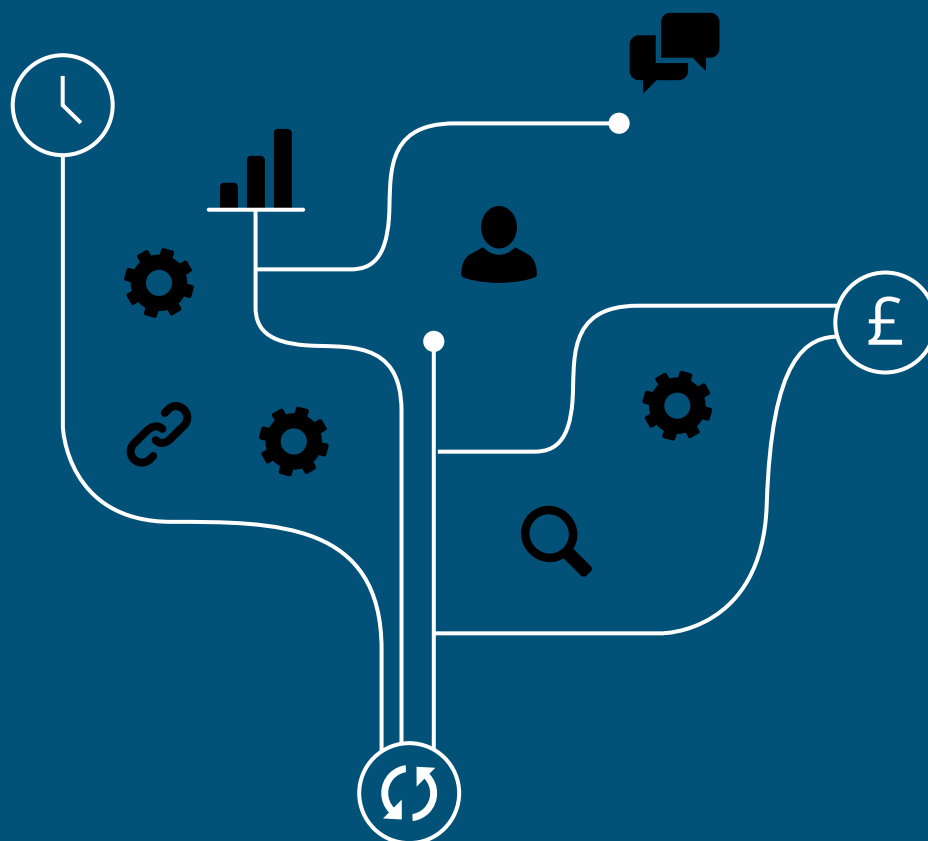


Quality improvement in general practice: what do GPs and practice managers think?

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Foreword and commentary

About this report

In the past decade, interest in the use of quality improvement (QI) approaches and tools in general practice has grown markedly.^{1,2,3,4,5} However, while the profile of QI in general practice is on the rise, there is very little concrete data about the extent of knowledge and implementation of QI approaches within practices. In fact, not much has changed since Paresh Dawda and colleagues highlighted the lack of data on QI in the sector almost a decade ago.¹

The research by the London School of Hygiene & Tropical Medicine (LSHTM) summarised in this report aims to help close this gap. Based on a survey of over 2,300 GPs and over 1,400 practice managers across the UK conducted in the second half of 2017, along with interviews and other qualitative research, it provides a valuable insight into the level of QI awareness, appetite and activity in general practice. It comes at an important moment in the development of QI in general practice following the recent inclusion of a QI domain in the Quality and Outcomes Framework (QOF)⁶ and the establishment of primary care networks (PCNs) in England⁷ to support service transformation and improvement, mirroring developments in other countries in the UK. Meanwhile, the Royal College of General Practitioners (RCGP), which argues that QI is now ‘fundamental to general practice’, is stepping up its efforts to raise awareness of QI in practice teams through its QI Ready online learning platform.^{8,9}

The role of quality improvement in general practice

At a time when GP practices are struggling to recruit and retain GPs and other staff in the face of growing demand and constrained resources,^{10,11} the use of QI approaches provides practices with a means of driving up both the quality and efficiency of their service. While there are a range of methods and tools designed to improve quality, QI involves a structured approach to tackling complex problems.¹² It offers practices the chance to free up capacity and time by tackling constraints, delays, duplication and other problems in their care processes and pathways. It allows them to take a step back and look with fresh eyes at the service they provide, and the tools they need to do things differently.^{13,14} And because QI works best when it is a team enterprise,¹⁵ it can help to capitalise on the talents and energy of the whole practice team and, in doing so, improve morale and confidence. Moreover, it gives patients the opportunity to get involved in shaping and testing the services they use.¹⁶

The technical and relational skills that practice teams will gain from engaging in QI will also stand them in good stead when it comes to making the most of new trends in care delivery such as patient-to-professional telehealth, remote monitoring and online patient portals. In addition, by strengthening their QI capability, practices will be better equipped to deal with developments in other care sectors likely to have an impact on demand for GP services, such as the proposal in the *NHS long term plan* to redesign outpatient services with a view to avoiding up to a third of face-to-face outpatient visits in England.⁷

As well as helping practices to improve their own services and processes, QI approaches can be used by practices to drive improvement on a collaborative basis. For example, they have been used to identify and tackle variations in service delivery and outcomes between neighbouring practices.^{17,18} Working in partnership also enables practices to pool improvement capacity and capability and to share insights and learning. Opportunities for such collaboration will undoubtedly increase over the next decade across the UK as formal and informal partnership working between practices through networks, federations, alliances and clusters becomes the norm.^{19,20}

At national level, too, there is growing appreciation of the critical role that QI can play in helping to sustain and strengthen general practice. As highlighted above, a QI domain has just been included for the first time in the QOF in England,⁶ while in Scotland a network of GP Clusters has been set up, in part to encourage GPs to take part in QI activity with their peers.²¹ Quality improvement has also become an intrinsic element of GPs' learning and professional development: GPs are now expected to engage in QI activities as part of their postgraduate training, appraisal and revalidation^{22,23} – although there has been relatively little analysis of the type of activities that have been carried out and the impact they have had.

Background: The challenges and opportunities for delivering quality improvement in general practice

Of course, QI is no instant panacea. Doing it well requires time, perseverance and a supportive context. Not only do practice teams have to spend time getting to grips with the problem they are trying to solve (it is easy to make the wrong assumptions about the nature, scale and root cause of the problem), but they then have to test and iterate their proposed solution over time.²⁴ Finding such time is becoming ever harder for many practices, and it is easy for improvement to become crowded out by more pressing day-to-day issues. And then there is the question of culture.²⁵ Some of the biggest barriers to improvement in health care are the entrenched professional hierarchies, which make it hard for staff from different professions, grades and levels of seniority (let alone with patients) to hold open and inclusive conversations about improvement.^{26,27} General practice has been no exception.¹ So, it is not enough to introduce practice staff and patients to QI approaches and tools and to give them the chance to use them. Without a culture of collective leadership for improvement,^{28,29} any improvement effort is likely to fall short of its intended outcomes.

Nonetheless, general practice does appear to have some distinct advantages when it comes to QI. Firstly, practices' status as small independent businesses lend them an agility and responsiveness that can be hard to find elsewhere in the health and social care system. Secondly, the size of the practice team is usually small enough for people to get to know each other reasonably well, and to understand what may motivate staff to get involved in improvement (or discourage them). It also makes it possible to involve each professional group and function within the practice in the planning and delivery of an improvement intervention. Thirdly, as community hubs closely connected to the local population they serve, GP practices are well placed to involve patients and other community groups in the design and delivery of improvement interventions. Fourthly, the fact that general practice has been almost completely digitised has given practices looking to undertake QI a major advantage over providers in almost every other health care sector, most of which are a long way behind general practice. The ability, for instance, to extract and analyse the patient information held in GP electronic health records (EHRs), gives practices the means to compare treatment uptake, adherence and outcomes within specific patient cohorts and to use it to identify areas for improvement.^{20,30}

The research findings

The LSHTM research found that most GPs and practice managers see QI as a core aspect of their work. Almost all of them (99%) reported that their practices were involved in some form of QI activity and, for most of them, the driver for this work came from within the practice rather than from external prompts. Furthermore, many respondents (60% of GPs and 71% of practice managers) said they were working collaboratively with neighbouring practices to improve services. Another significant finding was that many practices did not have a single, designated improvement lead, and were sharing the responsibility out across the practice team. In many cases the task of leading improvement was determined by the nature of the problem and the skills needed, which implies an inclusive and non-hierarchical approach to improvement.

But the LSHTM team also found plenty of issues that are making it difficult for practices to deliver improvement. As well as the twin challenges of high patient demand and staff shortages, the level of external demands (such as reporting requests) and the time needed to handle them was a source of frustration for nearly all respondents: 95% of GPs and 93% of practice managers identified the demands of other NHS agencies as a key barrier to improvement. The lack of protected time to plan and design improvement (a key difference from QI in secondary care) also emerged as a major challenge for almost 80% of GPs. This is an important finding. As the improvement programmes supported by the Health Foundation over the past decade have shown, it is almost impossible to embed and sustain an intervention without careful reflection and planning upfront.³¹ Improvement teams that try to cram the planning of a complex intervention involving multiple processes and people into a few brief impromptu meetings held between clinical commitments will struggle to make an impact.

Another challenge highlighted by the research is the level of improvement capability within general practice. For example, only 20% of GPs and 33% of practice managers were familiar with Plan, Do, Study, Act (PDSA) Cycles, which is perhaps the most widely used improvement approach in health care. Meanwhile, 42% of GPs and 51% of practice managers identified a lack of skills in managing and analysing data as being a barrier to improvement in general practice. On the plus side, the survey shows that 64% of GPs and 73% of practice managers would be interested in training in a wider range of QI tools and approaches. However, while their appetite for training is clear, it is less certain how they currently would find time to undertake it, given how little time they have for non-clinical responsibilities.

Implications of the research: The need to create an environment conducive to quality improvement in general practice

A great deal hinges on the extent to which it is possible to carve out dedicated time for QI in general practice. The goal must be to create an environment in which all practice staff are encouraged to learn about and participate in improvement, and where the resources exist, to cover their day-to-day clinical or administrative roles while they do. Up until now, such a culture has been the almost exclusive preserve of the secondary care sector,³² with primary care examples thin on the ground.³³

The opportunities mentioned above for greater collaboration between practices across the UK offer some scope to address this imbalance. But it will only happen if QI is central to the design and delivery of these partnerships and not relegated to the margins. At the very least they need a vehicle for sharing existing improvement capability and learning between participating practices and pulling in innovative ideas from elsewhere, such as the Q Community, the Royal College of General Practitioners' QI regional champions or NHS England and Improvement's Primary Care Improvement Community. Formal partnerships should also put in place a plan to identify and address any capability gaps, coupled with the means to coordinate and support improvement work carried out within and between member practices.

Of course, only so much can be done without national, regional and local support. Policymakers and system leaders have a responsibility to ensure those working in general practice are able to improve the quality of the services they provide by helping them develop their QI and data skills. They also have a role to play in helping practices carve out the time needed for QI: as the authors of this research observe: '... alongside steps to tackle workforce and funding pressures, support to help practices create time for improvement, along with vigilance to minimise the additional burden of external reporting requirements, will be particularly important ways in which the wider system can support general practice in quality improvement.'

In England, the General Practice Development Programme,³⁴ which aims to help build the capacity for improvement within the sector, is a step in the right direction. The proposal in the *NHS long term plan*⁷ to increase the number of integrated care systems (ICSs) building improvement capability is also encouraging – providing that this support filters through and provides tangible benefits for practices on the ground. However, given how far general practice still has to travel if it is to come close to matching the level of improvement capability in secondary care, these kinds of support will need to be maintained for some years yet if they are to have a meaningful impact. The case for doing so will become stronger as more examples of successful efforts to build improvement capability at scale within general practice emerge, such as Enabling Quality Improvement in Practice (EQUIP) in Tower Hamlets* and Clinical Effectiveness Southwark†, recent projects supported by the Health Foundation that are described further in Appendix 3. These examples show what can be achieved in the right context with a long-term vision, strong leadership and sustained investment over time. Given that general practice is not only responsible for the vast majority of patient contacts in the NHS but is also central to efforts to deliver new models of care and population health management, it is time for QI in general practice to receive the attention and support it deserves.

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* <http://equiptowerhamlets.nhs.uk/the-programme>

† www.clinicaleffectivenesssouthwark.co.uk

Key points from the research

This project provides a unique insight into the operation of general practice across the UK and how both GPs and practice managers are engaging with quality improvement (QI) within the landscape of the day-to-day pressures of high patient demand, workforce shortages and limited resources. The project findings draw on a survey of GPs and practice managers across the UK during the second half of 2017, which produced 2,377 responses from GPs and 1,424 responses from practice managers. This research found that:

- Improvement is a common and ongoing process for the vast majority of practices, with only 16 GPs and six practice managers in the survey saying their practices were not undertaking any QI activities. Prescribing, access, chronic disease management, collaborating with other practices and end-of-life care were all selected by GPs and practice managers as the most common improvement areas.
- Most practices do not have a single nominated lead to address QI. Usually the person leading depends on the type of improvement activity. This means that a wide range of practice staff are getting involved in QI work.
- Practices are more likely to respond to prompts from within the practice to change or improve services than from external bodies. This suggests that practices are self-motivating and that improving quality is often normal practice. However, practices reported that demands from NHS agencies did not always support QI. Reporting requirements were often overlapping and required duplication of effort and were often not in areas that the practices wanted to focus on.
- Key facilitators supporting quality improvements (Table 3.1) were:
 - working well as a team (98% of GPs and 97% of practice managers)
 - good clinical leadership (96% of GPs and 95% of practice managers)
 - clinical staff having the skills to assess service quality (94% of GPs and 93% of practice managers).
- Extra external funding was only identified as helpful by 42% of GPs and 38% of practice managers. This could be because of the added bureaucracy involved in creating and submitting plans and reporting outcomes.
- Key barriers to QI (Table 3.4) were:
 - high levels of patient demand (95% of both GPs and practice managers)
 - too many demands from NHS agencies (95% of GPs and 93% of practice managers)
 - clinical staff shortages (84% of GPs and 77% of practice managers).

These are probably not surprising as the key barriers. The level of demand from patients added to clinical staff shortages will inevitably restrict the time available for working on QI initiatives. They will also mean that it is harder to find the 'headspace' to be able to step back from day-to-day work to look at the practice and consider areas for improvement.

- Access to protected time is crucial to enable teams to meet to work on QI. However, our data shows that very few practices have access to much protected time. This issue was identified as important to successful improvement initiatives by nearly 80% of GPs (Table 3.1). Protected time seems to have been whittled away by increasing workloads and, sometimes, external demands. Unlike secondary care, most practices do not have a formal infrastructure that allows protected time for training, including in QI.
- While many GPs have been trained in Audit and Significant Event Audit, far fewer have been trained in QI tools such as PDSA (Plan, Do, Study, Act) Cycles, Root Cause Analysis and Process Mapping; for practice managers, too, only a minority have been trained in these tools. However, our survey found that nearly two-thirds of GPs (64%) and three-quarters of practice managers (73%) were interested in receiving training in the use of QI tools.

1. Introduction and background

Aims and structure of this report

This report presents the findings of a research project that aimed to establish what quality improvement (QI) work is currently being undertaken in general practice and by whom and to explore the extent to which the infrastructure and management of general practice in the United Kingdom (UK) has the necessary capacity and capability to support QI. The data were gathered through two online surveys, one of GPs and one of practice managers across the UK, preceded by a series of qualitative interviews.

The first section of this report includes a brief overview of the context of QI in general practice and a description of the project methodology. The project results are then presented in the sections that follow. Section two looks at what motivates practices to improve quality, the main areas in which practices undertake improvement activities, how improvement work fits into the practice workflow and who in the practice is involved. Section three explores the barriers and facilitators to improvement, while section four examines the level of GPs' awareness and use of different QI approaches and tools.

The context of general practice quality improvement

90% of all patient contacts in the NHS occur in general practice. It is the key gatekeeper to other services as well as being the main provider of community-based health care. In England, general practices have long been at the heart of changes to the way health services are commissioned and delivered. In recent years, smaller practices have joined together into 'super-practices' (although these are still relatively few in number) or, more commonly, federations, to take advantage of the possibilities provided by working at scale, such as the ability to share data across practices to enable improvement.²⁰ In line with plans outlined in the *NHS long term plan*⁷ practices have formed multidisciplinary PCNs with other services and neighbouring practices. Unlike existing federations or informal networks, these will be both formal and contract-based, with new and existing funding (for example, funding for enhanced services) flowing into them. The *NHS long term plan* follows on from the *General practice forward view*,³⁴ which outlined ways that general practice can be supported and improved. This in turn followed the *Five year forward view* (FYFV) for the NHS in England published in 2014.³⁵ Like several previous policy initiatives,^{36,37} the FYFV had a focus on moving more aspects of care out of large hospitals and into a primary care setting, mainly general practice. While Northern Ireland, Scotland and Wales have devolved responsibility for health care and have not been subject to the same level of reforms and restructuring, they too have seen the benefit of practices working together in federations (Northern Ireland) and clusters (Scotland and Wales), which have been in place for some time.

It is well established that general practice is coping with an increasing workload partly as a result of the ageing population.^{34,38,39} In many areas there are also problems recruiting GPs.^{10,40,41} As these pressures have risen, increasing attention has been focused on how to maintain and further improve the quality of general practice. However, what counts as ‘quality improvement’ is not straightforward.

Quality improvement in general practice

In its guide to quality improvement, the Royal College of General Practitioners (RCGP) defines it as follows:

‘The term “quality improvement” describes a commitment to continuously improving the quality of health care, focusing on the preferences and needs of the people who use services. It encompasses a set of values (which include a commitment to self-reflection, shared learning, the use of theory, partnership working, leadership and an understanding of context); and a set of methods (which include measurement, understanding variation, cyclical change, benchmarking and a set of tools and techniques).’⁴

As the results of our study show, ‘quality improvement’ and ‘improving quality’ are not the same thing. As in the quote above, ‘quality improvement’ implies the use of formal methods or tools, the results of which can be measured.⁴² Improving the quality of the services, however, can also encompass more informal efforts to change and improve the way care is delivered. Many practices are improving the delivery of their services and the way their practices work (for example, enabling a repeat prescribing system to run more smoothly) without using formal tools, but the results of these initiatives will not necessarily show up in ways that can be measured, or in standard metrics, such as the Quality and Outcomes Framework (QOF) or other measures of performance. In fact, as our survey findings on barriers and facilitators of QI activity illustrate, reporting and surveillance can potentially obstruct practices’ attempts to improve services.

Traditionally, more attention has been focused on QI in secondary care than primary care. In 2011, a report from The King’s Fund, *Improving the quality of care in general practice*, recognised that QI was not yet embedded in general practice and the authors were unable to quantify the level of QI that was being conducted at that time.⁴³ Furthermore, most practices are small businesses owned and run by the GP partners, who have a contractual rather than employer/employee relationship with the NHS, so it is possible that the levers and drivers for change within practices may overlap, but not directly correspond to, those in other, particularly larger NHS organisations, such as acute hospitals.

Nevertheless, recent years have seen increasing focus on developing and supporting QI in general practice. Box 1.1 provides a summary of the key developments.

Box 1: Key developments aimed at promoting and facilitating quality improvement in general practice across the UK since 2010

UK-wide

- Launch of revalidation for all doctors in 2012, which includes a requirement to engage in quality improvement activity.^{22,23}
- Creation of a range of RCGP quality improvement resources, such as a Quality improvement in general practice guide;⁴ QI Ready online modules;⁹ and a network of QI regional champions.⁴⁴

England

- Start of Care Quality Commission (CQC) inspections of GP practices in 2014⁴⁵ with inspection teams charged with examining the extent to which there are systems and processes for learning, continuous improvement and innovation.⁴⁶
- Publication of the *General practice forward view* in 2016,³⁴ which identified the development of quality improvement expertise as one of 10 'high impact actions', which was followed by the launch of the General Practice Development Programme aimed at building the capacity and capability for improvement within the service.⁴⁷
- Launch of a new quality improvement domain in the 2019/20 QOF⁶ alongside the publication by NHS England of *An introduction to quality improvement in general practice*.⁴⁸

Scotland

- Launch of GP Clusters in 2017, with the aim of 'providing a mechanism whereby GPs may engage in peer-led quality improvement activity within and across practices'.⁴⁹
- Creation of the Scottish Patient Safety Programme in Primary Care in 2013 with a view to improving safety processes, safety culture and leadership.^{50,51}
- Development of improvement resources by NHS Education for Scotland including a quality improvement in primary care guide.⁵²

Wales

- Development of a national programme for primary care by 1000 Lives Improvement,⁵³ which includes a focus on building improvement capacity and capability in primary care through training, support for networking and sharing learning.
- Creation of a network of primary care quality improvement leads⁵³ to support the development of Primary Care Clusters⁵⁴ across Wales.

Northern Ireland

- Launch of Health and Social Care Quality Improvement⁵⁵ to give health and social care professionals with an interest in improvement and innovation the opportunity to connect and share best practice.

The research study: Exploring how practices improve services

In order to investigate QI activity in general practice and how it can better be supported, we conducted a survey of GPs and practice managers across the UK during the second half of 2017.

Our specific research questions were:

- What are the current motivating factors for undertaking QI in general practice services?
- What sorts of QI activities currently take place in general practice?
- What role do different members of the practice team play in improvement work?
- What factors, internal or external to general practice, support and encourage QI?
- What are the internal and external barriers to QI in general practice?
- Is it possible to identify common levers for change in general practice QI?
- What support do practices say they need in order to develop QI work?

We sent an email invitation to take part in an online survey to all 46,238 GPs on the Royal College of General Practitioners membership list (as at 24 July 2017); those who had not practised in the UK in the past 12 months were identified and excluded from the survey. Overall, 2,377 responses from GPs were included in the survey dataset. In order to survey practice managers, we contacted all 9,153 practices in the UK and received 1,424 responses from practice managers. The initial design of the survey was informed by 26 semi-structured interviews and one practice-based focus group. Further information on survey methods and quality assurance is provided in Appendix 1.

The percentages of GPs and practice managers who responded to the survey by country are very similar to the percentages of GPs and practices registered with the BMA across the four countries of the UK (Table A.2). For example, 83% of the GPs registered with the BMA are in England, compared with 10% in Scotland, 5% in Wales and 3% in Northern Ireland; by comparison, 81% of the GP responses to our survey were from GPs in England, 12% from Scotland, 5% from Wales and 2% from Northern Ireland. The majority of GPs completing the survey were partners (64%), with just over 20% being salaried GPs and 15% being GP trainees (Table A.1); again, breaking down the responses across the different countries of the UK, the responses were broadly representative of GP type, apart from Wales, where our data under-represents salaried GPs. Further analysis of survey respondents is given in Appendix 2.

2. Responsibilities, activities and motivations to improve quality

Views of the current quality of care

Before asking GPs and practice managers about specific improvement activities, we wanted to gauge their perception of the need or desire for change in their practice. We asked: ‘How would you rate the quality of care and services your practice provides today, compared with what you think it should be?’ Half of GPs and practice managers felt that their expectations of the quality of their practice’s care and services were being met, with another 23% of GPs and 35% of practice managers saying that the quality of care was above their expectations (Table 2.1). This means that more than one in four GPs felt that the quality of care in their practice was below their expectations.

Table 2.1: GPs’ and practice managers’ assessment of the quality of care provided in their own practiceⁱ (%)

	GP partners	Salaried GPs	Trainee GPs	All GPs	Practice managers
Well above expectations	3	4	8	4	7
Above expectations	16	23	31	19	28
Meets expectations	50	47	54	50	50
Below expectations	29	23	5	25	14
Well below expectations	2	3	2	2	1
Base number	1,371	408	259	2,308	1,340

ⁱ Unless specified, the tables report data from both GP and practice manager surveys.

Responsibility for improvement

When asked who in the practice was responsible for quality improvement (QI), the majority of respondents, both GPs (62%) and practice managers (52%), reported ‘no single person’ and that responsibility varied according to the improvement activity. We also asked GPs and practice managers to rate the level of involvement of different types of practice staff in improvement work (‘very involved’, ‘somewhat involved’, ‘not very involved’ and ‘not involved’). Both GPs and practice managers reported that the majority of staff (including nurses and other clinical and administrative staff) were involved in improvement activities, although we were not able to ascertain how this involvement manifested itself. GP partners and practice managers were found to be the most involved in improvement work, followed by practice nurses, administrative staff, other clinical staff and only then salaried GPs. This suggests that there may be an issue with how salaried GPs are being integrated into practice teams, but this would require further exploration.

The importance of practice managers’ contribution to the improvement work of practices was highlighted in another question in the GPs’ survey. When asked about practice improvement activities, 75% of GPs agreed with the statement that ‘Our practice manager plays an important role in setting priorities for improving the services we provide’ (although the figure was slightly higher in England than in the other UK countries). GP partners agreed with this statement more than salaried GPs (53% and 41%, respectively). This may be because partners and practice managers typically form the management team of the practice and are more likely to be working together to determine priorities for the practice. The value of an effective working relationship between GPs and the practice manager has been highlighted by the CQC in its 2017 report *The state of care in general practice 2014 to 2017*: the CQC identified that practices scoring higher ratings were those with a practice manager, and where the GPs and practice manager worked together.⁴⁵

Improvement activities

Now that QI domains have been included in the QOF in England,⁶ it is even more important to understand how practices engage with and undertake improvement activity and integrate it into their day-to-day work. Our data indicate that improvement activity is common and an ongoing process for the vast majority of practices, with a wide range of work being undertaken, irrespective of impending CQC inspections or other external demands. Only 16 GPs and six practice managers in our survey indicated that their practices were not undertaking any activities to improve care. The six most common areas where practices were working to improve services are detailed in Table 2.2 (the sixth most common was different for GPs and practice managers).

Table 2.2: Areas in which improvement projects have been undertaken, by GP type and practice managers (%)

Area of activity ⁱ	GP Partners	Salaried GPs	Trainee GPs	All GPs	Practice managers
Prescribing	89	81	74	86	83
Access	79	64	47	73	81
Chronic disease management	73	67	68	72	73
Collaborating with other practices	69	46	30	60	71
End-of-life care	47	39	36	44	49
Health promotion	40	39	45	41	53

ⁱ Respondents were asked to tick as many as were applicable from a list.

Although there are some differences between the percentages of GPs and practice managers who have indicated improvement work in these areas, it is clear that prescribing, access, chronic disease management and collaborations have been uppermost in the minds of GPs and practice managers, well above other concerns. It is also important to note that the two new QI domains in the 2019/20 QOF – prescribing and end-of-life care – feature in the top five. ‘Collaborating with other practices’ also features strongly, with 60% of GPs and 71% of practice managers selecting this as an area of improvement work – in advance of the announcement of the new PCNs in the *NHS long term plan*.

Prompts to improve

Our survey found that most improvement activity was generated from within practices, rather than being externally driven. It is perhaps surprising that, in England, preparation for CQC inspections did not seem to prompt specific improvement work, even though the inspection report itself will have subsequently indicated priority areas for improvement.

When asked where the prompts came from to initiate an improvement activity, Significant Event Audits were the most common for both GPs and practice managers (slightly more for GPs (62%) than for practice managers (55%)), followed by discussion at practice meetings (58% for both practice managers and GPs) and then patient complaints (more for practice managers at 48% than for GPs at 36%). Prompts from external organisations, such as from the Clinical Commissioning Group (CCG), Health Board, or NHS Trust were rated much lower, but featured more for GPs (34%) than for practice managers (20%).

There is undoubtedly a complex relationship between the different options presented in the survey. For example, patient complaints tend to be formal and can potentially lead to a Significant Event Audit, whereas a comment or suggestion by a patient to a receptionist, nurse or GP may follow a more informal route either to the practice manager or to colleagues and then perhaps arrive on the agenda for discussion at a practice meeting. As one of the practice managers we interviewed explained:

‘... patient feedback is a big thing. So we’ve just changed something recently due to a meeting with the patients. And anything really that the staff, especially the staff at reception, and the doctors [who are seeing the practice] day in, day out, so they [...] see how it works. So actually I meet weekly with them as well, and I think it’s really important to get their feedback, and then work with them on the change.’

Thus when 58% of GPs and practice managers stated that the source of an improvement activity was ‘discussion at practice meetings’, the area in question may have taken different routes to get to that point.

In order to gauge how the team worked together, we asked the GPs and practice managers about practice meetings – whether and how often the whole team met together. There was little variation between GPs and practice managers, with nine in ten saying that their practice held regular team meetings. These were most commonly held once a month (GPs 31%; practice managers 40%) or, from slightly fewer respondents, once a week (GPs 25%; practice managers 23%). The frequency of team meetings did not vary, irrespective of list size, country, contract type or depending on whether they were separate practices or part of a federation or larger practice grouping.

3. Facilitators of and barriers to quality improvement

GPs' and practice managers' views on their ability to improve services

The survey asked about what helped and hindered a practice in attempting to improve the quality of services it provided. Respondents were presented with a series of potential facilitators and barriers and asked what impact these had had on their ability to deliver improvement. When considering key facilitators of quality improvement (QI), GPs' and practice managers' top responses were largely aligned (Table 3.1):

- working as a team (GPs 98%; practice managers 97%)
- good clinical leadership (GPs 96%; practice managers 95%)
- clinical staff have the skills to assess quality (94% of both GPs and practice managers).

The key barriers that GPs and practice managers identified were again common to both (Table 3.4):

- high level of patient demand (GPs 95%; practice managers 95%)
- too many demands from NHS agencies (GPs 95%; practice managers 93%)
- clinical staff shortages (GPs 84%; practice managers 77%).

The facilitators and barriers are discussed in more detail below.

However, the survey also found some marked differences in the views of GPs and practice managers. While 88% of practice managers agreed that they found it 'easy to participate in projects that aim to improve patient care and services in our practice', only 65% of GPs felt the same. Both GPs and practice managers have a heavy workload; however, it could be argued that practice managers have more flexibility to organise their work (as they are not tied to surgery times), and also that service QI is recognised as a core part of a manager's job. (According to the survey, 84% of practice managers agree that they have opportunities to show initiative and 88% are able to make suggestions to improve the work of the practice.)

There was also a difference of opinion (across all respondent types) about the adequacy of the resources for improvement available to practices. When GPs were asked whether the practice had 'the resources it needs to improve the quality of the care and services we provide', GP partners were more likely to disagree (64%) than salaried GPs (41%). The difference may, again, be a product of the fact that salaried GPs are less involved in the running of practices, so would not necessarily know about the resource levels of the practice or about any missed opportunities for improvement. In contrast, only 44% of practice managers disagreed with this statement, although it is unclear why they were less inclined to report this than GP partners.

Facilitators of quality improvement

To understand what may support practices in undertaking QI, respondents were presented with a series of potential facilitators and asked to indicate whether they were ‘very helpful’, ‘fairly helpful’ or ‘not helpful’. Unlike the barriers, where GPs’ and practice managers’ responses were particularly focused on a small number of specific issues that impeded improvement, their responses on the facilitators were less clear cut. For both GPs and practice managers, ‘working as a team’, ‘good clinical leadership’, ‘clinical staff have the skills needed to assess service quality’ and ‘routine monitoring of care’ were all selected by over 90% of respondents (Table 3.1). When looking at GPs specifically, these four facilitators were highlighted as by far the most important by partners and salaried GPs across the different countries and among all list sizes.

Table 3.1: Importance of facilitatorsⁱ, by GP type and practice managers (%)ⁱⁱ

	GP partner	Salaried GP	GP trainee	All GPs	Practice manager
Working well as a team	98	97	99	98	97
Good clinical leadership	97	92	99	96	95
Clinical staff have the skills to assess quality	93	94	99	94	93
Routine monitoring of care	92	93	98	93	93
Non-clinical staff have the skills to assess quality	84	84	97	85	85
Clinical staff trained in improvement	84	86	97	86	78
Non-clinical staff trained in improvement	82	86	96	84	77
Protected time	76	81	95	79	55
Wide range of information to evaluate services	76	82	94	79	70
Active patient group	61	70	89	65	52
Other support from external organisations	44	60	86	50	54
Financial support from external organisations	36	46	86	42	38

ⁱ Categories of ‘very helpful’ and ‘fairly helpful’ combined.

ⁱⁱ ‘Don’t know’ and ‘not applicable’ have been excluded from the base as well as missing answers.

Training both clinical and non-clinical staff in how to improve care and services was seen as important by over 80% of GPs and over 70% of practice managers. Our interviewees also highlighted the value of training. One key skill and training requirement they identified was in relation to the capture and analysis of data:

‘[The practice] developed three roles, one of which is about data and IT... So for any project, any improvement project we have, we have metrics, and the data lead plus some support people whom we’ve trained in data extraction provide the monitoring data and help us with that.’

(Interview with GP)

Perhaps a more surprising finding is that ‘financial support from external agencies’ was seen as ‘helpful’ by less than 50% of respondents, particularly given the general view that practices do not have sufficient resources to improve services. This view was the same for practice managers, GP partners and salaried GPs across the range of list sizes. When considering this question, we speculate that this is because financial help often comes with strings attached. As has already been mentioned, practices found the burden of reporting particularly onerous, so external support, which usually comes with expectations of further paperwork (completing application forms, recording data, evaluation and reporting), may not seem very attractive. This conclusion is borne out by the interim report of the Department of Health and Social Care’s GP Partnership Review,⁵⁶ which states:

‘The resources that are invested in general practice or primary care all too often are not seen to support the frontline delivery of care and are bundled up in small packages which are often seen as too difficult to bid for. The bidding process is over-burdensome and the delivery is so tied up with bureaucracy it is deemed to be not worth it.’

It may be assumed that smaller practices would feel the burden more than those with larger list sizes and thus bigger teams, and this is supported by the data. In practices with list sizes of 2,000 to 5,000 patients, financial support was seen as ‘not helpful’ by 62%,* but this dropped as list sizes rose, to 53% in practices with lists over 20,000.

The presence of an active Patient Participation Group (PPG) was also seen as a facilitator of quality improvements (Table 3.2). However, an active PPG was seen as slightly more helpful in practices of 20,000 patients or more (72%) than in smaller ones (for the other practice-list sizes, about two-thirds thought this). The picture across the four countries was more mixed and was likely to have been skewed because PPGs are only compulsory in England and have been set up in a minority of practices elsewhere in the UK.[†]

* For list sizes below 2,000 patients, the percentage was a little higher at 67%.

† In Scotland, 112 practices had a PPG in December 2019,⁵⁷ which equates to about 12% of practices in Scotland.

Table 3.2: Facilitators of improvement – active Patient Participation Groups. GP survey, by country (%)

	England	Northern Ireland	Scotland	Wales
Very helpful	13	0	6	4
Fairly helpful	54	21	34	52
Not helpful	33	79	60	44

Another key facilitator of attempts to improve quality was ‘protected time to plan and work on improvements in care and services’, although it was ranked slightly lower than some of the other options, being selected by about 80% of GPs and 55% of practice managers (Table 3.1). The availability of protected time for training, which provides practices with much-needed ‘headspace’,⁵⁸ is in fact a significant difference between general practice and NHS trusts:

‘Unlike our consultant colleagues in secondary care, GPs don’t have contractual training/service improvement protected time.’

(Interview with GP)

When we explored this, it was clear that GPs struggled to allocate protected time and that external organisations did not always support them in this, as this practice manager indicated:

‘So, the CCG [arrange protected learning time] every other month, so we have an afternoon every other month. But we don’t do it because NHS England are very averse to us shutting... We even got into trouble a couple of years ago because... between 12.30pm and 1.30pm we would turn the phone off unless it was an emergency... NHS England said we were in breach of contract and we needed to change it.’

(Interview with practice manager)

We asked GPs how much protected time they had each month ‘to participate in activities that aim to improve patient care and services’. 21% of partners and 31% of salaried GPs indicated that they had no protected time each month. Only 23% and 25% respectively said that they had three or four hours a month, which may indicate a monthly afternoon of protected learning time. Across practices of different list sizes, 23% of GPs in practices with under 2,000 patients said that they had 4 hours per month, compared with just 10% across all practices (see Table 3.3).

Table 3.3: Number of hours of protected time per month, by practice-list size (%)

	Under 2,000	2,000 to 4,999	5,000 to 9,999	10,000 to 19,999	20,000 or more	Total
No protected time	9	23	21	23	11	22
1 hour	15	6	12	10	13	11
2 hours	15	14	18	19	19	17
3 hours	8	10	15	13	13	13
4 hours	23	11	11	9	10	10
5–9 hours	15	24	17	16	24	18
10 or more hours	15	12	8	10	10	9

Barriers to quality improvement

To help understand what may impede QI activities, respondents were presented with a list of potential barriers and asked to indicate whether they thought they made improvement ‘much more difficult’, ‘somewhat more difficult’ or ‘not any more difficult’. The three main barriers identified by all respondent types were ‘high levels of patient demand’, ‘too many demands from NHS agencies’ and ‘clinical staff shortages’. Table 3.4 shows the responses by GP type and practice manager:

Table 3.4: Importance of barriersⁱ, by GP type and practice managers (%)ⁱⁱ

	GP partner	Salaried GP	Trainee GP	All GPs	Practice manager
High levels of patient demand	97	94	85	95	95
Too many demands from NHS agencies	96	93	87	95	93
Clinical staff shortages	84	85	75	84	77
Non-clinical staff shortages	64	70	64	65	58
Not having the right skill mix	52	50	37	50	50
Not having enough data	43	44	36	43	44
Lack of skills to manage or analyse data	43	44	31	42	51
Not all GPs engaged in improvement	38	43	33	39	46
Not all non-clinical staff engaged with improvement	37	46	41	39	42
Communication problems	28	40	29	31	31
Lack of interest in improvement issues in the practice	27	31	25	28	35

ⁱ Categories of ‘much more difficult’ and ‘somewhat more difficult’ combined.

ⁱⁱ ‘Don’t know’ and ‘not applicable’ have been excluded from the base as well as missing answers.

The picture is the same across the UK, with over 90% of GPs in England, Northern Ireland, Scotland and Wales saying that high levels of patient demand made QI work difficult. When analysing the data by list size, all sizes of practice agreed that high levels of patient demand were a barrier to QI work.

‘Too many demands from NHS agencies’ was the next most highly rated barrier, with over 90% of GPs and practice managers identifying this as an important barrier to QI work. This was reflected in comments from practice managers:

‘We are also expected to repeatedly report information in various different guises, which is frustrating and time-consuming.’

(Practice manager, comment from survey)

‘I am frustrated by the inability to make a difference to patients and staff solely due to increased reporting and workload that clearly does not recognise how general practice works.’

(Practice manager, comment from survey)

‘There needs to be a way to work better together rather than in individual practice silos and push back against some of the targets and reporting that comes from CCGs, NHSE, CQC, Public Health etc as quite often it is duplicating work and very time-consuming.’

(Practice manager, comment from survey)

‘Clinical staff shortages’ were also seen as a significant barrier. However, the number of GPs selecting this barrier became progressively larger as list sizes increased, from about 80% at the smaller practices to up to 89% in the 20,000+ category.

Another interesting finding is that 42% of GPs and 51% of practice managers identified ‘lack of skills to manage or analyse data’ as a barrier to QI (this was the same across list sizes and countries). Similarly, ‘not having enough data’ was highlighted as a barrier by 43% of GPs and 44% of practice managers. Accessing and analysing data are important skills for practices and, as discussed above, it highlights the importance of training in this area for GPs and practice managers, or the need for practices to have an appropriately skilled member of staff nominated to fulfil this role.

4. Use of the tools of quality improvement

As already mentioned, ‘improving quality’ and ‘quality improvement’ (QI) are not necessarily the same thing; the latter usually implies ‘a systematic approach that uses specific techniques to improve quality’ and ‘a “method” (an approach with appropriate tools)’.¹² This part of the report looks at the use of formal improvement tools by GPs and practice managers – which ones they have heard of and found useful as well as their interest in training in formal QI techniques.

Familiarity with quality improvement tools

Respondents were given a list of common QI tools, including some that are specific to general practice, and asked to select all the ones they had used. Table 4.1 shows the results by respondent type.

Table 4.1: Quality improvement tools and methods used, by GP type and practice managers (%)

	GP partner	Salaried GP	Trainee GP	All GPs	Practice manager
Audit	93	90	81	90	85
Significant Event Audit	95	91	63	90	90
PDSA Cycles	25	13	8	21	31
Change Management	25	13	6	20	42
Root Cause Analysis	21	15	18	19	25
Process Mapping	21	9	5	16	32
Model for Improvement	6	4	7	6	13
Run Charts	3	2	2	3	7

It is probably to be expected that the most commonly used are Audit and Significant Event Audit as these are standard tools in general practice that feature prominently in GP training, appraisal and revalidation. PDSA (Plan, Do, Study, Act) Cycles, Change Management, Root Cause Analysis and Process Mapping are also fairly common improvement and management tools, although the numbers of GPs and practice managers using these are

relatively low. It is perhaps not surprising that practice managers are more likely to have used these tools (apart from Root Cause Analysis) than GPs, as they are probably more likely to have come across them in management training courses.

In terms of who has received training, as might be expected training in Audit and Significant Event Audit are the most common among GPs (Table 4.2). Apart from the two types of audit, practice managers have received training more often than GPs in QI tools, again, perhaps because they have come across these in management training courses.

Table 4.2: GPs and practice managers who have received training in quality improvement tools (%)

	GP partner	Salaried GP	Trainee GP	All GPs	Practice manager
Audit	74	72	68	73	42
Significant Event Audit	69	62	39	64	49
PDSA Cycles	23	16	12	20	33
Change Management	17	11	4	14	43
Root Cause Analysis	14	12	11	13	24
Process Mapping	13	9	3	11	29
Model for Improvement	5	5	3	4	12
Run Charts	4	4	4	4	8
Not trained in any	18	18	16	18	25
Don't know if received training	2	4	9	3	1

Table 4.3: GPs and practice managers who expressed an interest in receiving training in the use of quality improvement tools (%)

	GP partner	Salaried GP	Trainee GP	All GPs	Practice manager
Model for Improvement	38	40	42	39	44
Change Management	36	40	38	37	32
Process Mapping	35	38	38	36	35
Root Cause Analysis	34	32	42	35	37
Run Charts	32	31	30	31	35
PDSA Cycles	29	34	32	31	29
Significant Event Audit	10	17	34	15	27
Audit	11	16	24	13	31
Other	4	4	1	3	4
Not interested in training in any of these	22	18	8	20	18
Don't know	16	17	17	16	9

Both GPs and practice managers were interested in receiving training in the use of QI tools. Of those who answered this question, only 20% of GPs and 18% of practice managers said that they were not interested in training, and a further 16% and 9%, respectively, selected 'don't know' (Table 4.3). This indicates that 64% of GPs and 73% of practice managers are interested in receiving training in a wider range of QI tools, which supports the argument that practices are interested in improving the services they provide and want new skills to help with this. The question allowed respondents to select multiple answers, depending on how many tools they were interested in receiving training in.

Table 4.4: Preferred method of receiving training among GPs and practice managers who have expressed an interest in training (%)

	GP partner	Salaried GP	Trainee GP	All GPs	Practice manager
In-practice training	75	73	69	74	58
Workshops	65	71	64	66	73
Online learning (for example, webinars or e-learning)	54	57	46	53	54
One-to-one via a senior colleague/mentor	14	18	34	18	12
Printed materials	15	12	16	16	21
Informal networking opportunity	15	18	12	15	25
One-to-one via a peer	10	11	10	10	9
Other	1	1	0	1	1
No preference in training methods	2	2	2	2	3

Of those who expressed an interest in training, the most popular format for GPs was ‘in-practice training’ (74%), followed by attendance at workshops (66%) and online or distance learning (53%), suggesting they prefer face-to-face training over an online format (Table 4.4). The advantage for the practice of in-house training is that the whole team can work together and use directly relevant examples from within the practice as training exercises. Conversely, practice managers favoured getting out of the practice to workshops (73%), followed by in-house training (58%) and then online learning (54%). While both GPs and practice managers probably value time spent with colleagues from other practices at workshops, it is likely to be easier for practice managers to be absent from the practice than for GPs who would have to fund a locum to cover any missed surgeries. Training by printed materials, one-to-one with a peer, or with a mentor/senior colleague were not rated highly as training methods by either GPs or practice managers.

5. Conclusions

This report provides a snapshot of both the quality improvement (QI) work being undertaken in practices across the UK and the views of GPs and practice managers about the facilitators and barriers to improvement. Despite concerns expressed in policy statements and the media about the pressures that general practice is under and the impact of these pressures on practices' ability to deliver high quality care, our data show that the majority of GPs and practice managers believe that improving the quality of the services they provide is an important activity. Only a very small number who responded to our survey were not involved in any QI work.

'Working as a team', 'good clinical leadership' and 'clinical staff have the skills to assess quality' were the key facilitators for improvement identified in the survey results. The importance of the practice manager as part of the management team was also highlighted. The smaller size of many practices means that the leadership is in much closer proximity to frontline staff, and GP partners remain, in a sense, front-line staff themselves, seeing patients on most days. This creates the potential for good working relationships and a positive QI culture. Indeed, it is clear from the responses to the surveys that both GPs and practice managers think that all members of the practice team, clinical and non-clinical, are and should be involved in improving the services that the practice provides. Furthermore, most respondents also reported that there was no single person responsible for leading improvement work; instead this depended on the activity in question.

Another trend is towards greater joint working. Practices were already beginning to work together, in advance of the requirement in the *NHS long term plan* that all practices should be part of a PCN. In free text comments on the survey, many respondents indicated that they were either working towards a federation or had informal links with other practices. Such contact across and between practices should have a positive impact on QI efforts in individual practices.

How can practices be better supported in quality improvement work?

Practices identified a range of areas that enabled and obstructed efforts to improve the services they provided. Some of the barriers identified will clearly have an impact on a practice's ability to improve its services, for example staff shortages. Yet most practices were able to identify ongoing improvement activities. It is notable that while there were demands from external agencies for QI, most of the improvement work had been generated from within practices. So, whatever the current barriers are, improvement work is happening in spite of these barriers. Nevertheless, the survey results suggest some ways in which practices can be better supported to pursue QI work.

Data and data analysis

Data and data analysis are clearly important to QI and this was acknowledged in our data. Over 40% of GP respondents reported that they did not feel they had access to the necessary data and skills (Table 3.4), and this was supported by the interviewees, who reported that they lacked the time to gather and analyse data. It may also be the case that there is a lack of basic data capture and analysis skills in practices. As more data becomes available and general practice IT systems become more sophisticated, practices need to have the skills to make use of them in QI work, or have access to external expertise, such as analysts employed by integrated care systems or clinical commissioning groups in England.

Quality improvement skills

While many GPs and practice managers in our survey had been trained in Audit and Significant Event Audit, there was a lack of knowledge about other QI tools. Few GPs or practice managers report that they use other tools, such as PDSA Cycles or Root Cause Analysis (Table 4.1), and similarly small numbers indicate that they have received any training in these QI tools (Table 4.2). On the positive side, there is an appetite for and interest in receiving training in a wider range of tools (Table 4.3), although this will bump up against the difficulties of GPs and practice managers finding time for training and the lack of protected time for improvement. With the advent of PCNs (England) and GP Clusters (Scotland) there is clearly potential for practices to share skills and capacity in this area.

Support from external bodies

Most GPs did not think that they had enough resources to improve services and the care provided (except in practices with a list size of over 20,000 patients, where respondents were evenly divided over whether the practice had enough resources). Nevertheless, the survey also found that, when it comes to QI, external resources to support change were generally not seen as particularly helpful because of the extra workload they can generate (Table 3.1). What is clearly missing in general practice is support from outside to create space and time for practices to get together as a complete team to learn, identify and plan improvement. This is partly a product of the way general practice is structured as a series of relatively small independent organisations. In this respect, the impact of the different organisational form of general practice compared to the larger organisations of secondary care, with their accompanying organisational infrastructure and formal training policies, should not be underestimated. Also, unlike secondary care, there is no formal requirement to ensure that protected time is provided, although the Scottish NHS has recognised its importance.^{*59} Furthermore, on occasion, the bodies that commission and oversee individual practices can actively work against attempts to create time when the practice can meet and work on QI activities as a team.

* The 2018 General Medical Services Contract in Scotland states that 'from April 2018, each practice will receive resources to support one session per month for Professional Time Activities. There is a clear intention to achieve, over time, regular protected time for every GP'.

So, alongside steps to tackle workforce and funding pressures, support to help practices create time for improvement and vigilance to minimise external reporting requirements will be particularly important ways in which the wider system can support general practice in QI.

It is perhaps remarkable that in a UK-wide study of both GPs and practice managers there is such a high level of agreement (across different countries as well as between GPs and practice managers), with only minor variations, about what hinders work to improve services and what supports it. NHS bodies with commissioning, regulatory and support functions across the UK need to acknowledge the QI activity already being undertaken in practices and take practical steps to support practices in the work they are already, willingly, undertaking.

Appendix 1: Survey methods and quality assurance

Methods

This was a multi-method study, comprising qualitative and quantitative work. The bulk of the data was gathered by a survey of GPs and practice managers, preceded by a series of semi-structured interviews.

Twenty-six semi-structured interviews and one practice-based focus group were conducted prior to the design of the survey. These were intended to gain a more in-depth picture of how QI is viewed ‘on the ground’ in practices, to gain a better understanding of how practices work day to day, and what might impact, positively or negatively, on the planning or undertaking of QI work. We interviewed a range of stakeholders, including those working in national-level institutions that have an interest in general practice quality, as well as GPs and practice managers from across the UK. The interviews were transcribed and analysed using an inductive, thematic analysis. While we knew some of the issues relating to QI work in practices and formulated our questions accordingly, the interviews also brought up other more local challenges and considerations. The interviews fed into the design of the survey questions.

The survey was divided into four brief sections:

1. basic information about the respondent and their practice characteristics
2. who in the practice is involved in quality improvement, what improvement projects have been undertaken and what prompted them to become involved
3. identifying the facilitators of and barriers to improvement
4. awareness and use of quality improvement tools and training.

We sent an email invitation to take part in an online survey to all 46,238 GPs on the Royal College of General Practitioners (RCGP) membership list (as at 24 July 2017). We decided early on in the project to use the RCGP membership list as the sample for the GP survey. The RCGP was a partner in the research project and a senior GP involved in QI in general practice at a national level was a member of the research team.

The membership list included GPs who had retired, were working abroad or, for various reasons, were not currently practising. These were identified at the beginning of the questionnaire and GPs who had not practised in the UK in the past 12 months were excluded from the analysis. In order to survey practice managers, we sent an invitation letter to all 9,153 practices in the UK, addressed to the practice manager. Although we are aware that some larger practices may have more than one practice manager, the survey

allowed only one response per practice. Both surveys were launched at the end of July 2017 and closed at the end of September 2017. An initial invitation and two reminders were sent during this period.

Overall, 2,377 responses from GPs were included in the dataset. Since we do not know the exact number of ineligible GPs on the RCGP membership list, we estimate the response rate to be between 7% and 10%. We received 1,424 responses from practice managers, which is a 16% response rate.* We received a response from the practice manager and at least one GP at the same practice in 368 cases.

Quality assurance and limitations

Ethical approval was obtained from the LSHTM ethics committee, and NHS Research Governance approval was received from the relevant bodies in each of the four countries of the UK. The project was overseen by an Expert Advisory Group, which met periodically during the course of the research. This report was also sent to them for comment.

A key limitation of the study is the low response rate from both GPs and practice managers. The sample frames were not perfect and there were advantages and disadvantages to using the RCGP membership list for the GP survey. Although we realise that the RCGP membership may not be representative of all GPs, around 69%† of GPs are currently members. We also believe that the respondents are broadly representative of GPs across the UK (Appendix 2). There were other possible ways to create a sample, but being aware of the high workload of most GPs and the number of surveys they can receive each week, we wanted to increase the chances of a response by sending the survey to named GPs and to be able to use an email invitation containing a link to the survey. We also believed that a survey sent from a professional body would help it stand out from the many others that GPs receive on a regular basis and give it greater credibility. The membership list also included many GPs who were no longer practising and some people who were members of the RCGP because of other positions they held and these were filtered out via a series of questions at the start of the survey.

The invitation letter to take part in the practice manager survey was posted to all practices, including those that may not have had a practice manager. We wanted to take the opportunity to gather the views of all practice managers across the UK. However, we were also aware that there is no central database of practice managers as they are employed by individual practices, hence the use of a mailshot. This raised a further issue that will have lowered the practice manager response rate, which is that, without email addresses for the managers, we were not able to send an electronic link to the online survey. The link was included in the letter and had to be typed into a browser, something that is known to lower response rates. Another factor impacting on the response rate is the motivation of GPs and practice managers, with those more interested in the subject being more likely to respond. This may mean that our respondents were more knowledgeable than the 'average' GP or practice manager. However, this would also indicate a lack of representativeness among the

* The response rate is based on number of practices rather than practice managers, as the total number of practice managers is not known.

† Personal communication with RCGP.

respondents, as we may be missing data from those who know less or are less involved than other GPs and practice managers. Another limitation is that we are collecting respondents' own views about what is happening in their practices and about their own knowledge and behaviours, and self-reports can be subject to recall and other reporting errors. Response and data quality issues are explored further in Erens et al.⁶⁰

The analysis of the survey data was straightforward, with the exception of one question, which asked respondents to use a sliding scale to indicate how much protected time they have each month. The scale was originally set at zero, which means that if it was not moved, we did not know whether this was an indication of zero protected time or if the question was skipped.

Appendix 2: Characteristics of survey respondents

The majority of GPs completing the survey were partners and made up almost two-thirds of GP respondents (64%), with just over 20% being salaried GPs and 15% trainee GPs (Table A.1). Recent research by The King's Fund suggests that about 30% of GPs are salaried,⁶¹ which indicates that salaried GPs are under-represented in the GP survey. This may be because partners play a bigger role in leading QI activities within practices. Most of the GPs who completed the survey were trained in the UK, with less than 1% trained elsewhere.

Table A.1: GP type and practice managers, by country (number)

	GP partner	Salaried GP	Trainee GP	All GPs	Practice managers
England	1157	452	315	1924	1109
Northern Ireland	53	4	3	60	58
Scotland	216	40	26	282	202
Wales	85	13	13	111	55
Total	1511	509	357	2377	1424

A slightly different picture emerges if we compare partners and salaried GPs with countrywide data. In England, according to NHS Digital, 58% of GPs are partners, while 27% are salaried GPs (23% among our respondents). In Scotland, only 17% of GPs are recorded as salaried⁶² (14% in our survey). In Wales the number of salaried GPs is slightly

higher at 20%⁶³ (12% in our survey) and in Northern Ireland 8% of GPs are salaried⁶⁴ (7% in our survey). This indicates that our data are broadly representative of GP type, apart from Wales, where our data under-represent salaried GPs.

Table A.2 shows the percentages of GPs and practice managers who responded to the survey from each country of the UK are very similar to the percentages of GPs registered with the BMA across the four countries of the UK, whether at the level of the individual GP (left side) or the practice (for both the GP and practice manager survey) (right side). There is a slight over-representation in the survey of GPs and practices from Scotland, and a slight under-representation of those from England and Northern Ireland.

Table A.2: GPs and practice managers compared to national data at individual and practice levels, by country (%)

Distribution of respondents across the UK	Individual GPs		Practice level: GPs and practice managers		
	GPs registered with BMA ⁶⁵	GPs in GP survey	BMA practices ⁶⁵	Practices in GP survey ⁱ	Practices in practice manager survey
England	83	81	81	80	78
Northern Ireland	3	2	4	3	4
Scotland	10	12	10	12	14
Wales	5	5	5	5	4

ⁱ In the GP survey, because some practices had more than one GP respond to the survey, data shown at the level of the practice have been weighted so that the survey distribution of practices according to their list size is consistent with the actual distribution of practice-list size within the UK.

Table A.3 shows that the survey over-represents female GPs and under-represents male GPs (compared with the General Medical Council register of GPs). If we look at respondent type by gender, among GPs who are partners, there was a 50–50 split between men and women. For salaried GPs, 74% were women and 26% were men. The proportion of men and women who were trainees is also similar (13% and 12% respectively). For practice managers, nearly four in five were female (79%) and one in five were male (21%).

Table A.3: GP respondents compared to national data, by genderⁱ (%)

Gender	GMC register of GPs ⁶⁶	GP survey
Female	52	56
Male	48	44

ⁱ Missing responses were excluded from percentage calculations in all tables.

Just under half of GP respondents were aged 50 years or over (44%). Practice managers were generally older than GPs with nearly two-thirds (63%) aged 50 years or over. Very few practice managers were aged below 30 (1%). Looking at GP type, partners tended to be in the older age groups and trainees tended to be aged under 40 (Table A.4).

Table A.4: Respondent type by age (%)

Age in years	GP partner	Salaried GP	Trainee GP	All GPs	NHS Digital ⁱⁱ	Practice managers
Under 30	0	4	22	4	1	1
30–39	12	41	58	24	29	8
40–49	30	29	18	28	32	28
50–59	50	21	2	38	30	50
60+	8	5	0	6	8	13

ⁱⁱ NHS Digital data is for England only

These results suggest that newly trained GPs are not necessarily heading straight into partnerships. Now that the option of a salaried position is available (introduced in 1996), it is one that many newly qualified GPs may prefer. In 2008, the National Audit Office reported that a fifth of GPs were working as salaried GPs, rather than as partners or locums⁶⁷ and in 2018, that had increased to 30%.⁶¹ (Salaried GPs will also include a number of ex-partners who have retired or stepped away from the pressures of partnership and returned as a salaried GP.)

There was a spread of respondents between inner city, urban and rural practices (Table A.5).

Table A.5: Respondent type by area (%)

Practice area	GP partners	Salaried GPs	Trainee GPs	All GPs	Practice managers
Inner city	16	25	30	20	19
Other urban	36	34	25	34	28
Urban-rural mix	33	25	28	30	30
Rural	14	15	16	15	21
Isolated rural	1	1	1	1	2

Across the UK, the vast majority (91%) of GP respondents came from practices that they identified as a ‘free-standing, separate entity’, the traditional small business model of general practice. Within England, of those who were part of a ‘free-standing’ practice, 45% of GPs and 60% of practice managers stated that they were also part of a federation with other practices. This is in advance of the requirement in the *NHS long term plan* that all practices should be part of a PCN. 47% of GPs and 31% of practice managers identified their practices as having no formal links to other practices. Only a small number of practices in England were either part of a super-partnership within one region (4%) or part of a national multi-practice organisation (2%).

Table A.6 shows the distribution of practices in the GP survey by list size. Since the number of responses from GPs in practices with a list size below 2,000 patients was small (n=25), results shown for these practices need to be treated with caution.

Table A.6: Distribution of practices in GP survey, by practice-list size (%)

List size	Practices in GP survey ⁱ
Under 2000	4
2000–4999	29
5000–9999	41
10000–19999	24
20000 or more	2

ⁱ GP survey data at practice level has been weighted for practice-list size within each country.

Appendix 3: The Health Foundation's work in building improvement capability within general practice

Over the past decade, almost one in 10 general practices in England, Scotland and Wales have taken part in an improvement programme funded by the Health Foundation. Our investment in general practice began in 2007 with the Engaging with quality in primary care programme^{*}, which involved 350 practices and provided useful learning about how to build improvement capability and capacity in primary care. In subsequent years we have supported large-scale projects that have sought to improve safety in general practice in Scotland[†] and to embed shared decision-making in practices[‡].

Currently, we are supporting projects based in general practice through a range of improvement programmes, including our recent programme Increasing continuity of care in general practice[§], which provides large-scale GP practices and federations with grants of up to £250,000 over 12–24 months to carry out improvement work to increase continuity in their practices.

Two of the projects we have supported recently are described below:

Enabling Quality Improvement In Practice (EQUIP) – Tower Hamlets CCG

EQUIP[¶] aims to help GP practices in Tower Hamlets to work smarter using existing resources, supported by live operational data and coaching to make effective changes.

The project, which received support from the Health Foundation's Innovating for Improvement programme, equips practices with real-time data and the skills to use that data to drive improvements. QI capabilities are also embedded in every practice through weekly sessions with a QI coach and training for practice staff. Team development interventions are also included to ensure the teams are able to communicate and make decisions effectively in order to deliver the changes.

EQUIP involves 31 GP practices in Tower Hamlets and the borough's out-of-hours service. Through EQUIP, practices have addressed a range of pressing access issues, such as how to increase their appointment capacity in response to high demand or improve the reliability of their phone service. Other practices have focused, among other things, on improving their document-handling systems and the way in which they manage new patients.

* www.health.org.uk/funding-and-partnerships/programmes/engaging-with-quality-in-primary-care

† www.health.org.uk/improvement-projects/improving-quality-and-safety-in-primary-care

‡ www.health.org.uk/funding-and-partnerships/programme/magic-shared-decision-making

§ www.health.org.uk/funding-and-partnerships/programmes/increasing-continuity-of-care-in-general-practice

¶ <http://equiptowerhamlets.nhs.uk/the-programme>

Clinical Effectiveness Southwark – Southwark CCG

For over 20 years the Clinical Effectiveness Group (CEG) in east London has played a major role in improving health care delivery in three of the UK's most deprived boroughs. The group helped the area become the UK's highest performer over a wide range of GP quality indicators. This project^{*}, which is being supported through the Health Foundation's Scaling Up programme, is undertaking a series of clinical improvement initiatives in areas such as atrial fibrillation, diabetes, hypertension and heart failure. It aims to spread the approach developed by the CEG in east London across 45 GP practices in Southwark and is underpinned by three principles:

- 'Belief' (guidelines, education and awareness-raising among stakeholders and clinical leaders).
- 'Act' (using trusted templates to support evidence-based practice, regular feedback through analytics and making the use of real-time data core to the daily work of clinicians).
- 'Motivation' (cross-practice learning and aligning incentives to clinical effectiveness areas).

The Health Foundation has also supported the RCGP to help it develop a range of learning resources – such as a set of 'how-to bite-sized guides'[†] – designed to build practices' awareness and understanding of QI. We have also been working in partnership with the RCGP and NICE to develop a set of QI modules for inclusion in the QOF in England.

Elsewhere, Q, which is an initiative connecting people, who have improvement expertise, across the UK, hosts a special interest group focused on improvement in primary care. Q is led by the Health Foundation and supported and co-funded by NHS Improvement. As of December 2019, the community has over 3,500 members in total, sharing ideas, enhancing skills and collaborating to make health and care better.[‡]

The Health Foundation has also established the Healthcare Improvement Studies (THIS) Institute at Cambridge University to strengthen the evidence-base for improving quality and safety in healthcare. THIS offers fellowships to build academic capacity for the study of improvement, and conducts research, including work on primary care. One research project will assess what sort of avoidable disruptions GPs encounter, and how these operational failures can be addressed.[§]

* www.clinicaleffectivenesssouthwark.co.uk

† <https://www.rcgp.org.uk/clinical-and-research/our-programmes/quality-improvement/quality-improvement-guide-for-general-practice.aspx>

‡ q.health.org.uk

§ www.thisinstitute.cam.ac.uk/research-projects/identifying-operational-failures-general-practice

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The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

Our aim is a healthier population, supported by high quality health care that can be equitably accessed. We learn what works to make people's lives healthier and improve the health care system. From giving grants to those working at the front line to carrying out research and policy analysis, we shine a light on how to make successful change happen.

We make links between the knowledge we gain from working with those delivering health and health care and our research and analysis. Our aspiration is to create a virtuous circle, using what we know works on the ground to inform effective policymaking and vice versa.

We believe good health and health care are key to a flourishing society. Through sharing what we learn, collaborating with others and building people's skills and knowledge, we aim to make a difference and contribute to a healthier population.

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