Abstract

Few jurisdictions have a robust common approach to assessing the quantitative and qualitative dimensions of physician performance. In this article, we examine the need for 360-degree physician performance assessment and review the literature supporting comprehensive physician assessment. An evidence-based, “best practice” approach to the development of a 360-degree physician performance assessment framework is presented, including an overview of a tool kit to support implementation. The focus of the framework is to support physician career planning and to enhance the quality of patient care. Finally, the legal considerations related to implementing 360-degree physician performance assessment are explored.

Currently, very few Canadian jurisdictions have a robust common approach to assist in the qualitative and quantitative dimensions of physician performance. Still fewer jurisdictions include a peer review component when assessing physician performance. The province of Alberta has a mandatory process – the Alberta Physician Achievement Review (PAR) (Hall et al. 1999) – and the province of Nova Scotia has recently embarked upon a similar program – the Nova Scotia Physician Achievement Review (Sargeant et al. 2007).
It is assumed that improving the professional competence of the individuals who provide healthcare services can improve the overall quality of care experienced by the users of the healthcare system. Performance management, which is a constructive process for addressing deficiencies and leveraging strengths in professional competence, has become a regular human resources practice in hospitals. Measuring the competence and managing the performance of physicians is of great interest to hospitals wishing to maximize accountability and the quality of the patient experience.

Professional competence, however, is a complex construct, particularly for physicians. Professional competence requires the use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served (Leape and Framson 2006). Physicians require both clinical competence (technical skills and knowledge, such as the ability to perform a medical procedure) and behavioural competence (interpersonal or affective skills, such as the ability to communicate effectively, use judgment and empathy and manage relationships) in their daily tasks (Figure 1). The application of these competencies is complex and multi-factorial and is clearly influenced by the teams, systems and broader environment within which a physician practices.

Figure 1. Performance is the confluence of knowledge, skill and behavioural competence

The Need for 360-Degree Physician Performance Assessment

Performance assessment, which provides a measure of an individual’s competence, is an essential component of any physician performance management process. Because physician performance is actually a measure of the outcomes that are achieved through the application of both clinical and affective skills, it is argued that a variety of measures and instruments are required to provide an overall assessment of performance.

Performance assessment for physicians, however, has traditionally focused on clinical competence rather than behavioural competence. Hospitals are fairly well equipped to provide a quantitative assessment of physicians’ performance based on the rates at which their patients experience certain outcomes of care and/or the rates at which physicians adhere to evidence-based processes of care during their practice of medicine. For example, hospitals typically have processes for using observation or billing and chart audits, among other approaches, to assess patient outcomes, the number of procedures performed, physician adherence to procedural guidelines, readmission or infection rates and other clinical outcomes. They provide formalized feedback to physicians using these quantitative measures to reflect physicians’ clinical knowledge and technical skill.

Behavioural or affective competencies, such as interpersonal skills, communication, judgment and relationship management, are more difficult to measure quantitatively. Assessment of these skills through observation, peer appraisal and self-assessment over a period of time and from a variety of perspectives is useful in providing feedback. However, processes to provide this type of performance feedback to physicians are less formalized and are used less frequently than more traditional methods of performance management.

A 360-degree performance assessment provides physicians with an opportunity to obtain feedback on their effectiveness as clinicians, colleagues and peers. Feedback gathered is for the
physicians’ personal information and is intended for personal development only. Experience in many jurisdictions has shown that the receipt and subsequent integration of the information provided through 360-degree assessment can facilitate physician self-awareness and personal and professional development (Brinkman et al. 2007; Sargeant et al. 2007; Veloski et al. 2006; Violato et al. 2008b).

literature review
A critical requirement of a 360-degree performance assessment tool is that the process and supporting tool kit be evidence based. Accordingly, a review of relevant academic and grey literature from the past 15 years was completed. Medline, CINAHL and Google Scholar were searched for physician achievement review, performance assessment, multisource feedback and 360-degree review. Each term was searched independently and combined with the terms physician, nurse and allied health.

The 360-degree feedback, also referred to as multi-source feedback (MSF), has been advocated for the assessment of broad competencies required for clinical practice (Arnold et al. 1998; Bandiera et al. 2006; Rogers and Manifold 2002; Rosenberg et al. 2001; Southgate et al. 2001; Swick et al. 2006). Its purpose is to provide feedback about observable behaviours and performance from multiple perspectives within the physicians’ frame of reference. The feedback is compared with the physicians’ self-assessment and may then be used by the physicians to address and possibly change their own behaviour, thus improving performance (Handfield-Jones et al. 2002).

Although it can serve several purposes, 360-degree feedback is generally used in medicine for the purpose of self-development (Violato et al. 2008a). Formative 360-degree feedback is currently being used by practising physicians in specialties such as family medicine (Hall et al. 1999), internal medicine (Lipner et al. 2002), anesthesiology (Lockyer et al. 2003) and surgery (Fidler et al. 1999), as well as for medical trainees and postgraduate physicians (Archer et al. 2008). In Canada, Alberta and Nova Scotia currently require physicians to receive regular MSF from patients (if applicable), colleagues and co-workers. Some jurisdictions, such as the National Health Service in the United Kingdom require 360-degree assessment of interpersonal skills for physician re-licensing.

Initial research on MSF focused on whether valid and reliable feedback tools could be created. Numerous studies confirm the reliability and validity of MSF instruments for physician performance reviews in both generalist practice and specialty areas (Hall et al. 1999; Lelliott et al. 2008; Lockyer et al. 2008). Valid and reliable tools for measuring the professional skills of clinical directors of medical programs have also been developed (Palmer et al. 2007).

The availability of tools that provide physicians with credible feedback from others may be beneficial, as a systematic review of evidence suggests that physicians have a limited ability to assess their own performance (Davis et al. 2006). Nevertheless, questions remain as to whether physicians use this type of feedback for formative purposes. Much recent literature on 360-degree feedback focuses on whether this type of feedback “works” and the conditions under which it works most effectively.

There is some evidence to suggest that physicians use 360-degree feedback to guide changes in their performance. A meta-analysis of 600 performance appraisal feedback intervention studies, not specifically limited to medicine, showed that participants’ quality of performance improved in one third of the studies, stayed the same in one third and decreased in one third (Kluger and DeNisi 1996). A meta-analysis of 24 longitudinal studies examining how performance changes over time with repeat MSF found that positive improvements in employee behaviour and attitude could result, but that “large, widespread performance improvements” should not be expected (Smither et al. 2005). Veloski et al. (2006) completed a systematic review of the medical literature to investigate the impact of peer assessment and feedback specific to physician performance. Seventy percent of studies included in the review showed that peer feedback had a positive effect on the clinical performance of physicians.

Recognizing that the relationship between assessment, feedback and improvement is not necessarily linear, and that feedback does not always achieve the desired results, a great deal of effort has been focused on understanding the process of MSF. Sometimes referred to as circumstantial validity (Sargeant et al. 2007), there is a desire to understand the circumstances and conditions upon which the MSF process produces the desired impact on physician behaviour.

An extensive review of the conditions contributing to the effectiveness of 360-degree feedback was recently completed by Atwater et al. (2007). Although this review was not limited to MSF for healthcare personnel, its specific results, which are beyond the scope of this article, are applicable. The authors found that organizational context, including the intentional and deliberate use of MSF for developmental purposes rather than for promotion or financial recognition, contributed to its success. The process should be implemented in times of high organizational stability and trust, and a credible process, including perceived confidentiality and anonymity, must be achieved. The specific characteristics of the individual being assessed influenced success, and it appears that some personality types (extroverts, those with dispositional goal orientation and high self-esteem) and those who recognize a need for change may respond more favourably to 360-degree feedback as a formative tool. Planned interventions after feedback, such as coaching, were important to effect behaviour change, particularly when negative feedback was provided. The authors argued that the findings suggest a need to establish a clear and strategic organizational goal for MSF, pay attention to how MSF is
introduced and implemented and create a culture that supports performance appraisal and improvement in order to maximize the success of the 360-degree process.

The evidence of the effectiveness of MSF specific to physician populations reflects the findings of Atwater et al. (2007) in the general population. Smither et al.'s 2005 meta-analysis of 29 longitudinal studies indicates that some physician recipients were more likely to improve their performance than others. Positive performance changes were most likely among physicians who had a positive orientation to feedback when it indicated that change was needed, felt change was feasible and were able to create a plan for improvement.

Sargeant et al. (2007) evaluated change that took place after a 360-degree feedback process with primary care physician volunteers. They concluded that the source and content of the feedback, the specificity of the feedback and the consistency of the feedback with other feedback sources influenced physician behaviour change. Feedback on communications skills was perceived as most credible and behaviour changes occurred in this area, whereas feedback on clinical competence was perceived as less credible and was infrequently used for improvement. The authors maintained that consequential validity of MSF is important, and that to enhance intended consequences the 360-degree tool should be part of a credible process, data collected should be as specific and therefore as useful as possible, feedback from patients should be included and other methods for assessing clinical competence should be used.

A study of performance changes over time, which used a large convenience sample of general practitioners who had participated in the PAR process in Alberta at least twice over a five-year period, showed evidence of the tool’s internal consistency and generalizability, as well as stability over time (Brinkman et al. 2007). This study suggests that the tool can contribute to changes in physician behaviour, particularly in the assessment of “professionalism.” However, the authors cautioned that data produced by the review may lack sensitivity (a ceiling effect for high scores) or may not be sufficiently compelling to drive significant behaviour change. This study also highlighted the importance of “observability,” that is, the physician being rated was much more likely to accept the validity of the feedback and to consider subsequent behaviour change if the raters were able to directly observe the behaviour they were assessing.

A study of emergency department physicians in Singapore examined their readiness to accept 360-degree feedback from colleagues (Tham 2007). The majority of volunteer physicians in this study, which used the PAR tool, agreed that colleagues, as well as supervisors, are well suited to assess their clinical and interpersonal skills. Acceptance of the assessment was maximized when physicians were able to select their own raters, when feedback was confidential and when the assessment was used to improve performance rather than for determining eligibility for promotion. This study also suggested that 360-degree assessments were most effective at drawing attention to weakness in “soft” (interpersonal and communication) skills that physicians had not self-identified.

Thus, it appears that studies examining physician populations reflect the learnings from general populations. Although further research would be beneficial, it appears that significant and thoughtful planning for the implementation of the 360-degree assessment tool and the development of a detailed implementation process, and follow-up on the feedback provided are essential to maximize changes in physician behaviour identified by this type of performance evaluation.

Tool Kit for 360-Degree Physician Performance Assessment

Developing a 360-degree physician performance assessment process is both detailed and complex. Based on a comprehensive review of relevant literature and interviews with key stakeholders and jurisdictions with experience in MSF, the Council of Academic Hospitals of Ontario has recently developed a tool kit to support the implementation of a “best practice” approach to implementing 360-degree physician performance assessment. The tool kit contains an evaluation tool as well as practical guidelines, suggested procedures and sample communication and planning templates to help guide the implementation of the 360-degree physician review process in hospitals. The tool kit uses the PAR tool that was developed by the College of Physicians and Surgeons of Alberta.

Key topics covered in a tool kit should include the following:

- Purpose of 360-degree assessment
- Description of the assessment tool (e.g., PAR)
- Engagement of the hospital’s administrative and medical leadership
- Development of a communications strategy
- Considerations for organizing the 360-degree performance assessment process, including selection of the raters, administration of the assessment instrument, generation of reports, provision of feedback, development planning and maintenance of records
- Approaches to the training of physicians, department chiefs and raters
- Statement on confidentiality
- Sample supporting materials, planning guides and templates for messaging
- Ongoing evaluation process

Implementation Considerations

As evidenced in the literature review, a key success factor for the introduction of a 360-degree performance assessment is the implementation process. Although the tool kit provides
guidelines for the successful use of the 360-degree assessment tool within an organization, it is important to recognize that the decision to implement MSF within the organization needs consideration.

Virtually all physicians have experienced 360-degree feedback during their medical education, and many may also have had exposure to multi-rater processes with respect to teaching duties. However, the vast majority of physicians are unlikely to have experienced this type of process in relation to their competence as a medical provider. It can be anticipated that most physicians will not have much knowledge of 360-degree performance reviews and that there will be many who will resist its implementation or acting on the results. Thus, before a hospital undertakes the process of implementing 360-degree physician performance reviews, a collective acceptance and understanding of the process are essential.

For MSF to be successful, it is critical that there is alignment between the purpose of the process, the expectations of physicians and the hospital, and organizational values. It is also essential that both those involved in the administration of the review process and the individuals being assessed recognize the capabilities and limitations of the methodology. Organizations need to be cognizant of potential conflicts that may occur if physicians feel that their autonomy or professional competence is threatened by this process. Dialogue with local professional groups, such as the Medical Staff Association, will be necessary when planning implementation to ensure that there is a consensus on the need for this process, as well as agreement that the process will be fair, educational and beneficial. Key stakeholders throughout the organization must be engaged in the process, including not only the physicians being assessed but also the department chiefs and the hospital’s medical leadership, including the chair of the Medical Advisory Committee, chief of staff or vice-president of medical affairs.

Implementing MSF and integrating it as part of the performance management process involves a culture change for the organization and physicians alike. It should be approached as a change management project, with extensive communication and training for all those involved. To maximize the likelihood of success, organizations should start slowly – possibly with a pilot group – and manage expectations carefully. Sufficient resources to facilitate the change should be in place and their existence well-publicized. For example, it will be necessary to ensure the availability of supports to facilitate any physician behaviour changes that are felt to be necessary. These can be provided in-house (e.g., by the human resources department) or by professional organizations, such as provincial medical associations, or external resources hired specifically by the organization. The hospital should develop a policy that indicates whether the organization will pay for any professional support required.

**Legal Considerations**

The implementation of a 360-degree performance feedback process for physicians has potential legal implications for hospitals that should be considered. While this section provides a brief overview of several key legal considerations that are important when implementing the process, it is recommended that a hospital’s legal counsel be consulted.

Confidentiality must be ensured in a review process that is developed for formative purposes only. Because physicians may be vulnerable to lawsuits in which plaintiffs seek broad access to all available documentation, it is critical that all information collected through the MSF process be provided in confidence between the physicians and their chiefs. It is also important that this information not be available to hospital administrators, the board of directors or any other parties. Further, confidentiality is also needed to encourage raters to provide honest and frank feedback.

Although the information collected through the 360-degree feedback process has the purpose of improving overall quality of care, it is not collected for or prepared by a quality of care committee. To protect the confidentiality of information provided through 360-degree performance reviews, it is recommended that the Medical Advisory Committee develop a specific policy concerning these reviews and the information provided by respondents. The policy should address all aspects of the review process, including its purpose in relation to quality of care and requirements concerning confidentiality.

The policy should also address where performance review records will be maintained and who will have access to them. Records should only be maintained by the physicians and chiefs, and access should be limited to these individuals unless the physicians express permission to share them with others. In all cases, strict confidentiality of the identities of specific raters and the information they have provided should be maintained.

Because it is focused on quality improvement, the 360-degree review should be detached from the actual credentialing process. In any event, because they are confidential, the results of the review cannot be used to either support or oppose appointment or re-appointment.

**Summary**

Few jurisdictions have a robust physician performance assessment program. This article has reviewed the literature that attests to the benefits of such a program, and the preconditions necessary to ensure a successful implementation.

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References


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