects of the pandemic, lack of time, difficulties with hybrid working, and low staff morale. Most GPs reported that expansion of their roles as expert medical specialists had not yet happened, as their workload had not decreased (and in many cases had increased). In deprived areas, insufficient resources to deal with the high numbers of patients with complex multimorbidity remained a key issue. Interviewees in remote and rural settings felt the new contract did not take into account the unique challenges of providing primary care services in such areas, and recruitment and accommodation were cited as particular problems.
Conclusion

Although there has been substantial expansion of the primary care MDT, which most GPs welcome, many challenges to effective implementation remain which must be addressed if transformation of primary care in Scotland is to become a reality.

**Key words:** Primary care transformation, reform, GP contract, multi-disciplinary working, rurality, multimorbidity, health inequalities

[Word count 243]
How this fits in

The Scottish Government introduced expansion of the multidisciplinary teams as part of its vision to transform primary care in early 2016, formalised in a new Scottish GP contract in April 2018. These changes aimed to reduce GP workload, improve patient care, and better meet the needs of patients with complex problems.

Our qualitative study with GPs and MDT staff reveals that although most GPs welcomed the expansion of the MDT, there are many internal and external challenges the effective implementation of integrated MDT working in primary care in Scotland. Most GPs reported that their workload had not decreased (and in many cases had increased) and the care of patients with complex multimorbidity had not improved. Challenges were most marked (though different) in deprived areas and in remote and rural settings. These barriers to effective MDT working need to be addressed if the ambitions of the new GP contract and the transformation of primary care in Scotland are to be fulfilled.
Introduction

In response to an ageing population, growing numbers of people living with multiple long-term conditions (multimorbidity), and widening health inequalities, the Scottish Government (SG) has a policy vision of better integration of care, and shifting the balance of care from hospital to community. [1, 2]. Consequently, the transformation of primary care is seen as fundamental to achieving better quality patient care, delivering effective management of multimorbidity, and reducing or mitigating health inequalities whilst also reducing costs [3-5].

Expansion of the general practice (GP) workforce is fundamental to the SGs aim of moving more care into the community and in December 2017, it pledged to increase GP numbers by 800 within a decade [6]. However an ageing GP workforce, and GP recruitment and retention problems have made it difficult for the SG to meet its target [7, 8]. Between 2018 and 2021, GP numbers in Scotland increased by 209, but this was solely due to an increase in female GPs, who mostly work part-time [9]. The most recent data published in November 2022 showed a 3% fall in the number of full-time GPs in Scotland, the lowest level since 2009 [10].

To address problems with GP recruitment and retention, and to facilitate primary care transformation, in April 2018 a new General Medical Services (GMS) contract was introduced in Scotland [11, 12]. The contract aimed to reduce GP workload and refocus the role of GPs towards becoming expert medical generalists allowing them to focus more of their time on patients with complex care needs such as people living with multimorbidity [11, 12]. A key part of the new contract is the expansion of the multidisciplinary team (MDT) in primary care so that patients can receive care from the most appropriate member of the MDT and at the ‘right time and place’ with the intention of this also helping to reduce GP workload.
Wider primary care transformation in Scotland has also seen the integration of health and social care [13] and in 2016 the introduction of GP clusters, which we have previously reported on in this journal [14-16]. Between March 2018 and March 2022, the SG reported that there were 3,220 whole-time equivalent new MDT staff appointed in primary care, with the largest group being pharmacists and pharmacy technicians (just under 1,000) [17].

The aim of the present study was to explore the views of GPs and MDT staff on these factors and the wider progress of primary care transformation (and its impact on ageing people with multi-morbidities and on health inequalities) in three different Health Board areas of Scotland (urban high deprivation, urban affluent/deprived, and remote and rural).

**Methods**

This research is presented using the Standards for Reporting Qualitative Research framework. [18] The research was carried out and reported in accordance with the consolidated criteria for reporting qualitative research (COREQ).

**Study design**

Qualitative methods were used to explore the views of frontline primary care staff working in Scottish general practices. Data were collected using in-depth semi-structured interviews. As a result of COVID-19 all interviews were conducted by telephone, something commonly done by researchers during the pandemic. [19]

**Sampling and recruitment**

This study is the second phase of an ongoing programme of funded research led by the corresponding author on primary care transformation in Scotland. As part of this broader programme, 12 GP clusters were recruited across three Scottish health boards (out of a total of 14)
for qualitative and quantitative evaluation. This number of health boards was established by the funding limit of the research grant. The participating health boards were selected to provide a variety of population characteristics including urban areas of high deprivation (health board one), urban mixed affluent/deprived (health board two), and remote and rural populations (health board three).

Frontline primary care staff working in GP practices across participating health boards and 12 participating GP clusters were initially approached by cluster quality leads (CQLs) who had participated in phase 1 of our qualitative data collection. Potential participants were provided with details of the research through a participant information sheet. The research team were accessible to answer any questions about the study. Recruitment stopped when the core research team agreed that data saturation had been reached. The health boards and the participating GP clusters and practices are not named to preserve the confidentiality of the participants.

Data collection

One-to-one telephone interviews with frontline GP practice staff, lasting approximately 40–60 min, were conducted by the first two authors between May and June 2022. Interviews were audio recorded and transcribed verbatim. The interview topic guide was influenced by phase 1 of our previous qualitative work in this current study, a scoping review of literature on primary care transformation in OECD (the Organization for Economic Cooperation and Development) countries, and previous research conducted on primary care change in Scotland by the corresponding author. Areas covered with participants included their views on the original intentions of the GP contract/reforms and expected outcomes at that time, their views on actual progress locally in the GP practices they worked in (particularly MDT expansion and its impact on GP workload and support and training for MDT staff), the impact on health inequalities and addressing the needs of older people living with multimorbidity and the effect of COVID. Table 1 shows the wide range of ages, experience, and professional roles of the interviewees across the three health boards. The
professional roles included covered most of the key professions involved in MDT in primary care in Scotland. [17]

Data analysis

Thematic content analysis was conducted [20, 21] to identify commonalities and divergences regarding the significance and operationalisation of the GP contract/wider reforms in the context of the three diverse population groups in each health board and from the perspective of the different frontline professionals interviewed. Three authors (SWM, ED, and HH) independently identified and developed initial codes based on individual analysis of selected interview transcripts from the three health boards, and agreed on the coding frame through discussion. The transcripts were coded using NVivo (version 12 Pro) by ED. The phases of thematic analysis outlined by Braun and Clarke [20, 21,] were applied by the core team of researchers in the six following steps: familiarisation with the data; generation of initial codes; searching for themes; reviewing themes; defining and naming themes; and producing the final report. The agreed themes were also discussed with the wider research team, including the four members of the patient and public involvement (PPI) group established for this programme of research, and sent to participants for comments. Below we report the key findings with examples of quotations, but more quotations on all the themes identified can be found in the Supplementary File.

Results

The majority of interviewees spoke positively about an increase in MDT working, and reported that patients were seeing a range of MDT staff since the introduction of the new GP contract in Scotland.

*We’re quite far on in having other health professionals in the practice. We’ve got a physiotherapist, a pharmacist, a physician’s assistant. We’re signposting through reception a lot of our patients directly to them at first point of contact.* P23 (GP, urban mixed affluent deprived practice)
It just feels like certain problems lend themselves really well to being managed by those AHPs as a first point of contact. That's been a really positive change. On the days or the weeks in which those professionals are not available, we really notice the difference. P24 (GP, urban mixed affluent deprived practice)

However, we identified three key common themes in the analysis in terms of challenges of MDT implementation – (1) the intrinsic challenges of MDT expansion in primary care, and (2) the extrinsic challenges relating to the pandemic and post-pandemic period and (3) the impact on GP workload and their expert generalist role. We also identified issues that differed between the three sites.

Theme One: Intrinsic challenges of MDT expansion

This theme had five sub-themes – adjusting to the primary care setting, building relationships, training and professional development, line management, and monitoring and evaluation.

Adjusting to the primary care setting

MDT staff new to primary care reported challenges adjusting to the setting, including higher patient volumes, greater patient complexity and clinical uncertainty, shorter appointment times, the unique cultures of individual GP practices, isolation, and working across different GP practices:

With these roles it's shorter appointments and high volume patients. We're seeing far more in primary care than in secondary...The biggest stressor of the job is the volume of patients and the unpredictable day....there is that risk of burnout I suspect. P17 (Advanced physiotherapy
practitioner, urban deprived)

Coming from secondary care into the community, for me, was very difficult. The differences are absolutely huge. It is a completely different mind-set. You don’t have the answers in front of you.....It’s navigating the hospital without walls.... Loneliness, is an issue. It’s a very independent role. You’re the sole decision maker. You’re not on a ward round, you’re in somebody’s house, or sitting in a clinic room on your own. P02 (ANP, urban mixed affluent/deprived)

Building relationships
MDT staff reported both positive and negative experiences of building relationships within the practices.

I think our MDT roles are very well supported here... I speak to the GPs very regularly. They are very approachable....It makes me feel very much part of the team. It has been very welcoming and very supportive. However, I know that that is not the case in every practice. P19 (Advanced physio practitioner, urban mixed/affluent)

When we initially start in a practice it can be quite overwhelming. You might feel a bit lonely as I did. So, it was stepping out of my comfort zone, making the effort to go and speak to people, go to tea and lunch breaks...... It’s taken some time to integrate into the team. P01 (Specialist clinical pharmacist urban mixed affluent/rural)

The importance of shared expectations around roles and responsibilities was also regarded as important in relationship building.
It's very variable in the GP practices how they look at us and what work they send us. In some practices we work really well as a team. In one practice we’ve got a reasonable amount of work. Time is set aside for medication reviews, cost efficiencies, that’s agreed. But in other practices that doesn’t happen and the sheer volume of work isn’t sustainable. They try and off-load the work to us. So the expectations from the GPs about our workload aren’t realistic. P03 (Prescribing support pharmacist, urban deprived)

MDT staff also highlighted the importance of trust in relationship building.

So one of the challenges is moving to a new GP practice team. You have to really make your own mark in that team, and gain that trust. If you don’t have it already, it’s a huge challenge....As a team, if you have trust then you’ll get there, and if you don’t, then you won’t. P02 (Advanced nurse practitioner, urban mixed affluent/deprived)

**Training and professional development**

Although MDT staff welcomed further developing their professional roles and skills, some raised questions about levels of training and professional development opportunities.

More support is desperately needed for staff as they roll out......They’re thrown into these roles......If I was to stand up in a court of law – “can you justify why you did this and that and what training you had to do this”– I’d be a little bit concerned. P17 (Advanced physiotherapy practitioner, urban deprived)

**Line management**
Line management was felt to be problematic by several of those interviewed, as MDT staff were practice-based but often employed and line-managed by the Health and Social Care Partnership (HSCP).

If we have an ANP [advanced nurse practitioner] and we’re told by the HSCP “well they don’t work after one o’clock on a Friday”. You don’t have control over that….But then that’s the problem if they’re being line managed by somebody else. You’re working for two teams. P11 (GP, urban deprived)

However, one ANP saw being employed by the HSCP as a safety-net.

The difficulty lies obviously in GPs aren’t employed by the HSCP… As ANPs I think we’re safeguarded because we’ve got the HSCP behind us. The HSCP come into bat for us if they don’t think we’re being treated fairly by a GP practice. P18 (ANP, urban deprived)

**Monitoring and evaluation**

A number of interviewees raised the issue of how to assess progress and the lack of monitoring, evaluation, feedback, and time to reflect

I think you have to be careful that you’re not just churning through volumes and volumes of patients. That you get time to reflect…to have non-clinical time to develop the service….I think we can anecdotally say what we’re doing, but perhaps not have the evidence to back that up. P17 (Advanced physiotherapy practitioner, urban deprived)
There isn’t enough time...you’re fire-fighting rather than spending time planning and bringing people together work-wise...It’s time to start thinking - what do we do going forward? ...we’re not consistent at auditing the changes and then reinforcing change.  P08 (Practice nurse, urban mixed/affluent)

Theme Two: Extrinsic challenges relating to the pandemic and post-pandemic period

The pandemic

Interviewees reported that the pandemic had a very large negative effect on the progress of the new GP contract and the MDT.

COVID stopped everything. In terms of long term conditions management, a lot of it stopped. P05 (Pharmacy team lead, remote and rural)

The vast majority of interviewees also reported increased workloads post-pandemic due to backlogs and patient demand.

COVID has made things a lot less efficient and particularly post-COVID we’ve got this huge backlog of clinical need that’s built up. P14 (GP, urban mixed affluent/deprived)

Added to this was also an increase in the complexity of patients’ needs.

We’re now seeing people coming forward who are sicker than they might have been....there’s a lot of people who are really sick at the minute with big problems. P26 (Practice manager, remote & rural)

Time pressure

Unsurprisingly, time pressure was a key issue.
Enough time? I very rarely get a lunch break and I’m always late after work. So, no, definitely.

No, you’re always looking at the clock. No, it’s quite clinical based at the moment because everyone’s just under pressure. **P09** (First contact physio APP, remote and rural)

**Hybrid working**

A number of interviewees believed that hybrid consulting, introduced during the pandemic as a necessity, would remain in place.

*I would say about 30-40% are face to face appointments. It’s only by making phone calls that I can get through the number of patients that need to be seen..... Hybrid working is here to stay.**P15** (GP, urban deprived)

However, many felt that hybrid working carried significant risks.

*Telephone triage has become the new norm which incorporates much higher risk. Quite often we will say at our coffee meetings “I saw this, it sounded nothing like that on the phone. I’m so glad I brought them in and saw them”. We’ve had some near misses, we’ve had some delayed diagnoses from that.**P23** (GP, urban mixed affluent/deprived)

**Staff morale**

Most interviewees reported damage to staff morale during and since the pandemic.

*Morale is very low at the moment, just kind of feels like you’re not ever going to get out of this and get back to normality. I think people have lost any resilience they had.**P03** (Prescribing support pharmacist, urban deprived).
Theme Three: Impact on GP Workload and their expert generalist role

Seven out of the eight GPs interviewed reported no decrease in workload, and most reported increased workload post-pandemic. Consequently, most GPs had not been able to give targeted longer consultations to patients with complex needs.

Am I spending more time as an expert medical generalist? No. Because there’s nobody that can actually take the work off us. I don’t have longer appointment times.....Patient demand, it’s doubled in the past couple of years, since COVID. P15 (GP, urban deprived)

GPs also spoke about the increased responsibilities they have in supervising and training MDT staff.

A lot of our time as GPs will be supervising AHPs....To train and develop autonomous working in AHPs takes a long time......Time is precious. You often don’t feel as though you have the time to be able to properly input and teach them. P23 (GP, urban mixed affluent rural)

Health inequalities

The majority of interviewees believed the new contract had done little to reduce health inequalities, indeed several noted that health inequalities had widened during and following the Covid-19 pandemic.

Differences between affluent/mixed, deprived, and remote and rural settings

Deprived

In the deprived areas, interviewees more commonly reported insufficient resources to deal with the high numbers of patients with complex multimorbidity (spanning mental, physical, and social problems).
In areas of high deprivation people have multiple medical problems, social and mental health issues...

It’s a challenging demographic, trying to encourage self-management and health promotion and wellbeing....Also it’s still a hard sell getting patients used to not seeing a GP.....In the more affluent practice area, patients are coming in primarily with single musculoskeletal problems....P17 (Advanced physiotherapy practitioner, urban deprived)

Interviewees reported that the pandemic had exacerbated health inequalities, and staff morale was lower in these interviewees compared with those from more affluent or remote and rural settings.

Urban affluent

Interviewees from the urban affluent/mixed health board more often had had a positive view of the new contract’s impact.

There is not a lot of socially deprived areas round here. Generally, patients are very health literate....A lot of people will have private healthcare as well, so the referrals into private healthcare I can do as well...and I think there is a really good balance of staff and an appropriate balance of MDT staff. P19 (Advanced physio practitioner, urban mixed affluent/deprived)

Remote and rural

Interviewees in this setting generally felt that the new contract did not take into account the challenges of providing primary care services in remote and rural areas. Recruitment and affordable accommodation were cited as particular problems.

If you’re looking at the central belt, if it’s a pharmacist they maybe go to that practice every day. But for us, that doesn’t make sense, with the travel distance involved because it’s two hours away.

That’s something that isn’t in the contract, and it’s not been decided where we should work
from......The contract is very much city centric, sadly......We’ve got some increased MDT working, but it’s limited. The issue is around recruitment and retention in rural areas. Accommodation is also a serious issue. **P05** (Pharmacy team lead, remote and rural)

**Discussion**

**Summary**

Our qualitative study with GPs and MDT staff reveals many internal and external challenges to the expansion and implementation of integrated MDT working in primary care in Scotland. Internal challenges facing MDT staff included adapting to the fast pace of primary care, building new relationships, training and professional development needs, line management issues, and monitoring and evaluation of performance. External challenges included the ongoing effects of the pandemic, lack of time, difficulties with hybrid working, and low staff morale. Most GPs reported that their workload had not decreased (and in many cases had increased) and the care of patients with complex multimorbidity had not improved. Challenges were most marked (though different) in deprived areas and in remote and rural settings.

The introduction of growing numbers of MDT staff working in, but not employed or line-managed by senior practice staff, has clearly introduced a new dynamic into Scottish general practice. Our findings indicate that tensions can arise as a result of these new line management processes, especially where there are competing priorities between individual GP practices and health board and HSCP priorities.

**Comparison with existing literature**
Our findings raise questions about the general integration of new MDT staff into primary care and how they adapt to the unique demands of general practice and individual practice contexts and culture. It also suggests that co-location of new MDT staff into GP practices in itself doesn’t automatically ensure their integration or result in positive inter-disciplinary working relationships, as other research has highlighted [22, 23, 24].

Our findings indicate that efforts to consciously build professional relationships and facilitate the best conditions for new MDT healthcare professionals to work effectively in GP practice teams are essential. We found that this requires leadership at the practice level, fostering a practice culture that encourages integration and shared understanding of roles and responsibilities, building trust, good communication, and recognising the importance of individual GP practice culture and context, as others have highlighted [25-28]. Recent research has likewise also noted that to realise the potential of MDTs, local implementation needs to be carefully planned and supported by ongoing monitoring and evaluation [29].

The importance of training and professional development, especially for MDT staff new to general practice and working in new general practice roles was raised by participants; research elsewhere also suggests a lack of training and professional development can be a barrier to primary care transformation [30, 31].

Consequently, acknowledging the importance of building relationships and having processes in place to support this, are fundamental for the development of effective multidisciplinary working in general practice. These two components are inter-twined, as building positive working relationships can only be developed if the right processes are in place to facilitate them along with shared understandings and agreements on MDT roles and responsibilities, as noted elsewhere [27, 28].
However, this remains problematic, as highlighted with, but not limited to, the integration of pharmacists into general practice [32-34] something we also found in our study.

**Strengths and limitations**

A strength of the study was the involvement of the four members of our PPI group in all stages of the study. A further strength was that we purposively sampled clusters in three Health Boards, in clusters serving urban deprived areas, urban mixed affluent/deprived areas, and remote and rural areas, in order to gain the views of GPs and MDT staff working in these diverse settings. However, as we recruited the first 12 Clusters that agreed to participate in the research programme, we may have introduced a bias, in that those who volunteered to participate may have held stronger views, either positive or negative, than GPs and MDT staff as a whole. A further limitation was that we did not recruit all types of MDT staff though we did cover most; paramedics, mental health nurses, and healthcare assistants were not included in our sample as they didn’t volunteer to take part [17]. Finally, as in all qualitative research, our findings cannot be assumed to be generalizable.

**Implications for policy, practice, and research**

Introducing changes to general practice is challenging and, as others have noted [35, 36], policies aimed at transforming primary care frequently underestimate the time required from clinicians with already very high workloads to then take time out to support the implementation of policy goals. Doing so in light of the unprecedented challenges facing Scottish general practice as it emerges from the pandemic, as GP leaders in Scotland recently highlighted [37], makes this a major test. A recent Scottish BMA survey of GP practices found that 81% of practices reported that demand is exceeding capacity, underlining the scale of the challenge [38].

Whilst we cannot generalise our findings from such a small number of GPs interviewed, feedback from participating GPs suggest that whilst the introduction of more MDT staff into Scottish general
practice has increased MDT working, it has not reduced GP workload. Indeed many MDT staff interviewed corroborated this. With the increased responsibilities on GPs for training and supervision of new staff it has, in the short term at least, increased time pressures on GPs, echoing similar findings in England [39, 40].

Most interviewees believed that the new GP contract and wider reforms to transform primary care have had little impact on the care of older people living with multimorbidity or in addressing health inequalities. As recently highlighted [41, 42], most interviewees, especially those working in deprived areas, believed the pandemic has exacerbated health inequalities.

Concerns over growing unmet need as general practice emerges out of the pandemic were raised by many interviewees, especially in deprived practices, suggesting a need for urgent answers to the inverse care law that continues to exist in Scottish general practice [43]. The growing concerns of remote and rural GPs regarding the suitability and applicability of the GP contract where they practice [44], along with the growing problems of recruiting and retaining sufficient numbers of MDT staff, must also be considered by the SG.

Conclusion

Our qualitative study with GPs and MDT staff reveals many internal and external challenges the expansion and implementation of integrated MDT working in primary care in Scotland. Most GPs reported that their workload had not decreased (and in many cases had increased) and the care of patients with complex multimorbidity had not improved. Challenges were most marked (though different) in deprived areas and in remote and rural settings. Although there has been substantial expansion of the primary care MDT, many challenges to effective implementation remain which must be addressed if transformation of primary care in Scotland is to become a reality.
Funding
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Ethical approval
Ethical approval was obtained from the Wales REC 6 research ethics committee (REC reference: 21/WA/0078) and research and development approval from participating Scottish health boards.

Competing interests
The authors have declared no competing interests.

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Table 1. Characteristics of participating frontline GPs and MDT staff (n = 27)

<table>
<thead>
<tr>
<th>Health board and participant interviewee number</th>
<th>Sex</th>
<th>Professional role</th>
<th>Years since qualified</th>
<th>Years in current professional post</th>
<th>Employed by</th>
<th>Line managed by</th>
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<tbody>
<tr>
<td>Health board one, urban high deprivation (n=9)</td>
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<tr>
<td>P03</td>
<td>Female</td>
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<td>Professional role</td>
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