Doctors' perceptions of why 360-degree feedback does (not) work: a qualitative study

Karlijn Overeem,[1,2] Hub Wollersheim,[1] Erik Driessen,[3] Kiki Lombarts,[2,4] Geertje van de Ven,[1] Richard Grol[1] & Onyebuchi Arah[2,5]

OBJECTIVES Delivery of 360-degree feedback is widely used in revalidation programmes. However, little has been done to systematically identify the variables that influence whether or not performance improvement is actually achieved after such assessments. This study aims to explore which factors represent incentives, or disincentives, for consultants to implement suggestions for improvement from 360-degree feedback.

METHODS In 2007, 109 consultants in the Netherlands were assessed using 360-degree feedback and portfolio learning. We carried out a qualitative study using semi-structured interviews with 23 of these consultants, purposively sampled based on gender, hospital, work experience, specialty and views expressed in a previous questionnaire. A grounded theory approach was used to analyse the transcribed tape-recordings.

RESULTS We identified four groups of factors that can influence consultants' practice improvement after 360-degree feedback: (i) contextual factors related to workload, lack of openness and social support, lack of commitment from hospital management, free-market principles and public distrust; (ii) factors related to feedback; (iii) characteristics of the assessment system, such as facilitators and a portfolio to encourage reflection, concrete improvement goals and annual follow-up interviews, and (iv) individual factors, such as self-efficacy and motivation.

CONCLUSIONS It appears that 360-degree feedback can be a positive force for practice improvement provided certain conditions are met, such as that skilled facilitators are available to encourage reflection, concrete goals are set and follow-up interviews are carried out. This study underscores the fact that hospitals and consultant groups should be aware of the existing lack of openness and absence of constructive feedback. Consultants indicated that sharing personal reflections with colleagues could improve the quality of collegial relationships and heighten the chance of real performance improvement.

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[1]IQ Healthcare, University Medical Centre St Radboud, University of Nijmegen, Nijmegen, The Netherlands
[2]Department of Social Medicine, Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands
[3]Department of Educational Research and Development, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands
[4]Department of Quality Management, Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands
[5]Department of Epidemiology, School of Public Health, University of California Los Angeles, Los Angeles, California, USA

Correspondence: Karlijn Overeem, UMC St Radboud IQ Healthcare 114, PO Box 9101, 6500 HB Nijmegen, The Netherlands.
Tel: 00 31 24 361 5095; Fax: 00 31 24 354 0166;
E-mail: k.overeem@iq.umcn.nl

INTRODUCTION

Doctors are faced with many professional demands, innovations and changes in medical knowledge and techniques, the need to collaborate in larger, often multidisciplinary, teams, and patients who are increasingly knowledgeable about their health and health care. As a consequence, it is important for doctors to ensure and demonstrate that their performance is up to standard. As doctors have been shown to have limited ability to self-assess their performance, external assessments are required for accurate appraisal.[1] External assessments are now well established in revalidation programmes in the UK and Canada.[2] In the past, there has been disagreement as to whether revalidation should aim to enhance professional development or to weed out those who are unfit to practise medicine.[3] The current consensus is that revalidation should do both.[4] There are few studies, however, that have systematically examined the formative aspects of revalidation in terms of its impact on doctors' performance improvement.

One of the methods commonly used to assess doctors' performance is 360-degree feedback.[5,6] Currently, 4444 residency programmes in the USA and all foundation programmes in the UK use 360-degree evaluations to assess residents and fellows. Since 1999, 360-degree feedback has been used for family doctors and surgeons in Canada and internists in the USA. It involves the evaluation of performance on various tasks by, firstly, peers with knowledge of a similar scope of practice, secondly, co-workers from allied health professions and, thirdly, patients. Research by Sargeant *et al.*[7] has shown that 360-degree feedback can be instrumental in improving performance, but its impact may be impaired by doctors' emotional reactions to negative evaluations. Moreover, increased awareness of weaknesses is often not enough to induce behavioural change.[8] The literature suggests, however, that performance improvement can be enhanced by a facilitator who delivers the feedback[9] and by stimulating doctors to reflect on feedback.[10] In this context reflection should be interpreted in the sense of 'letting future behaviour be guided by a systematic and critical analysis of past actions and their consequences'.[11] In a recent study, we found 67% of the participating consultants who received 360-degree feedback said they intended to improve their performance.[12] Other studies have reported similar results.[13,14] So far, studies have primarily focused on general practitioners' experiences with receiving 360-degree feedback and their perceptions and reactions towards the feedback itself.[7,10] There has been no rigorous research to explore which factors influence the use of 360-degree feedback for change in future clinical practice in hospitals. The aim of this study was to explore which factors represent incentives, or disincentives, for consultants to implement suggestions for improvement from 360-degree feedback.

METHODS

Context of the study

In 2007, eight Dutch hospitals participated in a performance assessment project aimed at improving consultants' performance. Consultants are senior doctors in Dutch hospitals who have successfully completed their residency (also known as specialists or attending physicians in the USA). All participating consultants received a 360-degree feedback report with information derived from questionnaires completed by colleagues, co-workers and patients, and narrative comments from colleagues and co-workers. The questionnaires were based on translations of two validated instruments, namely the Physician Achievement Review (PAR) programme developed by Violato *et al.* in 1997 and the instrument owned by the American Board of Internal Medicine.[15,16] Questions were to be rated on a 9-point scale. By 'narrative comments', we mean 'a more specific explanation of the ratings given and concrete suggestions to improve performance'. The participating consultants collected evidence concerning their performance in the seven CanMEDS roles (medical expert, communicator, collaborator, scholar, professional, manager, health advocate)[17] in a portfolio and provided written self-reflections on their performance. The portfolio and the 360-degree feedback report were discussed with a trained facilitator (a colleague from a different specialty based in the same hospital). The facilitator (also known as a mentor or coach) helps consultants to interpret the feedback, to critically analyse their performance and to use the feedback to guide future performance. Facilitators were offered 1 day of training which included an explanation of the assessment system, training in basic interview skills and role-plays. The consultants also developed a personal development plan (PDP) including improvement goals derived from the feedback. The process has been described in detail elsewhere.[12]

Study design and participants

In the present study we invited participants in the assessment project to attend an individual face-to-face

interview. In order to maximise the richness of the data we used maximum variation sampling. A maximum variation sample is a purposefully selected sample of persons who represent a wide range of extremes related to the phenomenon of interest. The factors we thought to be of influence for the study were: gender; hospital; work experience; specialty, and positive and negative views on satisfaction and impact expressed in response to a previous questionnaire.[12] Out of 109 consultants who had participated in our previous performance assessment, we selected 27 consultants who had represented extreme responses on a previous questionnaire, ensuring that they differed in terms of work experience, hospital, specialty and gender. We telephoned this selection of 27 consultants to invite them for a face-to-face interview; 23 consented to participate. Four consultants were unable to take part because of lack of time (two), personal circumstances (one) and unknown reasons (one). The participants included 14 male and nine female consultants from eight hospitals and 13 specialties. Participating consultants had varying backgrounds. Ten came from general medicine (psychiatry, paediatrics, internal medicine, neurology, cardiology, etc.), five were surgeons (urology, gynaecology, general surgery, ear, nose and throat, ophthalmology, orthopaedics, etc.), three were anaesthesiologists and five worked in diagnostic specialties (radiology, pathology, microbiology). The study was given expedited approval by the institutional review board because the participants were not patients.

Individual interviews

We conducted the interviews more than 1 year after the initial assessments to maximise the likelihood that the consultants had initiated changes to improve their practice. Having provided verbal consent, the consultants were interviewed in their offices between April and July 2008. The semi-structured interviews, which lasted approximately 1 hour, addressed the following topics:

- the consultant's reactions to the feedback;
- the consultant's opinions and beliefs about the portfolio, the (role of the) facilitator and the assessment interview;
- improvement goals and the consultant's beliefs and opinions regarding actual performance improvement in practice, and
- the consultant's views regarding factors that promote or impede performance improvement.

The interviewer (KO) encouraged the consultants to speak freely and asked them to illustrate their answers with examples from clinical practice. The consultants received a small fee (equivalent to £35) for their participation.

Analysis

All interviews were tape-recorded and transcribed literally with the consultants' permission. The analysis was based on the principles of grounded theory.[18] Two researchers (KO, GvdV) coded all the interviews independently. Codes were assigned to all issues of interest and were constantly renamed, reorganised and redefined within emerging categories. After coding four interviews, the researchers compared their findings and discussed any differences until they reached consensus. When the first open coding of all the interviews was completed, the next stage of the analysis involved axial coding to identify overarching themes and connections between the themes. The two researchers (KO and GvdV) and one medical education expert (ED) met regularly to discuss the coding and interpretation of the data. Saturation was reached after 12 interviews. However, because of the small volume of data for some categories of information, another 11 transcripts were analysed to ensure comprehensive analysis and coverage of data. The two researchers independently assigned the levels of improvement reported by the participants to four categories based on a model of behavioural change in health care: awareness of a need for improvement (Level 1); acceptance of a need for improvement (Level 2); actual change (Level 3), and maintenance of change (Level 4).[19] We analysed by which factors high levels of change were determined with the help of a cross-case display matrix. Finally, three of the participating consultants were asked to read and comment on the results of the analysis to determine whether the data and conclusions accurately reflected the content of the interviews (member checking).[20] This part of the analysis did not necessitate any changes.

RESULTS

Of the 23 consultants, 11 reported making concrete steps towards performance improvement (Levels 3 and 4).

Two examples of steps taken towards performance improvement were described by:

- an internist who forced himself to wait for 5 minutes before beginning to speak in multidisciplinary sessions in order to give other people the opportunity to think and speak, and

Table 1 Contextual factors

Factors identified and comments	
Factors related to hospital and consultant group	**Factors related to society**
1 Workload Consultant 4: 'There is less time for all sorts of quality improvement schemes which do nothing for production' *2 Cultural aspects* Lack of openness Consultant 6: 'People should be more open; it would be helpful if you knew that there was a sort of general consensus about certain problems' Lack of social support *3 Lack of management commitment* Consultant 13: 'It should not be laid at the doctor's door but it should be made a joint effort to try and improve performance in that area'	*1 Market competition and health care financing* Consultant 1: 'There is more pressure on us to be nothing more than production line workers' *2 Public distrust* Consultant 13: 'It's the big fear of any doctor: I am being watched and they are saying how badly I am doing. You should be able to get rid of that taboo'

- a surgeon who went to the emergency department every week for a short visit to ensure she knew the names and faces of the registrars working there.

The other 12 participants had not taken concrete steps (Levels 1 and 2). All the consultants mentioned factors that promoted or impeded change. The four main themes that emerged were: contextual factors; factors related to feedback; characteristics of the assessment system, and individual factors. All factors are summarised in Tables 1–4 and illustrated with quotations from the interviews.

Table 2 Factors related to feedback

Factors identified and comments
1 Hospital culture Consultant 10: 'It is not easy to give each other this type of feedback. The chance of escalation is higher than the chance of starting a constructive dialogue' *2 Negative or positive feedback* Consultant 20: 'That is what I mean when I say illuminating, it is often things that you actually do know or half know. But now they are expressed more clearly by others. And that is an incentive'

Contextual factors

Factors related to the hospital or consultant group

Factors relating to the hospital or consultant group were consistently characterised as impediments to change. In the Netherlands the majority of consultants are self-employed and work in a partnership with a group of colleagues. In this paper we refer to partnerships of consultants as 'consultant groups'. The factors identified related to workload, culture in the consultant group and commitment from hospital management. Heavy workload was considered an impediment to the implementation of personal improvement goals. Lack of time interfered with taking action on issues such as collaboration (e.g. writing referral letters on time) and evidence-based practice (e.g. keeping up-to-date with the literature). Relevant aspects related to culture in the consultant group included lack of openness and lack of social support. Half of the consultants believed that sharing their PDPs with colleagues would make it easier to implement them because their colleagues could remind them of their intentions and offer tips and support on implementing change. In reality, however, such sharing did not take place. Lack of commitment from hospital management was mentioned as another impediment to performance improvement. There were many organisational causes for suboptimal performance, such as administrative burden and poor collaboration with nursing staff.

Table 3 Characteristics of the assessment system

Factors identified and comments	
(Supported) reflection	**Incentives to take action**
1 Portfolio Consultant 9: 'Once you start to think about it explicitly for each domain you begin to see things more clearly' *2 Facilitator skills: exploring feedback and reflections in detail* Consultant 1: 'I am convinced that unless people receive some guidance in this they tend to remember mostly what they want to hear' *3 Facilitator skills: objectivity* Consultant 12: 'He did that very well and kept an appropriate distance'	*1 Concrete goal setting in the personal development plan* Consultant 21: 'Two things were really helpful. For one thing, it was about concrete and achievable things, I think that is really essential' *2 Facilitator skills: encouraging specificity of goals* Consultant 22: 'It's a good thing that she [the facilitator] has managed to reduce the issues that need attention to a concrete number of items… and that there aren't any items that are unachievable' *3 Annual assessments (follow-up)* Consultant 11: 'At a certain point I need to go back to that and then I have to consider: ''What have I actually done about that?'' And, well, that sort of forces you to actually do it that way'

Table 4 Individual factors

Factors identified and comments
1 Perceived urgency to change (motivation) Consultant 8: 'I am not going to commit myself to spending so many hours every Thursday night to keep up with my reading. No, I wouldn't go so far, after all it isn't all that important, is it?' *2 Belief in ability to change (self-efficacy)* Consultant 2: 'No, I think improving that, that is just totally impossible. And also, I think I have done everything in my power, I really have'

Some consultants advocated establishing a feedback loop in which key findings from assessments could be reported to hospital management anonymously and on an aggregate level, so that managers would be able to use this information to support consultants in pursuing improvement goals (Table 1).

Factors related to the organisation of health care and societal factors

Some consultants regarded market forces and health care financing as barriers to performance improvement because of increased emphasis on productivity and heavier workloads. Societal factors such as distrust by patients and the general public were also reported as barriers. The consultants said that some of their colleagues were not strongly motivated to use feedback to improve clinical practice because they saw 360-degree feedback merely as a means to convince the public that their performance was up to standard. For these consultants, assessment represented a tool with which to boost public confidence rather than an incentive to improve performance (Table 1).

Factors related to feedback

Taking action to implement suggestions from feedback was related to the hospital culture and to whether feedback was positive or negative. In general, receiving feedback was valued by consultants. However, in their day-to-day experience, hospital culture did not contribute to making them feel comfortable with giving and receiving feedback on performance. If feedback was given, it was mostly concerned with medical errors and rarely related to interpersonal skills. As a result, consultants thought that 360-degree feedback met a need. Consultants reported that negative feedback was generally difficult to accept, especially when it did not resonate with their self-perceived performance. However, after discussing the feedback with others (their facilitator or a family member, for example), they usually no longer perceived the feedback as problematic (Table 2).

Characteristics of the assessment system

The consultants indicated that an assessment system would be effective if it encouraged reflection and appropriate action.

(Supported) reflection

According to the consultants, reflection helped them to see that improvements were needed. Examining their strengths and weaknesses relating to the seven CanMEDS roles in a portfolio gave them insight into the quality of their performance. Because it was unusual for consultants to take a systematic look at communication, collaboration and professionalism, a majority thought that composing a portfolio was 'hard work'. They pointed out that the facilitator should serve as an objective sounding board to help them gauge the accuracy of their reflections. Finally, consultants expected facilitators to encourage them to reflect by exploring with them in detail the reflections in their portfolios and the feedback they received. Facilitators were valued when they paid equal attention to strengths and weaknesses and categorised and summarised the feedback and information in the portfolio to prevent key issues from becoming lost in an overload of detailed information. Consultants indicated that they tended to focus on either their strengths or their weaknesses and they believed that facilitators could counteract this type of 'selective memory' (Table 3).

Incentives to undertake action

The consultants thought that effective performance assessment stimulated them to take action when it promoted goal setting and included follow-up interviews. Consultants preferred concrete goals to vague intentions and thought facilitators could help them set achievable goals. They also indicated that annual assessments (follow-up) would stimulate them to take action. Repeated exposure to improvement goals and 'knowing that there will be another assessment' was thought to enhance the likelihood of performance improvement (Table 3).

Individual factors

We identified two categories of attitude-related factors that influenced performance improvement: perceived urgency of change (motivation), and belief in one's ability to effect change (self-efficacy). Although all the consultants had formulated personal improvement goals, they took different views of the urgency of pursuing these goals. Some consultants regarded their goals as intentions and as 'not very important to achieve' because their performance assessment was generally satisfactory. Other consultants considered themselves unable to achieve their goals (lack of self-efficacy). These consultants indicated that the assessment had frustrated them because they realised that improvement was needed but they had no idea how to achieve it. This was problematic for several consultants and caused negative feelings associated with a sense of not being 'in control' (Table 4).

Interaction of factors

Findings about consultants' notions concerning contextual barriers to change seemed surprising in light of the improvements reported by 11 participants. This issue was explored in the interviews. The analysis of consultants' narratives suggested that specific facilitator skills (encouraging reflection and specificity of goals) and concrete goal setting might overcome negative contextual factors and were key to performance improvement. All consultants who attained higher levels of improvement mentioned these facilitator skills in relation to encouragement of reflection or goal setting, or they emphasised the importance of concrete and achievable goals. The consultants who did not change mentioned these issues only twice in 12 interviews.

DISCUSSION

In view of the increased prominence of performance assessment in relation to revalidation of doctors, we conducted a qualitative study to investigate consultants' responses to 360-degree feedback and their perspectives on factors they considered critical to the achievement of actual improvement in clinical practice.

Our study demonstrates that, despite negative effects from contextual factors, such as high workload, the financing and organisation of health care and public distrust, 360-degree feedback can lead to progress when facilitators help doctors to handle the feedback and reflection is stimulated. However, our study also reveals that most consultants experience barriers to improvement, mostly as a result of the failure of hospitals to create a climate that is conducive to collegial support and lifelong reflective learning.

Strengths and weaknesses of the study

A limitation of this study is that the participants were all volunteers. Thus we cannot rule out bias arising from the possibility that we may have examined a group of unusually motivated doctors. Moreover, we cannot exclude the possibility that the non-responders would have reported more or different barriers to performance improvement. However,

given that half of the consultants had taken no steps to improve performance, we are fairly certain that we have captured most of the impediments. Secondly, this study relied on self-reporting by doctors on whether they had improved their performance and these self-reported data were not triangulated with other data. It will be clear that no general conclusions can be drawn about the actual performance improvement. However, the aim of this study was not to investigate whether consultants actually improve, but to explore the incentives and disincentives for change. Finally, because our study was restricted to Dutch consultants working in non-academic hospitals, the outcomes may not be fully transferable to academic medical centres, primary care settings and other groups of doctors, such as senior postgraduate trainees. The fact that the data were analysed by three researchers from different professional backgrounds (one clinical researcher, one non-clinical psychology researcher and one medical educationalist) is expected to have enhanced the validity and reliability of the results.

Comparison with existing literature

The information gathered in our interviews supports conclusions from other research. The impeding factors we found have also been identified in change processes of other behaviours (e.g. guideline adherence).[21,22] Our study also resonates with work by Frankford *et al.*,[23]who recognised that 'as doctors work nowadays in large group practices or hospitals that deploy financial incentives and management techniques to control clinical performance it is inaccurate to assume that doctors learn primarily as individuals and remain professional principally by virtue of their individual character and moral choice'. The contextual factors that emerged from this study underline the assumption that successful reflective learning depends on interactions with work settings and colleagues.

The culture in consultant groups, as described by our consultants, is not characterised by openness and a supportive climate. This is in line with findings by Akre *et al.*,[24] who reported that, compared with non-hospital doctors, hospital consultants described the communication climate as more competitive and less supportive. The consultants in our study specifically pointed to the potential benefits to be gained from capitalising on the momentum for structured feedback created by the 360-degree assessments. Several authors have highlighted the importance of feedback climate at work. Argyris and Schon[25] emphasised that a culture in which people can learn from one another is very important for learning and coping in the workplace. Our study suggests that facilitators who encourage consultants to reflect, set concrete goals based on their reflections and take action to achieve these goals are crucial in helping consultants overcome perceived barriers to change. These findings are in line with work by researchers in the field of human resource management and education. It has been shown that managers who work with a coach set more specific goals and achieve more improvements than managers who have no coach.[26] In addition, a review of over 100 articles on educational research revealed that goal setting enhanced the use of feedback.[27]

Recommendations for practice and research

We recommend various approaches which we believe may enhance the impact of 360-degree feedback. These approaches should be directed at hospitals and consultant groups and at the assessment system.

Our results suggest that we should raise awareness of the existing lack of openness and constructive feedback within hospitals and consultant groups. It would be helpful if consultant groups paid attention to their colleagues' experiences with assessments and discussed their PDPs with them. This may induce group reflection, referred to by Frankford *et al.*[23] as an 'institutionalised process of reflection'. Group reflection can promote cooperative, collegial relationships by enabling consultant groups to analyse different approaches to clinical work and consider the implications of performance feedback.[23] Furthermore, hospital management should recognise that doctors can be stimulated to become lifelong learners and reflective practitioners if the organisation is committed to promoting reflection and learning. Obviously, it would be good for hospital managers to be informed of general assessment results, anonymously and on an aggregate level, because this may catalyse a sense of joint responsibility for ensuring optimal clinical performance.

Vital elements of 360-degree assessments in relation to performance improvement include the provision of trained facilitators, concrete goal setting and follow-up interviews. When they are trained for this role, facilitators should be taught how to promote reflection by exploring feedback in detail and how to motivate consultants to take action by asking them to specify concrete goals for improvement.

This study raises new research questions. Although consultants' views of 360-degree assessment are important, other stakeholders may provide additional meaningful information to understand and guide the

feedback process. Questions raised by this study include:

- How and when do facilitators encourage reflection?
- How can the feedback best be processed to encourage improvement?

We are currently studying a group of facilitators to explore these questions.

Differences between hospitals and primary care settings should also be studied further. Finally, improved conceptualisation of the existing hospital culture by medical professionals is another important area for further research.

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