Walking the line between assessment, improvement and learning: a qualitative study on opportunities and risks of incorporating peer discussion of audit and feedback within quality improvement in general practice

Dorien van der Winden,1,2 Nynke van Dijk,1,3,4 Mechteld R M Visser,1 Jettie Bont1

ABSTRACT

Objectives There is a broad call for change towards ‘new era’ quality systems in healthcare, in which the focus lies on learning and improving. A promising way to establish this in general practice care is to combine audit and feedback with peer group discussion. However, it is not known what different stakeholders think of this type of quality improvement. The aim of this research was to explore the opinions of different stakeholders in general practice on peer discussion of audit and feedback and on its opportunities and risks. Second, their thoughts on transparency versus accountability, regarding this system, were studied.

Design An exploratory qualitative study within a constructivist paradigm. Semistructured interviews and focus group discussions were held and coded using thematic analysis. Included stakeholders were general practitioners (GP), patients, professional organisations and insurance companies.

Setting General practice in the Netherlands.

Participants 22 participants were purposively sampled for eight interviews and two focus group discussions.

Results Three main opportunities of peer discussion of audit and feedback were identified: deeper levels of reflection on data, adding context to numbers and more ownership; and three main risks: handling of unwilling colleagues, lacking a safe group and the necessity of patient involvement. An additional theme concerned disagreement on the amount of transparency to be offered: insurance companies and patients advocated for complete transparency on data and improvement of outcomes, while GPs and professional organisations urged to restrict transparency to giving insight into the process.

Conclusions Peer discussion of audit and feedback could be part of a change movement, towards a quality system based on learning and trust, that is initiated by the profession. Creating a safe learning environment and involving patients is key herein. Caution is needed when complete transparency is asked, since it could jeopardise practitioners’ reflection and learning in safety.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Exploratory study of a gap in the knowledge towards implementation of a promising intervention.
⇒ Participants included the four main stakeholder groups that are involved in implementation, including patients, to study agreement and disagreement between different stakeholders.
⇒ Additional stakeholders, such as governmental agencies, were not included, and they may have offered other perspectives.
⇒ This exploratory qualitative study offers insight into opportunities and risks: to get a broad overview of how these findings are supported by general practitioners in general, additional quantitative research is necessary.

INTRODUCTION

Current quality systems were established in the 1980s by governments and other supervisory bodies in high-income countries, partly in reaction to increasing demands for transparency and accountability in healthcare.1 Over the years, the emphasis of these systems shifted to auditing of performance indicators.2–4 In the past decade, researchers and policy makers, as well as healthcare providers, have acknowledged that these structures have many disadvantages. These disadvantages include a high administrative burden and a possible decrease in motivation among professionals working within these systems.5–7 Although designed to assess and ensure high levels of care, systems often focus...
on inconsequential indicators and do not necessarily improve the quality of actual patient care.\textsuperscript{8–10} Doctors and other healthcare professionals want to reclaim ownership of quality measures, and stress that the focus must shift from assessment to significant improvement of patient care.\textsuperscript{11,12} Quality improvement researchers and policy makers support this move. For example, in a 2016 viewpoint in \textit{JAMA}, Berwick proposed that a ‘new era’ for healthcare should now arise. This should be an era in which we let go of excessive measurement and transform into a ‘learning system’.\textsuperscript{1} In 2018, Braithwaite laid out in \textit{BMJ} that in order to sustain actual improvement in healthcare, a different mindset towards quality policy is necessary, appreciating a more nuanced form of quality improvement.\textsuperscript{8} Professional organisations for general practice in the Netherlands are currently advocating the development of a quality improvement system that focuses on collaborative learning and improvement. In their joint vision document on quality policy in general practice, published in 2019, they recommend increased use of peer-to-peer coaching and assessment, among other measures.\textsuperscript{13}

A promising way to give peer coaching and assessment a vital role in quality improvement could be small-group peer discussion of audit and feedback (AF). This combines two notable forms of quality improvement measures in general practice: AF and small-group peer discussion. AF interventions are widely used in quality improvement. In these interventions, clinical practice is discussed and summarised using indicators. The results are then communicated back to the health professionals, with the purpose of establishing reflection on their practice.\textsuperscript{14} Research has shown that interventions based on AF have a positive, though mild, measurable effect on professional practice.\textsuperscript{15,16} Small-group peer meetings, in the form of quality circles, have become a major part of continuing professional development (CPD) and quality improvement in general practice.\textsuperscript{17}

Current research on AF focuses on how to effectuate the best results with an AF intervention.\textsuperscript{14,18–20} As AF interventions are intended to change the behaviour of the professionals concerned, the behaviour change wheel is increasingly used to offer insight into influencing factors. In this framework, Michie \textit{et al} explain that opportunity, motivation and capability have a mutual influencing role when trying to change behaviour.\textsuperscript{21} In small-group peer discussion of AF, a group of professionals review their individual data and develop an action plan to improve their practice. Previous research has shown that this way of reviewing AF reports with peers seems to heighten motivation to change and leads to change planning.\textsuperscript{22–23} Incorporating peer discussion in an AF intervention therefore seems to influence opportunity, motivation and capability.

Although small-group peer discussion of AF seems promising, it is largely unknown what stakeholders in general practice think about giving this method a more prominent role in quality improvement. Prior research clarified that insight into the opinions and ideas of stakeholders is indispensable to facilitate implementation and ensure effectiveness of this complex intervention.\textsuperscript{24} To expand our knowledge on how to reach successful implementation of peer group discussions of AF for improving quality, we posed the following research questions: What are the views of stakeholders in general practice on peer discussion of AF? What opportunities and risks do stakeholders identify? How do they believe transparency and accountability fit into such a ‘new era’ quality system, based on peer discussion of AF?

### METHODS
### Study design

For this qualitative study, a constructivist paradigm was adopted to explore views and ideas of different stakeholders who function in different professional contexts in general practice. Thematic analysis was used to identify patterns in these differing viewpoints. Thematic analysis is often used for its flexible character, allowing data to be interpreted away from pre-existing theoretical frameworks. We chose it here for this reason exactly: it allowed us to navigate between the different contexts of our participants and to interpret our findings to construct a collective viewpoint and highlight differences where appropriate.\textsuperscript{25} A combined interview and focus group discussion design was adopted. We chose different data collection approaches to achieve optimal conditions for each stakeholder group: homogenous focus group discussions for general practitioners (GPs) and patients, and individual interviews for representatives of professional organisations and insurance companies. The homogenous focus group discussions with GPs and patients enabled discussion between participants, leading to clarification of individual viewpoints and revelation of mechanisms behind their ideas.\textsuperscript{26,27} The semistructured in-depth interview design, used for the representatives of professional organisations and insurance companies, allowed them to provide more in-depth information on their thoughts and ideas, while preventing the appearance of a political meeting.\textsuperscript{28}

### Setting

This study was conducted in the Netherlands in a general practice context. All inhabitants of the Netherlands are registered with a specific GP, where they go for diagnosis and treatment of all initial symptoms, and/or referral if necessary. GPs therefore have a strong gatekeeper function within the Dutch healthcare system.\textsuperscript{29} GPs have to renew their licence every 5 years, which requires 200 hours of CPD activities. At least 10 of these hours must be dedicated to peer-to-peer activities, for example, peer-to-peer coaching, feedback or discussion of AF reports.\textsuperscript{30} Both professional organisations and insurance companies play a role in the quality system within general practice. Professional organisations advocate for GPs at national and regional levels with regard to quality policies. They also manage guideline development, and...
many professional organisations provide CPD activities. Funding of GP surgeries is managed through insurance companies, which provide AF reports to GPs on an annual basis.31

Participants
Our participants were relevant stakeholders in the Dutch general practice setting: GPs, patients, representatives of professional organisations for GPs and representatives of insurance companies. Purposive sampling was conducted to include stakeholders with different views. GPs and patients were recruited through the academic network of the general practice department of our university. We selected patients through the patient board of a large umbrella organisation of GP surgeries, to make sure our participating patients had some understanding of the general practice policy setting, and thus were able to form an opinion on quality measures and CPD of GPs.

Data collection and analysis
Data collection and analysis took place using an iterative approach from December 2019 until June 2020. We conducted focus group discussions with GPs and patients and held interviews with representatives of professional organisations and insurance companies.

To obtain insights on corresponding themes, the same topic list was used to conduct both the focus group discussions and the interviews (online supplemental material 1). We asked the participants for their opinions on four main topics: possible purposes of AF peer discussion meetings, opportunities and risks of incorporating the meetings into the quality system, the role of accountability and transparency and how best to implement a quality system containing AF peer discussion.

During the interviews and focus group discussions, we used an infographic on how a simple system based on peer discussion of AF could be designed (figure 1). This infographic was designed by the researchers based on preliminary conversations with different stakeholders. We used the infographic as the starting point of the conversations to clarify a complex system and to check whether ideas on the basic design of such a system aligned. We verified our findings through member checking, by sending a summary of the results to our participants. We aimed to achieve data sufficiency by including all different viewpoints.

Interviews and focus group discussions were audio-taped, transcribed verbatim and anonymised. Transcripts were analysed with a thematic analysis approach using MAXQDA.25 32 The first three transcripts were analysed by two researchers (DvdW and JB) using open coding. Next, the two code trees were compared and discussed in detail, resulting in one preliminary code tree. DvdW coded the

Figure 1 Infographic on group discussion of audit and feedback (AF).
remaining seven transcripts. Ambiguous fragments were discussed with JB until agreement on coding was reached. This resulted in the final code tree (online supplemental material 2). DvdW, JB and NvD read through all the transcripts individually once more and discussed the code tree. From this discussion, the final themes were established by consensus of the full research team. We reported according to the Standards for Reporting Qualitative Research checklist for qualitative research.

Patient and public involvement
Patients were included as one of the stakeholder groups in general practice (see the Participants section). The results of this study will be shared with all participants, including the patients.

Reflexivity and ethics
The researchers are affiliated with a large general practice research and training institute. The research team included a GP trainee (DvdW), a GP and head of general practice department (JB), a cognitive psychologist (MRMV) and an MD/medical educator (NvD). They all work as medical education researchers, some having a long history of research in general practice education (MRMV, NvD) and are therefore familiar with the setting. The research project was prompted by a request made by a group of local GPs asking for a scientific framework for an alternative quality cycle in their general practice. This request informed a larger research project of which this is the first exploratory study.

Throughout this project we have aimed to conduct reflective research, giving all viewpoints equal consideration. To prevent biased interpretation of data, we have kept a reflexive stance throughout the research process by gathering frequently to discuss our positionality and the implications thereof.

Participation in this study was voluntary. We asked for and received informed consent from all our participants. All data obtained within this study were processed and stored in accordance with the General Data Protection Regulation and the Amsterdam UMC Clinical Research Unit procedures.

RESULTS
We conducted eight interviews and two focus group discussions with a total of 22 participants (table 1). The exploratory nature of this study resulted in rich data, surrounding the topic of peer discussion of AF. We therefore chose to focus on the themes that arose around the main topics we addressed in the interviews and focus group discussions, in alignment with our research questions. This leads to the three main headings of our Results section: ‘What are the opportunities of peer discussion of AF?’, ‘What are the risks?’ and ‘Disagreement on the amount of transparency’. The themes we found within these topics are listed in relevant boxes cited below. The full final code tree can be found in online supplemental material 2.

What are the opportunities of peer discussion of AF?
Participants identified several opportunities that could be offered by peer discussion of AF. They talked about what the group process can offer in addition to looking at AF reports individually. The three main opportunities they mentioned are: reaching deeper levels of reflection, adding context to numbers and taking more ownership of quality improvement (box 1).

Reaching deeper levels of reflection on daily practice
All participants agreed that discussing AF reports with peers deepens reflection on daily practice, compared with reflecting on these reports on one’s own. The data serve as the first mirror to which your practice is held up. The group acts as a second mirror, as one of the participants pointed out. According to the participants, the group deepens personal reflection by asking questions participants would not ask themselves. It also helps to uncover

### Table 1 Characteristics of participants

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Participants (n)</th>
<th>Description</th>
<th>Years of experience in this field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPs</td>
<td>11</td>
<td>Working in different types of practices (7 in solo, 4 in dual/group practices) Working in different areas (2 in rural, 3 in small-town, 6 in urban areas)</td>
<td>9–35</td>
</tr>
<tr>
<td>Professional organisations</td>
<td>4</td>
<td>Board members of different professional organizations (not further specified for privacy reasons)</td>
<td>5–25</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>3</td>
<td>► 1 board member</td>
<td>5–15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>► 1 care buyer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>► 1 medical adviser</td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>4</td>
<td>Representatives of a patient board of a large general practice organisation</td>
<td>n.a.</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GP, general practitioner.
blind spots, shows you solutions you would not have found on your own, motivates you to actually change your behaviour and encourages you to stick to your improvement plan. Participating patients also explicitly called for GPs to work together when it comes to quality improvement (see box 2 for quotes).

Adding context to numbers

GPs and representatives of professional organisations mentioned that peer discussion helps to solve the perceived oversimplicity of AF reports. They expressed being frustrated with how outcome reports are often used in quality improvement: being assessed by numbers that simplify the complex reality of their patients and of the patient-centred care they provide feels unjust. However, AF reports become more meaningful when used differently: as a basis for deeper reflection on practice, thereby prompting a conversation on improvement. Participants among all stakeholder groups agreed that peer group discussion therefore adds meaning and explanations to the indicators, doing justice to the complexity of general practice care (box 3).

Taking more ownership of quality improvement

Discussing AF in a group of fellow GPs was seen as a way to take back ownership of quality measures in general practice care. The GPs expressed hope that introducing a quality system whose cornerstone is peer discussion of AF the cornerstone of the quality system in which professionals are constantly learning with and from each other. Representatives of the professional organisations were of the same mind. The GPs and representatives of professional organisations expressed a desire for a system powered from within the profession, resulting in less externally imposed standards and more meaningful quality improvement. Representatives of insurance companies supported this transfer of ownership back to the professionals. GPs explained that ownership over quality improvement is also increased through the group process in another way: when a shared difficulty is identified, a group of professionals has more power to change the context they are working in, as compared with the individual GP (box 4).

What are the risks?

Having considered the opportunities, participants also mentioned several risks that could occur when making peer discussion of AF the cornerstone of the quality improvement system (box 5). Because such a system relies heavily on the willingness of GPs to improve practice, the question of how to handle unwilling colleagues arose. GPs also mentioned the necessity of having a safe group of peers in which to participate. Patients and GPs raised the subject of patient involvement and how important it is to incorporate this into the system.

How to handle unwilling colleagues

Participating GPs mentioned that, although they believe most of their colleagues will be eager to participate, there will always be peers who are not motivated to participate

---

**Box 1** Opportunities

- Reaching deeper levels of reflection.
- Adding context to numbers.
- More ownership of quality measures lies with the general practitioners (GPs).

**Box 2** Deeper levels of reflection

‘You have a second mirror. There’s a second mirror here [points to the group in the diagram]. This is the first mirror with information [points to the AF report]. The second mirror is what your colleague says about you in that respect, or perhaps what they say about your reflection. That has real added value, of course.’ (PO2)

‘Then you talk to your colleagues, and ask them “hey, how would you answer that question.”’ And then you say “hey, there’s another way after all …” They’re often very obvious things that make you think “oh, gosh, it can be done that way too. It’s a blind spot.”’ (GP1)

‘You don’t necessarily have to, but I think that doing it in a group takes the mirroring further. If I just look at a few figures and see “I’m doing those things well; but I’m not doing those quite as well, I’ll need to look at those again,” there’s a good chance it will stop there. There [points to the group] you’re encouraged to think about it more and answer questions like “what are you going to do with it, how, why and when?”’ (P03)

‘That’s exactly what you don’t want anymore, for the GP to do it all on his own, but for him to… I think a group like this is essential. … Yes, it should be required.’ (PT 1)

**Box 3** Adding context to numbers

‘If you’re in a group, of course you can always talk to each other about it. That’s another added value, because then you can also look at what that average says or “how are we all doing?”’ (PO1)

‘The sum of all that mirror information is really useful. Not in the absolute sense of basing a judgment on it, but in the sense that it can encourage you to reflect on your own performance.’ (P04)

‘If I may say so, an indicator is nothing more than what the word says: an indicator. As far as I’m concerned, it’s simply an invitation for a discussion, in terms of “reflection, self-reflection”.’ (IC3)

**Box 4** Taking more ownership

‘Well, you know? It stimulates the strengthening of the intrinsic motivation of GPs to work on quality, within yourself and within the group. It prevents you from having to constantly account for your actions externally. That’s the whole train of thought behind it. So that’s why I think it’s a good idea.’ (PO2)

‘Well, of course I’m really happy that there are parties who say “I want it [the power over their own quality policy] back.” I think it’s perfectly normal to evaluate your actions as a doctor. That’s part of your medical professionalism.’ (IC1)

‘If you all conclude that “there’s something wrong with our context,” that you’re then strong enough to take it to the next level together, that “something really has to change,” instead of always fighting it out at the practical level and then often not tackling it in depth.’ (GP1)
and/or change their practice, even with the best reflection methods. Participating GPs seem to accept this as a given, and conclude that this cannot be overcome by any quality system. Participants stated that this should be the responsibility of the colleagues within the group and of the regional organisations. However, one of the GPs pointed out that those doctors who are not keen to participate and change their practice in this way could still be excellent doctors for their patients. Another representative of a professional organisation explained that there are already measures in place to ensure patient safety, such as regulations concerning licence renewal and Healthcare Inspectorate (box 6).

Lacking a safe group

All stakeholders indicated that ‘feeling safe’ is an important prerequisite for reflection to actually take place. Participants agreed that many GPs in the Netherlands have a safe peer group in which they participate. However, participants mentioned that there are also groups of GPs lacking mutual trust, even while practising their obligatory peer-to-peer CPD activities together. This could be caused by bringing groups together due to geographical location. Competition for patients can be an issue in these groups, resulting in an environment in which GPs do not feel safe to freely reflect on their work. Participants expressed that this could impair learning (box 7).

Patients should be involved

Both GPs and patients mentioned that it is vital to involve patients in the AF peer discussion quality improvement cycle. Patient satisfaction often plays no part in current AF reports. GPs preferred to see patient satisfaction as a major indicator, since it says a lot about a practice: participants saw it as the most important ‘outcome’ of their work as a GP. Participants in the patient focus group discussion also favoured patient involvement and suggested that patients could have a role in determining the subject of the AF, so that they could put matters that affect them the most on the agenda (box 8).

Disagreement on the amount of transparency

Although all participants agreed that ownership of quality improvement should initially lie with the professionals themselves, issues were raised regarding the need for transparency of this process and/or its outcomes, to ensure accountability. Some of our participants argued in favour of process evaluation. Others stressed that this does not suffice and that some insight into outcome measurements is necessary. Patients showed ambiguity in their preferences on the amount of transparency that should be offered.

The argument for process evaluation

Professional organisations and GPs recognise that there is a need for some form of transparency on the quality of care that GPs provide. GPs and representatives of professional organisations share the view that this transparency should be offered in the form of process evaluation. They believe it should be sufficient to show the outside world through their mandatory annual report that they participate in AF peer group discussions in general: society should grant them ‘justified trust’ when it comes to the
results of the quality cycle. Opinions differ on whether to add what topics are being worked on and offering insight into the process. There is consent among the GPs and among most representatives of professional organisations that the amount of disclosure should be decided by the individual GP; it is seen as positive to share what is being worked on, but how much of it to share should be decided by the GP. An argument that our participants made in favour of this concerns the tension that can exist between an imposed level of transparency and the depth of reflection: if you need to be completely transparent, you do not feel truly free to make mistakes and reflect on them (box 9).

Insight into outcome measurements is necessary

Representatives of the insurance companies and a representative of one of the professional organisations voiced that simple trust in the doctor to disclose the genuine weaknesses of his or her practice does not suffice in this day and age. Several representatives of the insurance companies opposed the fact that process evaluation should be enough: one would always represent oneself as functioning perfectly, or only offer insight into the things that improved, but not into the goals that were not achieved. For the latter, plain numbers are believed to be necessary (box 10).

Ambiguity in patient preference

The participants in the patient focus group discussion were ambivalent regarding the necessity for transparency towards patients. They felt that, when it comes to medical technical skills, proper quality of care should be evident: as a patient you should be able to trust on this without needing insight into numbers and outcomes. On the other hand, the participants acknowledged that some GPs may be better at certain things than others: you should be able to review whether your GP fits the bill on the issues you find essential. That may sway your decision to switch to a different GP, if geographically possible. If AF reports for their GPs were available, some of our participants would make use of them, provided that the numbers and measures were easy enough to understand. Even so, they stressed that their own experience of the quality of their GP remains the most important factor in determining whether they are satisfied, regardless of the objective measures into which they might have insight (box 11).

DISCUSSION

In this study, we spoke to stakeholders in general practice to explore perceived opportunities and risks of incorporating small-group peer discussion of AF reports in the changing quality improvement system in general practice. We identified several opportunities that peer discussion of AF could offer, encountered some risks and discovered that there is disagreement on the amount of transparency that should be offered.

Opportunities that our participants described are: deepening of the level of reflection, addition of context to the numbers and transfer of ownership of quality improvement to the GPs. Risks that we identified were: some GPs might be unwilling to participate or change, proper reflection occurs only in a safe group of peers and it is important to add patient feedback to an AF cycle. When it comes to the role of transparency and accountability, there is disagreement between different stakeholder groups: GPs argue in favour of insight in the form of process evaluation, insurance companies state that they require at least some transparency on an outcome level, while patients show ambiguity in their preference.


Box 9  The argument for process evaluation

’S not just sitting in your ivory tower, but working on it with other people; I think that that should already show the outside world that we’re working hard on quality and that this can help the outside world get a better impression of the quality of GPs themselves again.’ (P01)

Focus group discussion 1

‘Justified trust. Yes. That’s what it should be about, but that we as participants in such a group are really responsible together for ensuring that everyone actually puts their best foot forward and comes with the intention of taking something away with them.’ (GP1)

‘If that’s how you’re going to do it, based on justified trust and things like that, you can also leave a lot of control behind. Or it could be “never mind, you can read all about it in our annual report”’. (GP7)

‘The intrinsic part I think is the intrinsic quality perspective of the professional and the transparency discussion. What you sometimes see is that those two things get mixed up. That’s something we should try to avoid, because from that intrinsic quality perspective, as a professional you should actually be completely free to say “oops” occasionally, to think “shoot, I could have done that a bit better” once in a while.’ (IC3)

Box 10  Outcome measurement is necessary

‘The problem is, everyone’s going to write something down, making it seem that everyone is doing great. It never means that much to me. I don’t know anyone who honestly writes down “we did this terribly, it’s still terrible, we failed.” There’s too little trust for me. Then I would also like to see the hard data.’ (IC1)

Box 11  Ambiguity in patient preference

‘And it could be important for patients, because a patient would never choose a doctor who scored a 5 or 6 of course, but I think it’s especially important – in relation to education and perhaps follow-up courses – that you know how you score as a doctor, that you have areas for improvement based on that score. Ultimately that’s what it’s about.’ (P2)

‘So if I feel that my GP is competent, I’ll stay with my GP. If I have a GP as I have had in the past, who is not competent, or a stand-in, which almost becomes a matter of life and death, I’ll never go there again and I’ll never want to see that stand-in again either. So that’s my own personal barometer, which is basically what you’re saying.’ (P4)
Opportunities
From our results it seems that AF reports and small-group peer discussion complement and reinforce each other when used together. By deepening reflection, peer discussion of AF boosts learning from AF and working towards change. By adding context to outcome measurements and transferring ownership of quality improvement to healthcare professionals, peer discussion of AF offers a partial solution to changing the quality system for the better, as called for by health professionals and researchers.

Social learning, changing behaviour and feedback and assessment ‘for learning’
Many of our findings concerning the perceived opportunities of AF peer discussion tie in with existing medical educational literature: the idea that learning with a group of peers deepens reflection, heightens motivation and increases ownership can be incorporated into medical and general educational theory. With his social learning theory in the 1960s, Bandura introduced the notion that our learning occurs through the observation of others and is thereby a social process. Lave and Wenger later introduced the importance of communities of practice and the notion that we learn from our own experiences and from seeing and hearing others. Sharing these experiences deepens reflection and thereby learning, as our participants confirmed to be the case with peer discussion of AF.

Our participants described that peer discussion deepens reflection on AF. It can therefore give meaning and momentum to the AF report, which are necessary for it to lead to improvements. When looking at the behaviour change wheel, a framework that provides insight into why and how people change behaviour, peer discussion on AF could add to motivation to change and increase capability (two cornerstones of the behaviour change wheel), for example, by sharing best practices and increasing ownership and capability to tackle shared problems.

Additionally, peer discussion of AF fits within the four-step process proposed by Sargeant et al in 2013 for using feedback and assessment ‘for learning’, rather than feedback and assessment ‘of learning’. In their article on how feedback and assessment can encourage professional development, they explain that, as a first step, external data are necessary in order to improve practice, since self-assessment is not sufficiently reliable. With peer review of AF, this comes in the form of the AF report. The second step is engaging with the feedback. Sargeant et al propose discussion of feedback in order to stimulate this. Discussing feedback leads to alignment of external feedback with the self-image and increases self-efficacy: it enables doctors to form an action plan.

This aligns with the deeper levels of reflection described that peer discussion of AF provides, as described by our participants.

Peer discussion of AF therefore follows the longstanding rules of social learning theory. It appears to tie in with providing feedback ‘for learning’, engaging with it and working towards behaviour change.

Moving towards a learning quality system
When considering the other opportunities our participants expressed, it seems that giving peer discussion of AF a prominent role in the quality system of general practice could offer a partial solution to the problems that current quality systems showcase. Our participants believe that it can help solve the problem of losing context when looking solely at outcome measurements and that it transfers ownership of quality policies to the GPs. By being a quality improvement intervention and a CPD activity, we believe it will put the focus on learning and improvement instead of assessment. It would tackle some of the changes that Braithwaite proposed in 2018, which are necessary to change healthcare improvement. For example, it is powered from within the health profession (instead of top-down), it centralises natural networks of clinicians, it pays attention to context, it does focus on what went wrong and on what clinicians do right (by sharing best practices) and it is built on (and stimulates) collaboration. Furthermore, group discussion of AF fits into the new ‘era for Healthcare and Medicine’, which Berwick advocated for in his article in 2016: it will bring us closer to a ‘learning system’. Group discussion of AF takes into account the complexity of the environments in which GPs function, by giving them and their peers ownership of which subjects to act on, and how to act on them. It gives GPs the opportunity to focus on the measurements that matter.

Risks
Berwick ends his article with the notion that stepping into this new era is not as easy as it seems. The risks our participants identified affirm this notion. The unresolved issue of what to do with GPs who are not willing to participate meaningfully raises the question of whether this type of intervention is fit for accountability purposes. Berwick states that we should include and empower not only clinicians, but especially patients. As the patients and GPs in our study explained: the patient voice still needs attention within the peer discussion of AF cycle. The described necessity of a safe learning environment (relying both on having a trusted peer group and control over who has insight into the process and the outcomes) fits with educational theories on social learning. Even so, this safe learning environment clashes with the complete transparency that Berwick proposes to be necessary: participating GPs and professional organisations clearly argue for process evaluation, rather than outcome measurement.
Transparency versus a safe learning environment

Importantly, disagreement on the level of transparency between our stakeholder groups presents us with a pivotal dilemma. While transparency is an important prerequisite when it comes to quality assessment, high demands for transparency may put the learning of health professionals, and thus quality improvement, at risk.

As the knowledge of quality improvement evolves, boundaries between quality assessment, improvement and also CPD get blurred: we need to hold our health professionals accountable for what they do. We want them to improve their practice and we want them to learn and keep learning. All the while, we require them to show us how they are doing this and to prove to us that it is working: we ask them to provide insight into both their actions and results. While this development has helped transform health workers into accountable professionals, going overboard with it puts learning, and thus sustainability, at risk. This risk becomes clear when we revisit the previously discussed learning theories: a prerequisite for an individual to learn, and thus sustainable improvement of practice, at risk. This risk becomes clear when we revisit the previously discussed learning theories: a prerequisite for an individual to learn, and thus to improve practice, is a safe learning environment. If we look at peer discussion of AF, the necessity of a safe peer group is, as expressed by our participants, a given. Yet, the safety of the learning environment is influenced by the direct peer group and by others, such as insurance companies, Healthcare Inspectorate and patients, possibly looking over the doctors’ shoulders, at outcome reports and improvement rates. This causes a trade-off between the amount of transparency and safety for learning (figure 2).

Accountability

Sustainable quality improvement depends on health professionals feeling safe enough to learn. At the same time, it is necessary for doctors to realise the importance of offering society insight into their daily practice and their actions to improve it. The era in which accountability was optional is long behind us. GPs and professional organisations express the desire to take responsibility themselves by developing a culture of holding each other accountable within these groups, but this is not yet the reality, as our participants stated. Patients and representatives of insurance companies express difficulty trusting that this will happen successfully. Even so, as one of our participants pointed out: there are already structures in place to hold poorly performing doctors accountable.

Fortunately, our results show that there is room for conversation on both sides: GPs and professional organisations are aware that there has to be a certain level of accountability. Insurance companies also understand that doctors need to feel safe to make a mistake here and there to learn. Meanwhile, patients explain that trusting their doctor does not have much to do with numbers and data, but far more with their personal experiences.

Given the above, we urge healthcare professionals and policy makers to have a conversation on transparency versus a safe learning environment within quality improvement. When designing and introducing new quality improvement measures, awareness of the tension between transparency and a safe learning environment is crucial. Clarity on wanted purposes, learning and/or assessment should be properly discussed with all stakeholders involved. It should be questioned whether both of these purposes can exist within the same activity. When both are required, the effects on safe learning should be taken into account and, as suggested by Sargeant et al, carefully managed. Since this tension has been researched widely in medical educational literature, we believe that using a broader scope of theory, especially educational theory, when conducting quality improvement research, may help with gaining insight into the underlying problems and may offer solutions.

Strengths, limitations and further research

It is important to note that this is an exploratory study, performed in a specific Dutch general practice context. Opportunities and risks identified in this context and by these stakeholders therefore cannot simply be extrapolated to other settings and larger numbers. We chose to focus on the three key stakeholders in our view, excluding other relevant agencies, such as governmental agencies and the Healthcare Inspectorate. Although we believe that the most important opportunities and risks were identified, different insights may be identified when including these agencies. All differences in settings aside, the struggle to develop new types of quality improvement tools and systems is widely shared across contexts and nations. We may learn from each other’s experiences. Moreover, we believe the tension between transparency and the safe learning environment to be relevant to many other quality improvement contexts.

It proved difficult to find GPs who were critical of AF peer discussion, which raises the question of whether our participating GP population was representative and peer
Discussion of AF is indeed widely embraced, or whether we were unable to escape the academic-minded enthusiastic GP when selecting our sample. We did purposively sample GPs in order to find a critical voice as well, adding another interview with a GP. When interviewed, this GP was merely critical of whether all GPs are indeed part of a safe group, and not of the opportunities AF could offer when indeed performed within a safe peer group. Even so, further research is necessary in order to verify our findings with a larger number of GPs.

Similar selection bias could have happened in the selection of our other participants: representatives of professional organisations and insurance companies may have agreed to participate because they were leaning towards the positive concerning this subject. Even so, we believe that we got a reasonable overview of the ideas and opinions that are alive in these agencies. We heard both positive and negative (opportunities and risks) in these interviews.

Our patients were purposively selected as members of the patient board of a large general practice organisation, because we believed it to be necessary for them to have some experience and affinity with thinking about quality systems in general practice with an umbrella view. This may mean that they are not directly representative for the typical patient. Nevertheless, the patient view added to the richness of our research. Inclusion of patients within future research on quality systems, as well as on CPD, can be of great value.

**CONCLUSION**

Peer discussion of AF is a valuable addition to quality improvement in general practice, according to stakeholders. It offers opportunities to engage with AF reports on a deeper level, resulting in learning and leading towards behaviour change. It could be part of changing the quality system in general practice towards a system based on learning. Creating a safe learning environment is a key part of this, as is including the patient voice into the system. Since tension exists between learning and improvement in a safe environment on the one hand and asking for a high degree of transparency on the other, using peer discussion of AF for accountability purposes should be treated with caution.

**Author affiliations**

1 Department of General Practice, Amsterdam UMC Locatie AMC, Amsterdam, Netherlands
2 Methodology and Quality of Care, Amsterdam Public Health, Amsterdam, The Netherlands
3 Personalized Medicine and Quality of Care, Amsterdam Public Health, Amsterdam, The Netherlands
4 Faculty of Health and Faculty of Sports and Nutrition, Center of Expertise Urban Vitality, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands

**Acknowledgements** We would like to specifically thank our participating patients for expressing their views on continuing professional development in general practice. We would also like to express special thanks to Marianne Mak-van der Vossen, who critically reviewed our paper during the writing process.

**Contributors** DvW codesigned the study, wrote the protocol, performed the interviews, observed both focus group discussions, coded the data, analysed the data and wrote the manuscript. NvD codesigned the study, critically reviewed the protocol, led a focus group discussion, coded the data, analysed the data and wrote the manuscript. MRMV codesigned the study, critically reviewed the protocol, led a focus group discussion, coded the data, analysed the data and wrote the manuscript. DvW functions as the guarantor of this study.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

**Patient consent for publication** Obtained.

**Ethics approval** This study involves human participants but the Medical Ethical Review Board of the Amsterdam UMC waived the necessity for ethical approval under reference number A18.310. We received a waiver from the Medical Ethics Review Committee of the Amsterdam University Medical Centers, confirming that the Medical Research Involving Human Subjects Act does not apply to our study.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** Data are available upon reasonable request. Data are available upon reasonable request. We will consider sharing deidentified data when objectives fit those communicated to our participants.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

**ORCID iD**

Dorien van der Winden http://orcid.org/0000-0002-5888-169X

**REFERENCES**


12 Iacobucci G. CQC’s plans to revamp GP inspections will not reduce bureaucracy, says Royal College. *BMJ* 2017;358:j4076.


19 Ivers NM. Optimizing audit and feedback interventions to improve quality in primary care. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 2015;75


Topic list 'Walking the Line'

Short introduction of the interview/focus group [recorder off]

Short introductions of the interviewer/focus group discussion leader.

Asking for a short introduction of the participant(s):

- Could you introduce yourself shortly? Could you tell me what your job entails? What topics are you working on?

[Recorder on] You have received the information letter and signed informed consent, but again: do you agree with the recording?

I would like to start with looking at this figure together and discuss it. That's part 1 of the interview. Then, in part 2, I have a few more questions that go deeper into certain dilemmas. There are a number of topics that I would like to cover in a short time, so I may interrupt if we stray too much from that.

Short introduction:

This interview is held in the context of scientific research into the use of peer discussion of audit and feedback in general practice. This research was initiated by general practitioners from our region. We are looking at how we can best use peer discussion of audit and feedback to improve quality of care. In this study we look into how the various stakeholders view this. We ask for your ideas as an expert in primary care.

In order to clearly state what we are talking about, I would like to look at this figure with you.

Audit and feedback is already widely used in general practice in various forms. Examples of this are the pharmacotherapeutic consultations (FTOs), diagnostic consultations (DTOs) and the summary of AF that general practitioners receive from health insurers every year. AF is, however, more widely applicable: the general principle is that data is collected about the actions of the general practitioner (the audit), which is then fed back to the general practitioner (feedback). That data can come from different sources. You can also compare with different benchmarks.

- Looking at the figure: what are your thoughts?

If we then look at different parts of this figure.

Sources:

- What are the possible sources for AF? [subjects, sources, benchmarks to be discussed: ask further about sources/benchmarks]

Discussing the group:

- How do you feel about discussing AF in group?
- What kind of group should it be?
- What are the conditions for discussing AF in a group?
- How should or could you form such a group?

**Quality improvement:**

- Some people would like to give more prominence to peer discussion of AF in quality improvement and continuing professional development for general practitioners. What are your ideas on this?
- What benefits would there be from your perspective? Can you tell us more about that?
- What risks could there be?
- Which conditions are important?

**Transparency:**

- How do you feel about transparency when it comes to quality improvement/assurance?
  What should transparency look like? What transparency do you think is important? (towards health insurer, towards patients?) What do you think GPs themselves think of this? What do you think patients want?

**Accountability:**

- How do you think doctors should be accountable for the care they provide? And to who?

**Process/outcome measure and consequences:**

- Should there be requirements for peer discussion of AF? To the process? Or also the results? Should there be consequences to it? How? (Reward/punishment?)

**Feasibility:**

- What could go wrong? Where could it go wrong?
- How do we involve GPs who are less motivated to work on quality?

Finally, a number of contrasts [choose based on conversation: to clarify ambiguities]:

Do you think peer discussion of AF should be used as a learning tool or quality control? [If not clear enough yet: why and how?]

Do you think that GPs should have control over quality improvement themselves or that it should lie more externally? (why, how?)

Do you think we should set requirements for the process or the results?

**Concluding:**

Are there any other people you think we should definitely speak to as part of this investigation? Who and why?

Thank you for your time! I'll keep you updated on the investigation if you'd like. We are going to talk to more people. Eventually we will publish the results in a scientific journal. We may also use the input to design an intervention that is based on peer discussion of AF.
Title: Walking the line between assessment, improvement, and learning: an exploratory study on opportunities and risks of peer discussion of audit and feedback

Corresponding author: Dorien van der Winden, Amsterdam UMC location University of Amsterdam, Department of General Practice, Meibergdreef 9, Amsterdam, The Netherlands, d.vanderwinden@amsterdamumc.nl

Co-authors: Nynke van Dijk¹, Mechteld Visser¹, Jettie Bont¹

1. Amsterdam UMC location University of Amsterdam, Department of General Practice, Meibergdreef 9, Amsterdam, The Netherlands

Word count: 5351

Key words: clinical audit, continuing medical education, formative feedback, general practice, peer group
## Code System ‘Walking the Line between assessment, improvement, and learning: an exploratory study on opportunities and risks of peer discussion of audit and feedback’

<table>
<thead>
<tr>
<th>Code System</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>achieving deeper levels of reflection</td>
</tr>
<tr>
<td></td>
<td>GPs</td>
</tr>
<tr>
<td></td>
<td>uncovering blind spots</td>
</tr>
<tr>
<td></td>
<td>group asking different questions</td>
</tr>
<tr>
<td></td>
<td>group offering different solution</td>
</tr>
<tr>
<td></td>
<td>group encouraging to improve</td>
</tr>
<tr>
<td></td>
<td>Insurance companies</td>
</tr>
<tr>
<td></td>
<td>group asking different questions</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
<tr>
<td></td>
<td>POs</td>
</tr>
</tbody>
</table>

BMJ Publishing Group Limited (BMJ) disclaims all liability and responsibility arising from any reliance placed on this supplemental material which has been supplied by the author(s).
<table>
<thead>
<tr>
<th>Opportunities\adding context to numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities\ adding context to numbers \GPs</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \GPs\complexity of general practice care</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \GPs\reality is different from numbers</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \GPs\group adds context</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \Insurance companies</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \Insurance companies\indicators are a starting point</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \Insurance companies\GPs in the lead on meaning of numbers</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \POs</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \POs\complexity of general practice care</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \POs\numbers simplify</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \POs\group adds context</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \patients</td>
</tr>
<tr>
<td>Opportunities\ adding context to numbers \patients\numbers simplify</td>
</tr>
<tr>
<td>Opportunities\taking more ownership</td>
</tr>
<tr>
<td>Opportunities\ taking more ownership \GPs</td>
</tr>
<tr>
<td>Opportunities\ taking more ownership \GPs\quality improvement is part of the profession</td>
</tr>
<tr>
<td>Opportunities\ taking more ownership \GPs\GPs should be in the lead</td>
</tr>
<tr>
<td>Opportunities\ taking more ownership \GPs\GPs should be in the lead\ownership prevents constant accountability</td>
</tr>
</tbody>
</table>
### Opportunities

- Taking more ownership: GPs should be in the lead; group can mobilize action
- Taking more ownership: Insurance companies
- Taking more ownership: Insurance companies; quality improvement is part of the profession
- Taking more ownership: POs; we would welcome GPs in the lead
- Taking more ownership: POs; quality improvement is part of the profession
- Taking more ownership: POs; GPs should be in the lead
- Taking more ownership: POs; GPs should be in the lead; ownership prevents constant accountability
- Taking more ownership: patients
- Taking more ownership: patients; trust in GPs

### Risks

- How to handle unwilling colleagues?
- How to handle unwilling colleagues?: GPs
- How to handle unwilling colleagues?: GPs; some people won’t participate
- How to handle unwilling colleagues?: GPs; some people won’t participate; they can be excellent doctors
- How to handle unwilling colleagues?: Insurance companies
- How to handle unwilling colleagues?: Insurance companies; we need some form of control
- How to handle unwilling colleagues?: POs
- How to handle unwilling colleagues?: POs; some people won’t participate
Opportunities
How to handle unwilling colleagues?
- Some people won't participate.
  - Their peers know who they are.
- Group needs to take action.
- There are other mechanisms in order to reinforce adequate care.

Opportunities
How to handle unwilling colleagues?
- Patients need some form of control.

Risks
Lacking a safe group

Risks
Lacking a safe group
- GPs
  - Most GPs are in a safe group.
  - Not all groups are safe for learning.
  - There can be competition.

Risks
Lacking a safe group
- POs
  - Safe group should be available.

Risks
Patients should be involved

Risks
Patients should be involved
- GPs
  - Most important outcome is quality of life.
  - Most important outcome is patient satisfaction.
  - Patients could offer insight.

Risks
Patients should be involved
- Patients
  - Patients are missing in peer quality cycle.
<table>
<thead>
<tr>
<th>Risks</th>
<th>patients should be involved</th>
<th>patients could offer insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks</td>
<td>patients should be involved</td>
<td>POs</td>
</tr>
<tr>
<td>Risks</td>
<td>patients should be involved</td>
<td>Insurance companies</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>we need some form of</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>accountability</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>we need some form of</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>accountability</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>you cannot grade your own</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>exam</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>process evaluation</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>process evaluation</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>offering insight in that</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>you participate should be</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>plentiful</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>process evaluation</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>offering insight in how</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>you participate should be</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>plentiful</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>besides process eval</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>we need some outcome</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>measurement</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>outcome measurements</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>outcome measurements</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>should not be asked</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>some form of outcome</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>measurement should be</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>offered</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>outcome measurement could</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>impair safety of learning</td>
</tr>
<tr>
<td></td>
<td>Disagreement on transparency</td>
<td>ambiguity</td>
</tr>
</tbody>
</table>