Table of Contents

Message from the Executive Director 1

1.0 Introduction 2

2.0 Background
   2.1 Goals 4
   2.2 The Recruitment/Retention Continuum 5
   2.3 Definition of Terms 6

3.0 Purpose of 360-Degree Performance Assessment 8

4.0 Literature Review
   4.1 Physician Performance Assessment 9
   4.2 360-Degree Performance Assessment 13

5.0 Performance Measurement Tool
   5.1 PAR Background 21
   5.2 PAR Administration and Use 21
   5.3 Attributes Assessed Using PAR 22

6.0 Legal Considerations
   6.1 Confidentiality 24
   6.2 Maintaining Records 25
   6.3 Notice of Disagreement 25
   6.4 Escalation Procedure 25
   6.5 Credentialing 25
   6.6 Reporting to the College 25

7.0 Methodology
   7.1 Participants 26
   7.2 Raters 26
   7.3 Administration of Tool 28
   7.4 Generating Reports 28
   7.5 Providing Feedback and Recommendations 29
   7.6 Development Planning 29
   7.7 Maintaining Records 29

8.0 Implementation
   8.1 Establish Ownership and Champions for the Process 30
   8.2 Communication Strategy 30
   8.3 Begin With a Smaller Group 31
   8.4 Training For Implementation 31
   8.5 Consolidate Acceptance 32

9.0 Linking 360-Degree Performance Evaluation With Quantitative Indicators 33

Bibliography 35

Appendix A:
   Sample Key Messages For Physicians 37

Appendix B:
   Sample Communications For Physicians and Raters 38

Appendix C:
   Sample Coaching Guidelines For Department Chiefs 40

Appendix D:
   Sample Development Planning Guide For Physicians 43

Appendix E:
   Sample Physician 360-Degree Feedback Process Implementation Checklist 52
Message from the Executive Director

February 2009

The Council of Academic Hospitals of Ontario is pleased to release its “360-Degree Physician Performance Review Toolkit”, developed by our hospitals’ Chief Medical Leaders as a resource for conducting performance reviews of physicians.

With increasing focus on patient safety and accountability, hospitals and physician leaders are challenged to address physician recruitment, performance and professional development. Performance reviews of physicians at our hospitals are not intended to be punitive or prescriptive but rather to support quality improvement at individual and institutional levels. This toolkit is designed to enable a process of change. It includes planning templates and sample communications to guide the implementation of performance reviews.

CAHO hospitals are currently implementing this toolkit and adopting it to meet their organizational needs. We strive to establish physician performance reviews as a standard practice in hospitals across the province. This toolkit is available to all interested organizations.

I would like to acknowledge Hay Group Health Care Consulting and members of the CAHO Steering Committee that collaboratively developed this resource: Alan Belaiche (St. Michael’s Hospital), Bill Davis (London Health Sciences Centre), Dr. Jennifer Everson (Hamilton Health Sciences), Dr. Peter Munt (Kingston General Hospital), Dr. Matthew Oliver (Sunnybrook Health Sciences Centre), Emma Pavlov (University Health Network), and Dr. John Wright (University Health Network). This report would not be possible without support from the CAHO Secretariat; I am particularly thankful to Martin Gurbin and Tricia Staples for bringing this work to fruition.

We recognize that success resides squarely in partnership. CAHO would like to thank the College of Physicians and Surgeons of Ontario, the Ontario Medical Association, and the Board of Directors of the Ontario Hospital Association for their input and support.

We hope you find this resource useful and relevant.

MARY CATHERINE LINDBERG
Executive Director
Increasingly, hospital Boards are focussing on patient safety. In part, this is because of the publicity which has attended the issue and, in part, because of an increased emphasis on “accountability” through such mechanisms as Hospital Accountability Agreements. At the same time, hospitals and physician leaders are being challenged to proactively address physician recruitment and retention strategies, and physician behaviour problems, and to ensure that performance does not decline with advancing age. These developments have been a catalyst to establish a new human resources planning and management framework, with robust elements of performance management, in which performance reviews would be conducted at pre-specified time intervals to ensure competency in roles.

The Council of Academic Hospital of Ontario’s (CAHO) medical leadership (consisting of the chief medical leaders of the 25 academic hospitals in Ontario) deemed this an opportune time to improve their respective hospitals’ reappointment processes, and to integrate an enhanced “360-degree review.” It is felt that, subsequent to the development of a new reappointment process by CAHO member hospitals, and its demonstration as an adoption of best practices, the practice of conducting enhanced 360-degree reviews may become an integral part of the re-credentialing process at all Ontario hospitals.

Currently, very few jurisdictions have a robust, common approach across organizations to assist in assessing the qualitative and quantitative dimensions of physician performance. The Province of Alberta has a mandatory process, the Alberta Physician Achievement Review (PAR), which mandates that physicians engage in a performance review process every five years. In establishing this program in 1999, the College of Physicians and Surgeons of Alberta (CPSA) stated that physician performance should be routinely assessed. The focus of the PAR process is practice quality and related educational processes, rather than a search for “bad apples.” Several aspects of performance, including relationships with patients and medical colleagues, are assessed to reflect the different functions of physicians. Participation in this process, while mandatory, has been specifically regulated in order to ensure that it does not lead directly to disciplinary action or investigation without further involvement of the physician being assessed. Conversely, the CPSA recognizes that it does have an obligation to acknowledge serious concerns or performance problems. However, these are addressed in a collegial and supportive model, and are designed to focus on the physician’s needs, for example, for enhanced access to continuing professional development or consultant support.

Recently, the Province of Nova Scotia embarked upon a similar program, the Nova Scotia Physician Achievement Review (NSPAR). Its implementation has been trialed among family physicians. NSPAR will shortly be expanded to the specialist physician group as well.

It is also noted that several academic hospitals in Ontario have established some elements of 360-degree reviews in their competency assessment processes. In addition, many Ontario hospitals have integrated 360-degree reviews in the performance management process for physician leaders, but these assessments are focused specifically on the physician’s capacity, skills, etc. in their roles as leaders, rather than as providers of care. These assessments, too, include input from other physician leaders, management team members, peers and colleagues.

CAHO retained the services of Hay Group Health Care Consulting to create a Toolkit to support the design and implementation of a “best practice” approach for the development of a framework for 360-degree physician performance assessment. The process has been designed to support physician career planning and enhance the quality of patient care. This Toolkit is being made available to all hospitals, with adoption being voluntary and non-binding.
1.0 Introduction

Readers are cautioned, however, that if any assessment tool is to reach its full potential, it must be acceptable to the key stakeholders involved. Three stakeholder groups need to be considered in relationship to the acceptance of performance assessment: consumers, the health care organization and physicians.

Not only must the assessment tool be acceptable to individual physicians, it must also be seen to be acceptable on a collective basis. Thus, as part of this process, we encourage dialogue with the local professional groups, such as the Medical Staff Association. These organizations need not only to accept performance assessment in order to ensure that it is successfully implemented and utilized, but also feel that the process is fair, educational and beneficial. While some expectations of performance assessment are shared by all stakeholders, others may not be shared. For instance, the involvement of patients and hospitals in performance assessment may be perceived to threaten the autonomy of the physician group. For this reason, when planning for implementation, organizations need to be cognizant of these potential areas of conflict in order to identify and manage them effectively on a pre-emptive basis.

This Toolkit has been developed as an enabler that will facilitate a process of change. It contains guidelines, suggested procedures, and sample communication and planning templates to help guide the implementation of a new process, which itself is intended as an instrument for facilitating enhanced quality of care and service delivery.

We trust this Toolkit will be useful, and further enhance the advances that many Ontario hospitals have already made in the area of physician performance appraisal.
2.0 Background

2.1 GOALS

In the spring of 2007, CAHO issued a request for proposal “to create a Toolkit to support the design and implementation of a best practice approach for the development of 360-degree frameworks for physician performance assessment within the CAHO member hospitals.”

Potomac et al. (2002) acknowledge that there are different audiences for assessment. If the assessment is used as part of a system of public accountability, it must in part reflect the expectations of the public. If the assessment contributes to certification or credentialing, it must represent the interests of the profession. If the assessment is to guide professional development, it must be considered valid, fair, reliable and useful by individual physicians.

The identified needs of CAHO and the rationale for establishing this process included the desire to ensure physician competency given the elimination of age-based retirement. It also included the need to ensure that the metrics that were applied to measure competency were both objective and transparent, and would support a new approach to human resources planning and management. The approach presented in this Toolkit is focused on broad professional competence, as opposed to an assessment of clinical skill. This important distinction is expanded on, below, in Section 2.3, “Definition of Terms.”

The desired goals of the process were to include performance reviews with 360-degree feedback, while ensuring that whatever tools were developed reflected both best practice and an evidence-based approach. By definition, however, hospitals need to remain cognizant of the contribution of systems and teams to the performance of individual physicians.

While various formats for performance assessment exist, the unifying assumption is that, by improving the quality of care provided by an individual practitioner within the health care system, the overall quality of care will improve. Performance is recognized as being complex, multi-factorial and non-linear in nature. It is clearly and demonstrably influenced by the fact that physicians perform within teams and systems, and that their performance oftentimes is a reflection of the performance of the broader environment in which they work.

The process was to be designed to guide professional development, facilitate quality improvement and blend with the hospitals’ other quality improvement initiatives. The goal was to provide physicians with broad-based feedback from peers, colleagues and potentially others, such as patients, in a manner that can be seen as facilitating the development of insight and focusing future professional development activities.

While originally anticipating implementation in CAHO hospitals only, a “drift” to a broader range of hospitals is anticipated, and therefore the Toolkit is intended to support processes that are “customizable.”

By engaging in this process, CAHO is both implicitly and explicitly demonstrating the leadership role of Academic Health Science Centres. The process has been designed to support physician career planning (both clinical and non-clinical/procedural) and to serve as a tool to enhance the quality of care.

It has also been designed to ensure physician engagement in the process, in part, by demonstrating that it is neither punitive nor prescriptive, but rather a pure quality improvement process. It is designed to ensure that, where appropriate, physicians are recognized for their excellence and given opportunities to share those traits and practices which have been recognized as “outstanding” by peers, colleagues and patients with others in their department or hospital, in order to facilitate institution-wide improvements.

In distributing this Toolkit, CAHO recognizes that the physician peer assessment process is but one in a series of processes or instruments that can or should be used to facilitate enhanced quality of patient care and physician career and professional development. It is seen as complementary to traditional quality management and is not designed to be used as a “stand-alone” tool for academic promotion or other purposes.
2.0 Background

2.2 THE RECRUITMENT/RETENTION CONTINUUM

The professional growth, development, performance management and ultimately, satisfaction and retention of physicians represent a complex continuum. This continuum ideally begins with recruitment, and, if successful, results in long-term physician retention. While not explicitly detailed in this Toolkit, we believe it is important to direct the attention of readers to this important concept.

Figure 2.1: Illustration of Human Resources Planning and Management Framework

The Organization should focus specifically on the roles it expects physician recruits to play. This may require attention not only to the clinical services provided, but to other services, such as administrative or academic activities. Further, prior to commencing the formal recruitment process, organizations should determine the resources that will be available to support the physician, including his/her clinical activity (e.g., beds, OR time, clinic space, etc.), administrative activity (e.g., computers, secretarial support, etc.), and academic activity (e.g., laboratory space, statisticians, etc.).

As part of its impact analysis process, the organization also needs to quantify the anticipated costs of these supports, and to prepare a budget, which it can present to the potential recruit to ensure that she/he is aware of the baseline metrics that may be used in the future as measures of her/his performance.

Potential recruits should also be advised that the organization has chosen to adopt a 360-degree performance appraisal tool. The criteria upon which this performance appraisal will be based, the frequency of its application, and the implications of the results must also be made explicitly clear. By providing this information prior to a physician’s hospital appointment, the criteria that will be used to assess his/her performance will be made explicit, including the obligations that have been made both by the physician and the institution to support clinical, academic and/or administrative activity, and to create an atmosphere in which the individual’s mentoring can be further facilitated.

Creating such objective and transparent criteria will reflect an atmosphere of openness, facilitate consensual decision-making, democratize decision-making processes and, ultimately, facilitate physician retention.

With specific reference to the physician performance appraisal process, it is critical that there is alignment between the purpose of the process, the expectations of physicians and the hospital of the process, and organizational values. It is also essential that both those involved in the administration of the physician performance process and the individuals being assessed recognize the capabilities and limitations of the methodology that is being used. Detailed explanations of this will be found in other sections of this Toolkit.
Clearly, it is essential that key stakeholders throughout the organization be engaged in this process, including not only the physician being assessed, but her/his Department Chief and the hospital’s medical leadership (i.e., the Chair of the Medical Advisory Committee, Chief of Staff, and Vice President of Medical Affairs), and that the implementation process be well-designed. \textit{We cannot over-emphasize the importance of a well thought out, well detailed and publicized implementation process.} While physician performance appraisal and physician management are methodologies whose value has been well demonstrated in the literature, the literature is equally conclusive that an implementation process which is flawed will inevitably result in a failed effort.

The process which has culminated in this Toolkit has been detailed and complex. It has included a comprehensive review of the relevant literature (including medical, management, and educational literature) as it pertains to physician performance measurement, assessment and evaluation. The process has also included interviews with a variety of other organizations and jurisdictions (including the Provinces of Alberta and Nova Scotia, and the American Board of Internal Medicine), which have developed and/or implemented physician performance management and appraisal tools.

\section*{2.0 Background}

\subsection*{2.3 Definition of Terms}

\subsubsection{2.3.1 Physician Performance Assessment and Management}

Performance assessment and performance management are separate and distinct terms, and need to be clearly understood by participants in the performance assessment process.

Performance assessment examines competencies and outcomes, and includes methodologies for actual measurement of performance. Physician clinical performance assessment can be defined as the quantitative assessment of physician 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 actual practice of medicine. In the case of trainees, for example, this may include the administration of examinations, or supervising residents conducting procedures and providing feedback on their levels of skill. For practicing physicians, it may also, for instance, include the measurement of length of stay, complication rates or early readmission rates.

Conversely, performance management builds on the results of the assessment and provides a constructive process for addressing identified deficiencies and/or leveraging strengths. It is about ongoing management of performance through coaching, regular performance feedback, etc. The focus is on helping physicians perform effectively between formal assessments.

\subsubsection{2.3.2 Clinical and Behavioural Competence vs. Performance}

It is also essential to understand the distinctions between clinical competence, behavioural competence and clinical performance.

\textbf{Clinical Competence}

Clinical competence is a measure of technical skill and knowledge, and is often referred to in the educational literature as “cognitive” skill. It includes measures of both knowledge and skill.

Knowledge can be measured by examinations and can be continuously acquired by measures such as continuing professional development.

Core skills may include procedural skills (for example, the ability to safely and reliably conduct cardiac catheterization) or interpretive skills (e.g., the reliability of interpretation of diagnostic imaging procedures). Measures of skill may be ascertained from reviewing clinical records, measuring cost per case, or readmission rates.

\textbf{Behavioural Competence}

Behavioural competence is a measure of interpersonal knowledge and skill, and is often referred to as “affective” skill. It includes items such as interpersonal skills, judgement, relationship management and self-appraisal.

Measures of behavioural competence can be assessed through a variety of means, alone or in combination, such as, observation, the use of standardized patients, peer review activities and self-assessment.
Performance
Physician performance is actually a measure of the outcomes that are achieved through an application of knowledge integrated with the use of affective skills.

The following figure demonstrates that the confluence between knowledge, skill and competence defines true performance. Importantly, this diagram demonstrates that no single tool captures all of the elements of performance. Rather, a variety of measures and instruments are required order to provide an overall measure of performance.

Figure 2.2: Performance is the Confluence of Knowledge, Skill and Behavioural Competence

2.3.3 PHYSICIAN COMPETENCE
Physician competence can be defined as 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 & Framson, 2006).

Physician competence can be assessed through a variety of means. These may include licensure or certification, which are commonly used, but can also be expanded to include modalities such as cognitive testing, the use of standardized patients or clinical vignettes. Each of these methods has been justifiably criticized because of their expense, lack of objectivity, and lack of demonstrated validity or reliability in the literature.

By incorporating performance assessment, some of the limitations of these methodologies can be addressed, and its use, along with other measures of physician performance, such as infection rates, death rates, etc., may provide a more comprehensive and inclusive overview of true physician performance.

Many professional specialty societies have begun encouraging physicians to measure their performance. For instance, the American Medical Association has developed and disseminated performance measurement tools that allow physicians to measure their performance relative to existing best practice standards of care for conditions such as diabetes and asthma.

Multi-source feedback is gaining acceptance and credibility as a means of providing physicians with quality improvement data as part of an overall strategy of maintaining competence. Research in both industry and medicine shows that multi-source feedback systems (i.e., 360-degree feedback) can result in individual improvement and the adoption of new practices (Violato et al, 2003).
3.0 Purpose of 360-Degree Performance Assessment

The 360-degree performance assessment process provides physicians with an opportunity to obtain confidential feedback on their effectiveness as clinicians, colleagues and peers.

The resulting data is intended for the physician’s personal information, and will not be shared with anyone other than the individual’s Department Chief. The purpose of the 360-degree performance assessment process contemplated in this Toolkit is personal and professional development only. Experience in many other jurisdictions has shown that the receipt and subsequent integration of the information provided through multi-source assessment has greatly facilitated physician self-awareness, and personal and professional development.

It is crucial that individuals reading this document and participating in the process recognize that the purpose of the performance measurement process is solely to enhance the hospital’s overall quality management process.

Specific concerns regarding the potential use of these data in legal or other judicial or regulatory proceedings are addressed in a subsequent section of this report.

The purpose of this process is not to facilitate academic promotion, although individual organizations or physicians may choose to share the results of this assessment with academic promotion committees. The decision to do so should, however, be made by the individual physician with his or her explicit consent to the sharing of information, and not in anticipation that this process has been designed for this specific purpose.

The process is also not designed to assist organizations in making resource allocation decisions. It is not intended, for instance, to assist organizations with deliberations regarding the assignment of operating room time, outpatient clinic space or inpatient resources.

While the process may be implemented during an individual’s first year on associate staff, it is designed to assist in early career planning and mentorship, but is not designed specifically to guide decision-making with respect to the process of credentialing or re-credentialing.
4.0 Literature Review

4.1 PHYSICIAN PERFORMANCE ASSESSMENT

4.1.1 THE IDENTIFIED NEED TO ASSESS PHYSICIAN PERFORMANCE

Although there is wide recognition that faulty systems and processes within the delivery of health care may adversely affect patient safety, individual performance failures can also contribute to patient injuries and complications. While at a minimum, physician competency must be assured to maximize patient safety, physician excellence is desired to ensure that the highest quality of patient care is provided. The assessment of physician performance is therefore required to identify those physicians whose performance consistently falters and those who are excellent performers, and to identify opportunities for any physician to improve her/his own competence in the delivery of patient care (Leape & Framson, 2006). Major medical boards have defined standards for good medical practice and are now seeking useful instruments to assess whether practicing doctors are meeting these standards (Schuwirth et al, 2002).

Performance assessment is typically viewed as a process of:

- Gathering information that describes what the physician does in the care of his/her patients, and
- Comparing that information with defined standards of practice performance, in order to arrive at decisions or judgments about the quality of performance.

For performance assessment to be meaningful, both the data gathering process and the judgment process must be valid and defensible (Lew et al, 2002). Performance assessment is considered to be a component of a larger process of performance management, in which constructive processes for addressing performance deficits identified in assessment are put in place. The underlying assumption of performance assessment is that by improving the quality of care provided by individual practitioners within the health care system, the overall quality of care can be improved (Farmer et al., 2002).

A review of the medical literature indicates that while the need to assess physician performance is well recognized, methods of assessment are somewhat lacking. There is a clear need to develop better methods of assessment and common approaches to physician performance assessment. Few organizations systematically monitor physician performance or have formal programs to identify problem doctors (Leape & Framson, 2006).

The American College of Physicians, for example, calls for a “national effort” to develop better methods of assessment:

*Performance failures of one type or another are not uncommon among physicians, posing substantial threats to patient welfare and safety. Few hospitals manage these situations promptly or well. It is time for a national effort to develop better methods for assessing performance and better programs for helping those who are deficient (Leape & Framson, 2006).*

The American College of Physicians proposes that ad hoc, informal, reactive approaches to the assessment of physician performance should be replaced with routine, formal, proactive systems of monitoring that use validated measures to focus strictly on clinical and behavioural performance. The goal of this would be to identify problems early on, before patient safety is jeopardized.

The British Society of Rheumatology (Potter & Palmer, 2003) also addresses the importance of performance assessment for physicians:

*The range of professional competences and qualities now recognized as necessary in a good physician is not adequately assessed by conventional examination and assessment. Suitable methods are needed to assess the broader range of competences, including humanistic qualities and professionalism.*

They note that comprehensive performance assessment will become increasingly important in physician recertification processes. Similarly, performance assessment has been identified as useful for credentialing, board certification and licensure (Landon et al., 2003).

The need to identify physicians whose competence may be in question becomes increasingly important when considering the rapidly evolving pace of medicine, and recent policy changes in Canada that eliminate age-related retirement for physicians. As physicians are able to practice for longer periods of time and to more advanced ages, the need to assure clinical currency and competence becomes more acute.
However, the utility of physician performance assessment extends beyond the identification of problem physicians. Performance assessment processes have been identified as valuable for career development and planning purposes. All professionals, including physicians, have a responsibility to constantly assess and endeavour to improve their skills and abilities, no matter what their baseline level of performance (Landon et al., 2003). Even excellent physicians should be expected to continue to build their skills and improve their performance.

In addition, organizational improvement opportunities may be identified as a result of individual physician performance assessment. Individual physician performance problems may identify larger systems or team challenges and individual physician results may be aggregated to understand particular patterns of strength and weakness in performance within a department or organization. The identification of these issues may be useful in guiding quality improvement initiatives that should be undertaken from an organizational perspective.

Performance assessment may also be useful for identifying high-performing physicians, both to identify “champions” who may participate in or lead quality improvement internally, and as a means of retaining high performers. The literature identifies that recognition of successful performance significantly decreases stress and burnout and facilitates retention. Further, the public release of performance information, although sometimes controversial and applied by a limited number of settings in North America at present, may be used by consumers to support health care choices (Landon et al., 2003).

4.1.2 WHAT IS PERFORMANCE ASSESSMENT?

The area of performance assessment is relatively new in the field of medicine, but has been high on the agenda because of both the possibilities it offers for improving quality of care, and the demonstrated limitations of competence assessment procedures (Schuwirth et al., 2002). When considering assessment in medicine, the subtle distinction between the constructs of competency and performance become important. Competence and performance are strongly related, and lessons learned from competence assessment can serve as a guide to assessing performance.

Epstein & Hundert (2002) have defined professional competence as “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of individuals and communities being served.” In medicine, a common approach has been to divide competence into defined sets of “competencies” in specific domains, including those that apply to all physicians and those that are unique to each specialty. The Royal College of Physicians and Surgeons of Canada, for example, has adopted such an approach in its CanMeds Physician Competency Framework (Frank, 2005), which identifies the seven distinct roles of the physician, and the specific competencies that are required to fulfill each of those roles. Although some of the competencies relate to technical skill and medical knowledge, the framework recognizes that intellectual, emotional, professional and humanistic qualities are also required if one is to be a “good doctor.”

It has been recognized that both cognitive and affective competence are a necessary, but not sufficient, requirement for performance (Schuwirth et al, 2002). Physician performance is generally considered to be the outcome that is achieved through an application of knowledge, skills and behaviours within the context of everyday work. It is generally agreed that while competence indicates what people will do under optimal conditions, performance indicates how people will behave when unobserved, in real life, day-to-day situations. Performance can be seen as the result of competence combined with the conditions that both enable, and impose boundaries on, the practitioner.

Hays et al. (2002a) propose a model that captures the complex nature of performance in the medical field. The authors suggest three domains of performance that are important to measure: the doctor as a manager in patient care, the doctor as manager of the environment, and the doctor as a manager of him/herself. The first domain includes such competencies as clinical expertise, communication and patient management skills. The environmental manager domain encompasses such skills as peer communication, resource utilization, respect for colleagues and population health management. Competencies in the self-management domain include insight into one’s behaviour, attention to self-care, and a focus on lifelong learning and personal development. The authors suggest that a range of measures may be required to assess skills and behaviours and to thereby gain insight into all three important performance domains.
4.0 Literature Review

Hence, performance is recognized as being complex, multi-factorial and non-linear in nature. It is clearly and demonstrably influenced by the fact that physicians perform within teams and systems, and that their performance is often a reflection of the performance of the broader environment in which they work.

4.1.3 HOW IS PHYSICIAN COMPETENCE/PERFORMANCE ASSESSED?
Performance assessment provides an opportunity to make judgements about how well individual doctors work within complex environments, how they adapt and apply knowledge and skills already attained, and how they apply new knowledge and skills on a day-to-day basis (Hays et al., 2002b). The challenge lies in establishing the best tools to assess performance.

Figure 4.1: Performance Assessment Components

Hays et al. (2002a) recognize that measuring the ability to practice medicine is complex for two reasons: first, clinical practice takes place in a dynamic environment that is influenced by many variables other than individual competence; second, while most methods focus only on technical or behavioural competencies, few methods take into account how individual doctors truly perform, let alone how teams and systems deliver health care to patients.

Within the medical field, attempts to measure physicians’ performance have traditionally focused on clinical performance. Clinical performance assessment, i.e., the quantitative assessment of physician performance based on the rates at which patients experience outcomes of care and/or the rates at which physicians adhere to evidence-based processes of care during their actual practice of medicine, is a narrower construct than that of professional competence. While not the focus of this Toolkit, quantitative measures that can be used to measure physician performance are described in Chapter 9.0, Linking 360-Degree Performance Evaluation with Quantitative Indicators.

Behavioural competencies include communication, empathy and self-assessment. Measures of behavioural competence may include any or all of, for example, observation, the use of standardized patients, peer review activities and self-assessment.

The need to assess the characteristics, both clinical and humanistic, that define a good practitioner, has been recognized, and various models and frameworks for doing so have been proposed. The main challenge facing developers of performance assessment methods is that most approaches consist of adaptations of competence assessment methods or the application of data currently collected for other purposes (Hays et al., 2002a).
4.0 Literature Review

The British Society of Rheumatology (Potter & Palmer, 2003) addressed the importance of utilizing a broader construct of performance when assessing physicians. Recognizing that competence is multi-factorial, they identify that traditional methods of assessment used for physicians may be inadequate:

"The range of professional competences and qualities now recognized as necessary in a good physician is not adequately assessed by conventional examination and assessment. Suitable methods are needed to assess the broader range of competences, including humanistic qualities and professionalism."

Miller (1990) reflects this opinion when he argues that work-based assessments of actual practice behaviour provide a comprehensive view of actual physician performance (i.e., what the physician actually does), whereas the testing of skills in isolation or in artificial circumstances (such as with the use of standardized patients or clinical examinations) allows for the assessment of less complex, knowledge-based clinical competencies (i.e., what the physician knows). Rethans et al. (2002) also recognize this concept, and make a distinction between the use of competency-based assessment and performance-based assessment. They suggest that not only is performance-based assessment necessary for continuous quality improvement, but that the context, such as the environment in which the physician works, and personal issues, such as health, should also be considered.

Norcini (2003) maintains that the basis for judgment on clinician performance is threefold. First, outcomes of care should be considered. Second, processes of care and practice volumes should also be considered. Norcini suggests, however, that the typical methods for collecting this information, for example, the use of administrative data and clinical records, provides mostly quantitative information. He argues for the use of portfolios, which include data gathered through observation, diaries and qualitative sources, including peer ratings and evaluation, in order to provide a more balanced work-based assessment. Wilkinson et al. (2002) also support the use of portfolios, or a collection of information from various perspectives, for measuring performance, and suggest that the use of this information may help clinicians move from competence to excellence.

While the majority of performance assessment methods that have been identified in the literature focus on the usual set of knowledge and skills that are the subject of competence assessment, there are substantial gaps in what could be included in the performance domains of systems management and personal development. These include how well individual physicians collaborate with other health professionals to achieve desired outcomes (teamwork), how well they improve their knowledge and understanding of their own health (self-awareness), how individuals keep up to date with new developments (maintaining currency of practice), and the degree to which individual doctors are aware of their strengths and weaknesses (insight). Performance assessment should include measurement of how doctors acquire and apply new knowledge and skills throughout a long career, and how the other aspects of their complex environment interact with these processes.

Schuwirth et al (2002) note that methods of performance management should reflect the complex and multifaceted nature of performance. They suggest that performance assessment should consist of:

- Obtaining sufficiently large samples of practice
- With sufficiently large variety of measurement methods
- With a main focus on outcomes
- With a judicious blend of structure/objectivity and subjective methods

In summary, it is relatively well accepted in the literature that assessing physician performance is a complex task. Because physician performance itself is complex, physicians must possess multiple competencies, and be able to apply them in a variety of circumstances. Further, since these competencies can be measured and assessed in a variety of different ways, it is recognized that no one method of evaluation can capture all aspects of performance. Multiple methods and evaluation instruments are required to capture all aspects of physician performance. No one superior assessment instrument will be developed to measure performance and it is more likely that a varied palette of methods will be required (Schuwirth et al, 2002).
4.2 360-DEGREE PERFORMANCE ASSESSMENT

4.2.1 WHAT IS 360-DEGREE PERFORMANCE ASSESSMENT?

360-degree evaluations have been identified as a method of performance evaluation with promise in the medical field. Assessment using 360-degree evaluations requires that a measurement tool, usually in the form a survey, is completed by multiple people within an individual’s sphere of influence in order to provide a broad base of feedback on performance, usually for developmental purposes. 360-degree assessments are also known as multi-source feedback, multi-rater assessments, full-circle appraisal and peer evaluation. This method of providing developmental feedback is used to assess competency and behaviour, rather than personality.

360-degree evaluations can potentially assess a variety of core competencies, but may be especially useful in assessing interpersonal skills, communications skills and professionalism.

Evaluators may include those to whom the physician reports and those to whom the physician delegates. They may also include other physician peers, other team members, including administrative staff, and even patients. This feedback is used in conjunction with a self-assessment, allowing for a “gap analysis” between how individuals perceive themselves and how others perceive them. This provides a powerful method to focus on areas for improvement about which the individual is unaware (Rogers & Manifold, 2002). The premise of 360-degree feedback is that the best way to understand and improve one’s performance is to receive feedback on that performance from others with whom one has important work-based links (Peiperl, 1999).

360-degree feedback provides a systematic vehicle for “full circle appraisal” of observable behaviours, especially the “soft” areas of performance that are difficult to quantify (Arnold et al., 1998). The technique leads to feedback that is considered to be highly credible, and thus is a powerful tool to change behaviour. This level of feedback is considered a significant deviation from traditional peer review processes that almost exclusively use physicians as raters (Southgate et al., 2001). Based on studies from the private sector, people with a professional attitude toward their work both desire and require such feedback for career development (Rosenberg et al., 2001). It has been conjectured that the global nature of 360-degree feedback may be more readily accepted, resulting in more behaviours changes that are positive (Rosenberg et al., 2001).

Ramsey and Wenrich (no date) maintain that although peer ratings can be somewhat cumbersome because multiple ratings are required to achieve reliability, they are one of the easiest and most comprehensive methods available to assess the skills of an individual physician. “No other existing methodology provides practice-based information about physician performance in cognitive and interpersonal areas, as well as professionalism.”

Peiperl (1999) reviewed several sources to cite some advantages of peer review. These include that they tap different performance dimensions than do top-down evaluation, are more stable and are better at differentiating effort from performance. Because of this, they tend to have acceptable reliabilities and above average predictive validities, and are thought by some to be the most accurate judgment of behaviour.

Southgate et al. (2001) agree that peer assessment should be increasingly recognized as a valuable tool for measuring physician performance. They feel that the advantage of peer review lies in its focus on what a physician actually does in practice, rather than merely on what they know. They add that, given the movement toward a more patient-centred health care model, the use of peer review reflects the more equal partnership being developed between the public and the profession in maintaining standards of care.

Peer ratings “are coming into their own” in many health care settings (Ramsey & Wenrich, n.d.). The American Board of Internal Medicine recently established professional associate ratings as a component of its future recertification programs. Peer ratings are also being used or considered for the evaluation of physicians in other settings in the US, including academic departments, hospitals, HMOs and large group practices.

The British Society of Rheumatology (Potter & Palmer, 2003) conjectures that particular types of performance assessment, including 360-degree peer review, that assist with assessing humanistic competencies, will become important in physician recertification processes.
4.2.2 CAN 360-DEGREE PERFORMANCE ASSESSMENT CHANGE BEHAVIOUR?

Peiperl (2001) notes that peer appraisal can fulfill multiple purposes. Peer review is sometimes used simply to ensure that things are going smoothly with workers and to catch potential conflicts before they occur. Occasionally, peer appraisal is used to improve ties between groups or to distribute authority and responsibility more broadly throughout an organization. However, the most common purpose of peer appraisal is to provide timely and useful feedback to help individuals improve their performance.

The value of physician performance assessment is considered to be its potential impact on physician behaviour. 360-degree evaluations use feedback, or the communication of a physician’s status in relation to a standard of behaviour or professional practice (Veloski et al, 2006), to motivate behaviour change. Feedback takes the form of objective reports intended to guide decision-making, administrative recommendations, compensation guidelines, rankings, sanctions, praise, rewards or special recognition.

Handfield-Jones et al. (2002) have identified the need to link performance and assessment. They note the importance of ensuring that ongoing learning and continuing competence are, in fact, connected and state that it is important to recognize the role of assessment in driving continuing professional development and promoting continuing competence. They provide a model for a systematic approach that links physician practice performance to assessment and development (see Figure 4.2, below). They argue that:

- Physicians need valid and reliable information about their approach to care.
- Physicians assess their practice by comparing their approach to the characteristics of expected or desired practice. The characteristics of desired practice need to be defined.
- Actual practice can be validated by additional data or input provided from feedback and assessment.
- When a discrepancy between actual and desired practice is found, the physician engages in contemplation or reflection to determine the causes and implications of this discrepancy.
- There is then a definition of educational need by the physician, typically based on the size of discrepancy. Small discrepancies are often considered inconsequential and overlooked, whereas large gaps may seem unrealistic in terms of change, and may be dismissed.
- Educational actions are then defined.
- Rewards for participation are achieved as actual performance improves, and the gap between actual and desired practice is eliminated.

Figure 4.2: Assessment as a Comparison between Desired and Actual Practice

![Diagram of Assessment Process]

Source: Handfield-Jones et al. (2002)
Using this theory, performance improvement can be a formal or informal process. Assessment may occur when the doctor realizes that her/his actual performance is below a “minimally acceptable personal level of performance” rather than a professionally acceptable minimal level of performance. Feedback assists in altering a physician’s insight, or perceptions of his/her own performance. However, a confounding factor is that the physician must also possess motivation to change, and have access to the resources required to facilitate change.

Peiperl (1999) assessed peer evaluation models to determine if peer review can be effective in changing behaviour, and to understand which conditions lead to its success. He hypothesizes that, for a peer evaluation to be successful, it must have impact on the behaviour of the participants being evaluated, the perceptions and attitudes of the participants that are being evaluated and the behaviour of the organization as a whole. Peiperl concludes that where peer evaluation is introduced, what the system consists of, how the tool is designed and how it is implemented are all associated with its success. Context, design and implementation must all be aligned in order for peer evaluation to work well, and their alignment sets up a process of outcomes that vary, depending on the positive or negative success loop that results from implementation of the evaluation (see Figure 4.3).

**Figure 4.3: Successful Peer Evaluations: Hypothetical Determinants**

Source: Peiperl (1999)

When a well-designed tool is well-implemented, and the context is right, positive successes, including an ongoing commitment to the use of the method and momentum for change, both individual and organizational, can result. When determining conditions in the work environment are not well-aligned, or the tool is poorly designed or implemented, peer review is less successful, momentum is not gained and desired behavioural and performance effects may not occur.

Veloski et al. (2006) completed a systematic review of the medical literature to investigate the impact of assessment and feedback on physician performance. Limiting the review to assessments of clinical competence in real-life settings, the authors looked at the effects of feedback on performance and any moderating variables that influenced the effect of such feedback. They found that 70 per cent of studies included in the review showed that feedback from physician assessment generated positive effects on physician behaviour. Positive effects on clinical behaviour were stronger when they came from authoritative, credible sources (such as administrative teams or professional groups). The studies that yielded the strongest positive effects also tended to have feedback provided as a result of performance monitoring that took place over a longer period of time.
Positive changes in behaviour were also shown to occur frequently when feedback was coupled with education on performance standards (63 per cent of the time) or when combined with educational outreach visits, such as coaching (75 per cent of the time).

Veloski et al (2006) also noted that several characteristics of feedback had little effect on behaviour change in physicians. For example, the extent of the physician's involvement in the design of the feedback system, whether local statistical norms or published professional standards were used for comparison when evaluating performance, the relative amount of detail of the feedback provided, whether the feedback was written or verbal, and whether the reports of the physicians performance were made public – all had little impact on behaviour change.

The authors concluded that there is support for the use of feedback to influence the clinical performance of physicians, and that large, systematic efforts at feedback supported by authoritative sources and sustained over time have a greater chance of success than short-term interventions (Veloski et al., 2006).

The College of Physicians and Surgeons of Alberta recently implemented the Physician Achievement Review (PAR), a 360-degree feedback process aimed at assessing multi-dimensional aspects of physicians' performance (Hall et al., 1999). This process uses a validated tool to provide feedback to physicians for the purpose of quality improvement in medical practice. Post-survey feedback showed that approximately two-thirds of respondents reported that they had contemplated changes or initiated changes in practice as a result of the feedback received from the PAR assessment. The most common change implemented related to communication with patients.

4.2.3 THE CHALLENGES OF 360-DEGREE ASSESSMENT

Peiperl (2001) has studied the theory and practice of 360-degree evaluation for a decade. He reports that it is the peer appraisal component that, when conducted effectively, bolsters the overall impact of 360-degree feedback. He argues that this type of appraisal is as important as feedback from superiors and subordinates, but difficult because it is novel and ambiguous when compared to more traditional forms of performance evaluation.

Peiperl (1999) described three issues that pose problems for peer evaluation techniques. First, ratings can be inflated, usually because raters lack incentives to provide accurate ratings. Second, the objectives of performance evaluation are often confused, and often take a subordinate role to issues such as promotions. Third, performance assessments are often lacking in reliability and validity and subject to bias.

In 2001, Peiperl went on to identify four “inescapable paradoxes” of the peer review process as follows:

- **The paradox of roles**: It is inherently difficult to be both a peer and a judge, and peers will tend to give fairly conservative feedback rather than risk straining relationships.
- **The paradox of group performance**: Peer appraisals do nothing to recognize group dynamics and work realities. Shifting the focus from group to individual performance, and asking members to compare one member with another, may yield counterproductive results.
- **The measurement paradox**: The easier feedback is to gather, the harder it is to apply. Without qualitative feedback, which is time-consuming to generate and difficult to aggregate, recipients will have little information on which to act.
- **The paradox of rewards**: When peer appraisal counts the most, it helps the least. When not tied to rewards, feedback is likely to be more comprehensive, and therefore potentially more useful, but often not seen as important by recipients.
4.0 Literature Review

Peiperl suggests managing the paradoxes during the implementation of 360-degree evaluation by:

- Clearly defining the purpose of peer assessment
- Managing the scope of the assessment; being selective, not inclusive
- Being public about the benefits of the process and with support for the process
- Helping participants understand the process
- Providing training to all involved early and often
- Putting substance before rankings (publicize improvements brought about by results)
- Letting people know if they are not doing peer assessment well

Peiperl also states that the most significant finding from his research is the pivotal role that managers play in successful peer appraisal. Unfortunately, managers and organizations often do not spend enough time asking themselves, and conveying to their direct reports and others, why peer appraisal is being used.

Crossley et al. (2002) note that achieving reliability is particularly challenging in performance evaluation. They posit that objective measures, such as knowledge tests, are not adequate to reflect the richness of the complex behaviours that make up performance. Because competence and performance are complex and situational, they are better measured using subjective judgments that are based on real life behaviour. However, this threatens reliability. They argue that it has been demonstrated clearly that global judgments produce more reliable results than do highly structured, objective rating tools. They also argue for the use of multiple judgments over a large numbers of observers to increase reliability. On the other hand, Van der Vleuten and Schuwirth (2005) maintain that reliability is not conditional on the objectivity or standardization of the assessment tool, but on adequate, careful and sufficient sampling.

Schuwirth et al. (2002) identify the problem of bias that exists in judgments and the assessment of practice performance. The most obvious concern is the personal bias of the rater, but other sources of error, such as the timeframe set for assessment, the manner in which raters are selected, and other contextual domains such as the elements of performance that are chosen for assessment, may also introduce bias.

Other challenges to 360-degree assessment identified in the literature include:

- Physician resistance to accepting the need for continuous improvement and to the adoption of assessment process to support improvement (Rogers and Manifold, 2002)
- Determining the constructs, or elements of competence, that should be measured to provide meaningful feedback and support change (Rogers and Manifold, 2002)
- Organizing medical practices and systems to collect and analyze practice and performance data (Rogers and Manifold, 2002)
- Constructing surveys specific to the setting that are appropriate for use by all evaluators in the circle of influence
- Orchestrating data collection from a potentially large number of individuals to be compiled and reported confidentially to the assessee
- Defining thresholds for acceptable care. This is challenging for clinical competencies, but particularly challenging for behavioural competencies, in which absolute thresholds do not exist. Adjustment for risk and other practice or patient specific issues is needed to avoid confounding individual physician assessment (Landon et al, 2003)
4.2.4 What Should 360-Degree Assessment Look Like?

Ramsey and Wenrich (no date) suggest that peer ratings have not been taken seriously in medicine for many years because physicians have assumed that they were not reliable and did not provide rigorous assessment of skills. However, with the introduction of careful psychometric methodologies, the reliability of this method has been established.

Based on what is known about the potential effects of feedback on physician performance, the following conclusions can be drawn about designing performance measures, and in particular, peer reviews:

- Different types of assessment are required to address the various competencies required for practice as a physician
- Assessment must go beyond summative assessment, and look at individual practice domains
- More frequent assessments offer opportunities for correcting and maintaining competence
- A combination of methods will best support doctors in improving performance

London & Smithers (1995) identified the following items to be of importance in designing peer appraisal, and suggested that attention be given to the following methodological issues:

- The content of the appraisal (so that it is relevant, familiar and measures observable behaviours)
- The format of the appraisal form
- Involvement of the appraisee in the design of the appraisal
- Clarity of the procedure and purpose
- Training to make participants aware of common errors and biases
- Rater anonymity
- Use of the tool for development or rewards
- Inclusion of a self-assessment tool
- The frequency of feedback
- The format of the report and the level of personal interaction in delivery of the results

Peiperl (1999) found that, in terms of evaluation design, the perceived quality of the criteria used in the rating instrument is correlated with success. Those groups that perceived the tool as being of high quality tended to have more success with peer review in terms of outcomes on behaviour and performance.

Peiperl concludes that, where peer evaluation is introduced, the design and content of the assessment process and how it is implemented are associated with its success. He also suggests that, beyond individual performance improvement, peer evaluation, when successful, can be a useful tool for strengthening links within an organization, and that managers may get best results from peer review when they focus not on the individual performance of a physician or unit, but on the links within the organization that are most in need of attention.

Leape & Framson (2002) suggest that the essential criteria for any physician performance assessment process are that it is objective, fair and responsive. A common criticism of recent evaluation methods is that they are based on subjective judgments of personality, motivation or behaviour instead of performance. All physicians should be evaluated on the same measures in an open and unbiased process, and the system must be prompt and consistent when problem behaviours are identified. They propose that a model system include a four stage process: adopting explicit standards for behaviour and performance, requiring compliance with these standards, monitoring performance through formal evaluation, and ensuring timely and appropriate responses to any identified deficiencies.
Hays et al. (2002a) identify that sound assessment processes should possess five important qualities: validity, reliability, feasibility, educational impact and acceptability. They also note that it is important to recognize that each of these qualities will have a different level of importance depending on the purpose of the assessment. For example, assessments aimed at identifying inadequate performers for purposes of credentialing will have a different focus than an assessment that is intended to provide opportunities for improvement.

Landon et al (2003) point out that several important characteristics are desired in an ideal physician performance assessment tool. It should be evidence-based and have agreed-upon standards for satisfactory performance. Any competencies measured should be non-controversial, and broad professional consensus should be sought. They should be applicable to the specific specialty of practice, and reflective of the overall clinical practice of that specialty. The measures should be applicable to a group of patients of sufficient size to provide a reliable estimate of the physician’s ability to care for patients of that type, and the measures must account for patient factors (such as case-mix, socio-demographic characteristics, etc.) that may confound individual physician performance assessment. The measures should be attributable to the care that was rendered by the individual physician being assessed. Finally, the information must be feasible to collect from existing data and information sources. They note that collection of information should be affordable, and there should be no potential for gaming of the system.

Melnick et al (2002) acknowledge that there are different audiences for peer assessment, and that these audiences vary with the purpose of the review. They advise that the constructs measured by the assessment may vary with the audience, but that if the assessment is to guide professional development, it must be considered valid, fair, reliable and useful by individual physicians.

The College of Physicians and Surgeons of Alberta (Hall et al., 1999) asserts that physicians’ performance should be routinely assessed through 360-degree review processes. To be useful and acceptable, the College maintains that the focus of the assessment should be practice quality and related educational processes, rather than “a search for bad physicians.” Several aspects of physician performance, such as relationships with patients and medical colleagues, should be included in the assessment to reflect the different functions of physicians. However, at no time should a physician’s participation in the assessment lead directly to disciplinary action or investigation without further involvement of the individual. Although the College does have an obligation to acknowledge serious concerns or performance problems, and this may trigger a review, the statutory obligation of the medical licensing body overseeing the assessment should not compromise the use of fair and confidential procedures when assessing performance.

Finally, a study of the reaction to performance assessment feedback for family physicians in Ontario determined that confidentiality is important. Physicians welcomed feedback and acknowledged that it was necessary; however, they also wanted it to be private. They were unwilling to share feedback with patients, even though they noted that they have high accountability to their patients (Rowan et al., 2006).

Several other studies have evaluated or hypothesized particular components of peer rating and 360-degree performance evaluation design that are considered important. The following observations were noted in the review of the literature:

- To successfully implement multi-source feedback, the participants (raters and ratees) must understand and accept the program as a career-enhancing tool (Rogers & Manifold, 2002).
- Raters must be willing to give fair and honest feedback, and ratees must respect the confidentiality of the process (which includes trust that anonymity will be maintained and that feedback will be used in a fair and constructive manner). Failure of either of these areas will diminish participation and effectiveness (Rogers & Manifold, 2002).
- There is a recognized tension between performance measurement for the purposes of quality improvement and performance measurement to assess competence or for purposes of promotion. If the purpose is assessment of competence, this may encourage gaming of data or refusal to participate. Similarly, if the purpose is to determine promotion, this tends to encourage less accurate responses from raters concerned about producing a negative financial impact for the physician being assessed. Careful consideration of the purpose of the assessment, as well as mandatory participation and careful data auditing may be required (Landon et al., 2003).
- Two critical determinants of success of 360-degree evaluation in improving behaviour have been identified by Rogers and Manifold (2002) as follows: the fairness of the evaluators and the raters’ ability and willingness to give feedback, and the ratee’s ability to receive and implement feedback.
4.0 Literature Review

- A study of Alberta’s Performance Achievement Review (PAR) tool indicates that assessment results are significantly affected by the peer’s knowledge of the physician being assessed. Raters who knew the physician “not well” or “not at all” gave statistically more favourable ratings than those who knew the physician “somewhat,” “well” or “very well.” Assessors should be familiar with the work of the assessee (Hall et al., 1999).

- An evaluation of the implementation of 360-degree assessment on an interdisciplinary rheumatology team suggested that direct staff involvement in the development of the process may make it more acceptable. Further, administration by an independent person, use of electronic forms and feedback given by the direct supervisor rather than by a more senior manager may be preferable (Potter & Palmer, 2003).

- A trial of a 360-degree tool with a rheumatology team showed that the anonymous nature of the assessment led assessors to make more personal comments (than were, perhaps, appropriate). Some assessees found it hurtful to receive anonymous negative comments (Potter and Palmer, 2002).

- The College of Physicians and Surgeons of Alberta (1999) maintains that data about the individual physician must be confidential, and must not be made available to patients, health authorities or other non-medical bodies. The reports must not be used for personal promotion or advertisement. Each report is returned only to the individual physician and the physician performance committee. The Medical Professions Act of Alberta was amended to ensure confidentiality.

- Ramsey et al. (1996) demonstrate that, in medicine, peer ratings are reliable if at least 10 or 11 raters are used.

- Ramsey et al. (1993) demonstrate that the outcome of the assessment is not affected by the person who is being assessed choosing their own raters. Furthermore, the relationship between the rater and the subject does not affect the results.

- Prior to implementation, significant groundwork must be laid to ensure “buy-in” by all parties involved (Rogers & Manifold, 2002).

- Professional self-regulation that stresses autonomy and accountability can best be accomplished in an affirmative educational framework, rather than a punitive and legalistic one (Handfield-Jones et al., 2002). For example, the PAR assessment used in Alberta is aimed at the improvement of practice quality. Information presented by PAR will be used to identify performance deficits which, through quality improvement and reflective self-practice, would require that the physician engage in performance improvement activity. Such performance improvement activity will be voluntary, unless serious performance deficits are identified, and then the College has the authority to require more detailed evaluation, remediation and a re-assessment.

- Descriptive, behaviour-specific feedback is a useful tool for changing behaviours. Feedback provided from the 360-degree evaluation should be a realistic balance of both positive and constructive information, which is essential for learning and assists the individual in managing his/her own performance and career. Since positive change is the ultimate purpose, a 360-degree program should include a goal-setting or career development component based on utilization of individual feedback (Rogers & Manifold, 2002).
The CAHO Steering Committee and Hay Group conducted a review of several possible processes and vendors to provide 360-degree evaluations for physician performance measurement. The vendors were reviewed based on the following criteria:

- A model for 360-degree evaluation that is standardized, validated and reliable. This is especially important, as the 360-degree evaluation will initially be implemented in academic health science centres
- Easy to complete and analyze
- Confidential results
- Easy to implement
- Process consistent with CAHO goals for assessment, i.e., to support physician career planning and enhance the quality of patient care
- Customized to specific practices

The review resulted in the selection of a tool called Physician Achievement Review (PAR). The following sections describe PAR and outline the ways in which the tool meets the criteria listed above.

5.1 PAR BACKGROUND
PAR is a tool originally created by, and for the use of, the Alberta College of Physicians and Surgeons. The development of the tool began in 1995 with involvement from the two Alberta medical schools, the Alberta Medical Association, physicians and the public. During the development process, PAR questionnaires were tested and refined by survey experts and reviewed by focus groups, representing patients, physicians and other health care workers. Based on this rigorous review process, the PAR questionnaires were found to be reliable and valid as multi-dimensional assessment tools. In 1999, PAR was implemented for all Alberta physicians.

It is important to note that, although PAR is mandatory for Alberta physicians and is a provincial initiative led by the College in Alberta, in Ontario, PAR is being made available to all CAHO member hospitals, with adoption being voluntary and non-binding.

5.2 PAR ADMINISTRATION AND USE
The PAR survey instruments are easy to complete. No written responses are required; all responses are provided using a 5-point Likert scale, making the results easy to understand and analyze.

In Alberta, the results of the PAR questionnaires are owned by a private, independent research firm. This firm administers the tool and provides the feedback reports. Regardless of the method chosen by CAHO to administer the tool and store the results, confidentiality of the data will always be ensured.

PAR is an increasingly accepted way of assessing physician performance. Using PAR as a foundation, the province of Nova Scotia has embarked upon a similar program (NSPAR), and has implemented the tool in its community of family physicians. The program will soon be expanding the tool to its specialist physician group. The PAR tool is also being implemented outside of Canada, within the Irish Medical Association and the American Board of Internal Medicine.

PAR is designed to provide physicians with information about their medical practice through the eyes of those they work with and serve. The PAR tool has questionnaires for medical colleagues, co-workers, patients and a self-assessment component. Each CAHO member hospital may choose to administer the tool to all or a sub-set of these groups of respondents. The survey provides an opportunity to benchmark how a physician’s colleagues and/or patients define good performance, as well as indicating areas for individual improvement and professional development. Assessment programs elsewhere have found that physicians appreciate detailed, reliable feedback and particularly value clarification of what others consider exemplary medical practice.
5.3 ATTRIBUTES ASSESSED USING PAR

In the PAR tool, each group of respondents (medical colleagues, co-workers, and patients) assesses a set of attributes. The specific topics assessed by each group vary slightly to capture the differing insights gleaned by the group of respondents. Several questions explore each attribute. Those groups of questions are both statistically and logically linked, adding credence to the findings. The attributes assessed by PAR are consistent with CAHO’s goals for assessment. The attributes are listed and defined below, by group of respondents.

Figure 5.1: Attributes Assessed by Rater Groups

5.3.1 MEDICAL COLLEAGUES
- Clinical Competency: The physician assesses, diagnoses (using the appropriate technical procedures), and selects an appropriate treatment for the patient.
- Psychosocial Management of Patients: The physician relates social conditions to physical and mental health, thus resulting in appropriate referrals to non-physicians and other community resources.
- Patient Interaction: The physician communicates effectively with patients and their families in a manner that conveys respect and compassion and appropriately coordinates care for patients with other health professionals.
- Professional Self Management: The physician manages his/her own health care resources, professional development and stress.
- Consultation Communication: The physician communicates effectively to patients the steps needed for continuing care, such as referrals to other health professionals and transfer of care to specialists and consultants.
5.0 Performance Measurement Tool

5.3.2 CO-WORKER

- **Patient Interaction**: The physician communicates effectively with patients and their families in a non-judgmental manner that conveys respect and compassion. The physician maintains confidentiality and is responsible for professional actions.

- **Co-Worker Collegiality**: The physician interacts and collaborates with co-workers in an effective, courteous manner, which recognizes their professional skills and knowledge.

- **Co-Worker Communication**: The physician provides clear written communication, including prescriptions, and is available for consultation with other doctors and community workers.

5.3.3 PATIENT

- **Patient Interaction**: The physician listens, answers questions and demonstrates interest, empathy and respect for the patient during an examination period. Patients indicate whether they would return to or refer a friend to the physician.

- **Phone Communication**: The physician is available by phone after hours for urgent medical problems.

- **Information for Patients**: The physician provides proper information regarding medical problems, return appointments, reporting of test results, referrals to specialists, tracking of prescription and non-prescription medication and patient education.

- **Personal Communication**: The physician adequately explains illness/injury, preventative measures, treatment options, and medication regimen and side effects.

- **Office Staff**: The office staff are pleasant, helpful, capable, professional and able to maintain confidentiality.

- **Physical Office**: The office is accessible, clean, private and appropriately sized.

- **Appointments**: Appointments can be made quickly and wait times for scheduled appointments are not excessive.

Through PAR, validated survey instruments are available for General Practitioners, Surgeons, Anaesthesiologists Lab Medicine, Medical Specialists, Episodic Care, and Diagnostic Imaging. The format of the survey instruments is standardized across all practices. Samples of the survey instruments for all specialties (for which they have been developed) may be obtained through the College of Physicians and Surgeons of Alberta website.
6.0 Legal Considerations

The implementation of 360-degree performance feedback processes for physicians requires attention to various legal considerations. This section provides a brief overview of several key issues with legal implications. However, in all cases, it is recommended that the hospital’s legal counsel be consulted.

6.1 CONFIDENTIALITY

Physicians may be vulnerable to lawsuits in which plaintiffs seek broad access to all available documentation. Therefore, it is critical that all information collected through the 360-degree feedback process, as well as follow-up discussions, be confidential between the physician and his/her Chief. It is also important that this feedback information not be available to hospital administrators, the Board of Directors or any other parties. This process will help to ensure that physicians feel comfortable that the information will be available only for the purpose of developmental discussions. Finally, confidentiality is also essential in order to encourage raters to provide honest and frank responses.

6.1.1 QCIPA DOES NOT APPLY

The Quality of Care Information Protection Act, 2004, does not apply to information collected through a 360-degree feedback process since it is not “collected by or prepared for a quality care committee.”

According to the Act (Sec. 1):

“quality of care information” means information that,

(a) is collected by or prepared for a quality care committee for the sole or primary purpose of assisting the committee in carrying out its functions, or

(b) relates solely or primarily to any activity that a quality care committee carries on as part of its functions, but does not include,

(c) information contained in a record that is maintained for the purpose of providing health care to an individual,

(d) information contained in a record that is required by law to be created or to be maintained,

(e) facts contained in a record of an incident involving the provision of health care to an individual, except if the facts involving the incident are also fully recorded in a record mentioned in clause (c) relating to the individual, or

(f) information that a regulation specifies is not quality of care information and that a quality care committee receives after the day on which that regulation is made.

Further, the Act defines a “quality of care committee” as (Sec. 1):

a body of one or more individuals,

(a) that is established, appointed or approved,

(i) by a health facility,

(ii) by an entity that is prescribed by the regulations and that provides health care, or

(iii) by an entity that is prescribed by the regulations and that carries on activities for the purpose of improving or maintaining the quality of care provided by a health facility, a health care provider or a class of health facility or health care provider,

(b) that meets the prescribed criteria, if any, and

(c) whose functions are to carry on activities for the purpose of studying, assessing or evaluating the provision of health care with a view to improving or maintaining the quality of the health care or the level of skill, knowledge and competence of the persons who provide the health care.

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.”
6.0 Legal Considerations

6.1.2 "PRIVILEGED" INFORMATION
Generally speaking, all information pertaining to a civil action must be disclosed unless it is “privileged” (OHA, 2004). In addition to traditional types of privilege (e.g., lawyer-client communications), the Supreme Court of Canada (in Slavytch v. Baker) has recognized that other types of information may be privileged if four criteria are met:

1. The communications must originate in confidence that they will not be disclosed;
2. This element of confidentiality must be essential to the full and satisfactory maintenance of the relation between the parties;
3. The relation must be one which in the opinion of the community ought to be sedulously fostered; and,
4. The injury that would inure to the relation by the disclosure of the communications must be greater than the benefit thereby gained for the correct disposal of litigation (OHA, 2004).

The case under consideration by the Supreme Court concerned comments made on a tenure application form by the applicant’s colleague. Similar arguments have been upheld by the courts in the health care context (OHA, 2004).

6.1.3 MACS SHOULD DEVELOP A SPECIFIC POLICY
To protect the confidentiality of information provided through 360-degree performance reviews, Medical Advisory Committees should 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.

6.2 MAINTAINING RECORDS
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 physician and his/her Chief and access should be limited to these individuals, unless there is express permission to share them with others. In all cases, strict confidentiality of specific raters and the information they have provided, should be maintained.

6.3 NOTICE OF DISAGREEMENT
There will be situations in which the physician disagrees with elements of the review. Therefore, a mechanism should be incorporated into the design of the process that allows the physician to indicate his or her disagreement with the results of the report. In all cases, the content of the review is “opinion,” rather than fact, and the Chief and physician should endeavour to achieve alignment. However, the feedback may suggest that further exploration is advisable, potentially leading to remediation.

6.4 ESCALATION PROCEDURE
The policy should also incorporate a procedure for escalating any critical performance issues identified in the performance review process that are perceived as a risk to patient care and safety. In these cases, the Chief has an obligation to undertake an investigation of these issues.

6.5 CREDENTIALING
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. However, the review can be timed to coincide with the appointment process, i.e., every five years.

6.6 REPORTING TO THE COLLEGE
Because it is confidential, the 360-degree review cannot be the basis of a report to the College of Physicians and Surgeons of Ontario. Issues identified by the review should be followed up through a separate process agreed to by the physician and Chief.
A number of methodological issues need to be carefully considered prior to implementation of the 360-degree process. As discussed below in the following sections, some of these have been addressed through the research that has led to the development of the PAR tool.

7.1 PARTICIPANTS
7.1.1 WHO WILL BE ASSESSED?
It is recommended that all physicians in the hospital be assessed on a rotational basis. It is impossible to establish fair criteria for selecting physicians for the review process, unless this is done on a random basis. However, anything less than universal participation might allow for accusations that the program is singling out specific physicians, e.g., because there have been complaints. One of the strengths of a universal program is that all physicians are treated equally.

If the program is initially implemented as a pilot, physicians could be asked to volunteer to participate or participants could be selected at random.

In other constituencies, the frequency of evaluation is every 3-5 years and is conducted on all members of the department in the same year in order to provide a data base for comparison. Department Chiefs may also choose to conduct the appraisal during the first year of a new appointment (during the individual’s “associate” term) in order to identify any potential performance issues early in an individual’s career and mentor him/her appropriately.

7.1.2 IS THE REVIEW MANDATORY?
It is recommended that the review be mandatory, i.e., that all physicians must take part in the process, possibly, as a condition of appointment/re-appointment.

7.1.3 FREQUENCY
As noted above, it is recommended that physicians participate on a rotational basis. The frequency of evaluation will be at the discretion of individual organizations, but a frequency of every 3-5 years is suggested. The process may be timed to coincide with the annual re-appointment process.

A 3-5 year period has two advantages: first, it will allow time for physicians with identified remedial issues to work on them; second, it will allow Chiefs sufficient time to effectively implement the feedback process, especially in large departments.

At the same time, if remedial issues are identified through the 360-degree process, follow-up assessments involving either the entire assessment or specific sections can be scheduled earlier, e.g., after 18-24 months.

7.2 RATERS
7.2.1 SELECTING RATERS
Generally speaking, raters should represent the following individuals/groups:

- Self
- Chief/Leader
- Peers (i.e., other physicians with whom the subject works closely)
- Other clinicians (nurses and others with whom the physician works closely)
- Consultants (to whom the physician refers patients)
- Patients
7.0 Methodology

The selection of raters can occur in a number of ways, including:

- The physician selects all raters
- The Chief selects all raters (perhaps in consultation with others)
- Some raters are selected by the physician and the others by the Chief
- The physician selects more raters than are necessary, from which the Chief selects the final groups of raters

There are advantages and disadvantages to each of these options. However, there is research to suggest that there is greater perceived rater competence when the subject participates in selecting the raters.

It is recognized that, for some specialty areas (e.g., pathology, radiology, emergency medicine), patients are not an appropriate rater group. At the same time, it is anticipated that some physicians will oppose including patients in the process. Therefore, while it is recommended that feedback be requested from patients, it is expected that each hospital will make its own determination.

Additional points to consider:

- Raters should have had regular contact with the physician for at least six months; individuals who have only periodic contact or who have had contact for only a short period will likely not have sufficient knowledge of the person to provide reliable ratings.
- Physicians should be encouraged not to focus exclusively on raters whom they know will rate them highly, but rather to purposely select a range of raters in order to get the most balanced feedback.
- Potential raters should disqualify themselves if they have a conflict of interest, e.g., are related to the physician.
- Raters should be directed not to discuss their ratings with others.

Physicians and their raters will be directed to a website, where instructions are provided concerning completion of the survey. Sample communications for physicians and raters are provided in Appendix B.

7.2.2 How Many Raters?

There are various opinions on the number of raters required for each rater group. At minimum, there need to be sufficient raters to ensure the confidentiality of individual responses.

Based on extensive research and validation of results, the PAR tool has established the following numbers of required raters:

- 6 Peers (i.e., other physicians and clinicians with whom the subject works closely)
- 6 consultants (to whom the physician refers patients or who refer patients to him/her)
- 6 other clinicians
- 25 patients

For patients, it is suggested that additional patients be contacted (up to 50 in total) as it has been found that a number do not respond or do not agree to participate. Response rates of patients should be considered in the interpretation of results to ensure that it is not only disgruntled raters who are responding.
7.0 Methodology

7.3 ADMINISTRATION OF TOOL
The evaluation form requires that rating occur on a 5 point Likert scale which poses the question “Compared to other physicians I know …..”

There are various approaches to administering a 360-degree feedback tool, i.e.:

- Web-based
- Electronic (but not web-based)
- Paper-and-pencil
- Automated telephone surveys
- Interviews

Web-based is the most common approach. Although this method entails an out-of-pocket administration cost, there is a savings on report production, as web-based services automatically generate reports. There is the further benefit of enhancing confidentiality, as no one within the hospital is directly privy to individual ratings information.

Some patients may have difficulty completing web-based questionnaires. Therefore, it is suggested that other methods be made available for this group. PAR provides a paper-based questionnaire for patients. The American Board of Internal Medicine uses an automated telephone questionnaire. Patients dial in to a central number and answer questions using the key pad. Hospitals may wish to consider translating the patient questionnaire into other languages.

While “narrative” comments may be included in the evaluation, they should be kept concise in nature, and few in number. Clearly, they cannot be subjected to a statistical analysis, but should be reported to the assessed physician. However, narratives can provide important context in which to interpret results.

7.4 GENERATING REPORTS
As noted above, web-based systems typically generate individual reports automatically. If another methodology is used (e.g., paper-based), someone in the hospital will have to be designated to collate all of the data and prepare reports. In this case, it is suggested that the individual be located in the hospital’s Medical Staff Office or the Human Resources Department. In either case, strict confidentiality should be maintained concerning the content of or individual responses and reports. Reports should be provided to the physician and his/her Chief.

7.4.1 VERBATIM COMMENTS
Regardless which method is used, responses to open-ended questions and other comments are generally reported verbatim. It is recommended that raters be advised that such comments will be reported verbatim and that it may be possible to identify the rater based on the content or language of the comment.

The alternative is for someone to read through the comments and extract key themes. However, this approach is costly, time-consuming and difficult to implement effectively.

7.4.2 AGGREGATE REPORTS
It is suggested that hospitals consider producing aggregate reports of the results by department and for the entire organization. These reports are typically available when web-based tools are used. They can provide valuable insights concerning development areas that may be shared by large numbers of physicians or pockets of the organization where there may be systemic issues. Based on the results of these aggregate reports, hospitals may wish to target certain development areas through in-house training programs.
7.0 Methodology

7.5 PROVIDING FEEDBACK AND RECOMMENDATIONS
The most critical component of the 360-degree review is how the results are interpreted and used to affect change. It is essential that both Chiefs and physicians be trained in how to interpret reports, constructively discuss them, identify development areas and agree on follow-up actions. Please consult Appendix C for Sample Coaching Guidelines for Chiefs on preparing for and participating in the feedback session.

7.6 DEVELOPMENT PLANNING
Physicians should review their feedback and create a development plan, which leverages strengths and identifies activities to address developmental opportunities. Physicians should meet with their Chiefs to review the feedback and discuss a development plan. Ideally, the plan will take the nature of an agreement that outlines the activities or learning experiences in which the physician will participate in order to address identified issues, and the timeframe in which they will be completed. The plan will also delineate the Department Chief’s support for the planned activities and his/her commitment to assist the physician in dealing with identified issues in a supportive and collegial mode. More than one meeting may be necessary to complete the plan.

Physicians should review their feedback and create a development plan, which leverages strengths and identifies activities to address developmental opportunities. Physicians should meet with their Chiefs to review the feedback and discuss a development plan. More than one meeting may be necessary to complete the plan.

A Sample Development Planning Guide is presented in Appendix D. The hospital should develop a listing of internal and external resources that are available to assist physicians in their development planning.

7.7 MAINTAINING RECORDS
As discussed in Chapter 6.0, Legal Considerations, in order to protect confidentiality, records of the reports and any related discussions or follow-up activities should only be maintained by the physician and his/her Chief and access should be limited to these individuals, unless there is express permission to share them with others. In all cases, strict confidentiality of specific raters and the information they have provided, should be maintained.
8.0 Implementation

Regardless the quality of the 360-degree tool, a key success factor for such programs is the approach to implementation. Virtually all physicians will have experienced 360-degree feedback during their medical education, and most 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 clinical activities.

It can be anticipated that most physicians will not have much knowledge about 360-degree performance management and that, in any case, there will be many who will resist its implementation and/or its results. Further, most of those asked to provide feedback (including other physicians, other clinicians and patients) will not have had experience doing so.

Indeed, implementing 360-degree reviews involves a culture change for the organization and physicians alike. For this reason, it should be approached as a change management project, with extensive communication and training for all those involved. In order to maximize the likelihood of success, organizations are encouraged to start slowly and manage expectations carefully. Sufficient resources to facilitate the change should be in place and their existence well publicized. It will, of course, be necessary to ensure the availability of a sufficient array of resources to facilitate physician behaviour changes that are felt to be necessary. These may be provided in-house (e.g., through the Human Resources Department), by a professional organizations such as the Ontario Medical Association, or by external resources hired specifically by the organization. A compendium of available resources should be compiled and easily available. The hospital should develop a policy that indicates whether the hospital will pay for any professional support required.

Each organization will have to develop a thorough implementation plan. A Sample “Physician 360-Degree Feedback Process Implementation Checklist” is presented in Appendix E. Key issues to be considered include the following:

8.1 ESTABLISH OWNERSHIP AND CHAMPIONS FOR THE PROCESS

It is essential that the process have the support of the hospital’s administrative and medical leadership. As this is primarily a quality of care activity, the Board of Directors should also be informed. It is strongly recommended that the program be fully communicated to both groups and be formally endorsed. In addition, present the program to the Medical Staff Association Executive prior to implementation and seek their endorsement.

8.2 COMMUNICATION STRATEGY

A communication strategy should be developed, including but not limited to:

- Goals of the 360-degree process
- Positioning relative to the hospital’s mission, vision and values
- Identification of key stakeholders and specific messaging
- Communications vehicles
- Time frames and responsible individuals

Ongoing communication about the process is essential, especially in the first year. A Communications Committee with representatives of the various stakeholders might be established to provide advice on approaches to communication and messaging.

A Sample “Key Messages for Physicians” document is provided in Appendix A.
8.0 Implementation

8.3 BEGIN WITH A SMALLER GROUP
Consider introducing the 360-degree gradually, beginning with a smaller group. The process might look as follows:

- Establish a Steering Committee with MAC, MSA and Senior Management representation to provide guidance regarding the implementation and communication of the process during the pilot phase.
- The Committee could evaluate the process and make recommendations for modifying it. (It is anticipated that, following the pilot, the process would be managed through the Medical Staff Office or Human Resources, and the Steering Committee would not be required.)
- During the initial implementation period, request volunteers to participate in the program. At the end of the first year, the volunteers could be asked to provide feedback to improve the process.

8.4 TRAINING FOR IMPLEMENTATION
8.4.1 PHYSICIAN TRAINING
All physician participants will require training, which could encompass the following elements:

- Understanding 360-degree feedback
- What the literature says about 360-degree feedback
- Explanation of the PAR tool
- The purpose of the 360-degree feedback process
- The steps in the 360-degree feedback process
- Confidentiality
- How to interpret 360-degree feedback
- Preparing for the meeting with your Chief
- Developing a learning plan
- Follow-up activities

Training methods could include presentations, hard copy and electronic reference materials, and a dedicated intranet site.

8.4.2 CHIEF TRAINING
All Chiefs will require training, which could encompass the following elements:

- Understanding 360-degree feedback
- What the literature says about 360-degree feedback
- Explanation of the PAR tool
- The purpose of the 360-degree feedback process
- The steps in the 360-degree feedback process
- How to interpret 360-degree feedback
- Preparing for the meetings with physicians
- How to deal with developmental issues
- Helping the physician developing a learning plan
- What resources are available?
- Follow-up activities

Training methods could include presentations, hard copy and electronic reference materials, and a dedicated intranet site.
8.0 Implementation

8.4.3 RATER ORIENTATION
All raters (including physicians, other clinicians, consultants and patients) will require training, which could encompass the following elements:

- Understanding 360-degree feedback
- What the literature says about 360-degree feedback
- Explanation of the PAR tool
- The purpose of the 360-degree feedback process
- The steps in the 360-degree feedback process
- How to provide feedback
- What will happen with your feedback

Training methods could include written materials made available in hard copy and on a dedicated intranet site. Information can be handed out to patients by their physicians or mailed along with an invitation to participate. In addition, optional presentations can be provided for internal physicians and staff.

8.5 CONSOLIDATE ACCEPTANCE
Consolidate acceptance through:

- Ongoing evaluation and modification of process as needed
- Preserving the integrity, including the developmental nature, of the process
- Responding to outcomes appropriately
Measurement of physician performance with respect to clinical guidelines and accepted care protocols is often difficult, because of the
dearth of valid and comparable data. Many of the data collection systems in hospitals and other health care organizations were established
primarily to support financial management and provider payment, and only secondarily incorporate clinical data elements that can be used
to monitor patient care processes and outcomes.

In Ontario, there have been many initiatives to develop health system performance indicators, some of which can be applied at the level
of the individual physician, and that could be used to support physician performance review. These initiatives include Hospital Reports,
Canadian Institute for Health Information (CIHI) indicator development projects, and the Ontario Ministry of Health and Long-Term Care
Ontario Health System Scorecard project.

Many of the potential indicators are based on the CIHI discharge abstract database (DAD) and national ambulatory care reporting system
(NACRS) data submissions from hospital health records departments to CIHI. These indicators should be used with caution, since they
can be impacted by inter-hospital or inter-physician variability in the quality and comprehensiveness of clinical documentation, and the
abstracting and coding practices at each hospital.

Some of the performance indicators for which data are routinely available in Ontario are described briefly below.

- **Acute Care Hospital Length of Stay** – All Ontario acute care hospitals are required to submit to CIHI summaries of inpatient stays
  for every patient discharged. These data include identification of the “most responsible physician” and CIHI generates reports for each
  hospital that compares the average length of stay for each physician’s patients with expected lengths of stay derived from the CIHI
  national database. The CIHI expected length of stay takes into account the clinical characteristics of the patients (based on diagnoses,
  procedures, co-morbidities and patient age), and excludes patients who die in hospital, who are transferred to and from another acute
  care hospital, who sign themselves out against medical advice, or have exceptionally long lengths of stay.

- **Ambulatory versus Inpatient Procedures** – CIHI inpatient and ambulatory procedure data facilitate comparisons of the relative
  use of ambulatory surgery versus inpatient surgery for procedures that could be safely performed in an ambulatory environment.
  These comparisons are available for individual surgeons.

- **Infection Rate** – Rates of infection for the patients of individual physicians have been used for performance measurement. These
  rates should be risk adjusted to take into account the fact that there may be a higher inherent risk of infection for some patients than
  for others. Rates of surgical site infection for specific procedures (e.g., joint replacements) can be compared across surgeons or with
  published clinical studies. Although physicians may have primary responsibility for care of patients, infection rates (and many other
  adverse events) will be influenced by other factors that may be beyond the physician’s control (e.g., nursing care, organizational
  infection control procedures, facility status).

- **Risk Adjusted Mortality** – CIHI, in partnership with Safer Health Care Now!, has recently provided each hospital with their Hospital
  Standardized Mortality Ratio (HSMR). The HSMR compares actual in-hospital deaths with expected in-hospital deaths and can be used
  to identify hospitals (or physicians) who have patient populations with higher mortality death rates than would be expected. Because of
  the wide confidence intervals for HSMR measurement, physician-specific HSMR measures should only be examined for physicians with
  large inpatient caseloads.

- **Relative Procedure Rates** – For patients with conditions where there is a choice between competing procedures (e.g., Caesarean
  section versus vaginal delivery, mastectomy versus lumpectomy, and open cholecystectomy versus laparoscopic cholecystectomy)
  measurement of the relative use of one procedure versus the other can be used as a performance measure. In some instances,
  there may be clear clinical guidelines that indicate which of the competing procedures should be preferred, but in other cases,
  the preferred procedure is not necessarily obvious (and may change as research outcome evidence accumulates).
9.0 Linking 360-Degree Performance Evaluation with Quantitative Indicators

- **Procedure Volumes** – Some procedural specialties have published guidelines that recommend the minimum number of annual cases that a physician should complete in order to maintain competence (e.g., annual case volume standards for cardiac bypass surgery and PCIs). Measurement of the case volume for individual physicians and comparing the volume to the minimum case threshold set by national and international clinical groups can be used for performance measurement.

- **Patient Safety/Surgical Misadventure** – Most institutional risk management programs track occurrences of significant adverse events, such as wrong side surgery. Some adverse events (e.g., accidental laceration or puncture, patient falls, medication errors) can be tracked via CIHI patient discharge data, but variability in consistency and comprehensiveness of reporting makes comparisons of rates between physicians unreliable. CIHI data can be used to track rates for the patients of individual physicians over time.

- **Post Admit Complications** – CIHI data require that post-admit co-morbid conditions be explicitly identified. A recent change in U.S. Medicare reporting requirements requires that post-admit co-morbid conditions be identified, and Medicare patients will be reduced for providers whose patients have adverse events that should have been avoided. The U.S. research that identifies these avoidable events can be applied to Canadian CIHI data and used to support physician performance measurement.

- **Readmission Rates** – Readmission rates are often used as a quality measure, based on the presumption that if complete and successful treatment is provided at the initial episode, the likelihood that a patient must be re-admitted (for a similar condition, and within a specific time period) is small. Calculations of readmission rates must exclude planned readmissions. CIHI reports to acute care hospitals include reporting of readmission rates within 7 days or 28 days.


Bibliography


Ontario Hospital Association (2004). Quality of care information protection act toolkit.


Ramsey PG & Wenrich MD (n.d.). Peer ratings: an assessment tool whose time has come. JGIM.


One of the Hospital’s key strategic goals is to implement a process to enhance physician performance assessment in support of career planning and improving the quality of patient care.

The 360-degree feedback process is one more step in our ability to guide professional development and facilitate quality improvement by providing physicians with broad-based quality feedback from peers, colleagues and potentially others, such as patients, in a manner that can be seen as facilitating the development of insight and focusing future professional development.

The 360-degree feedback process will serve as a guide for all physicians to contribute directly to successful achievement of our organizational goals and objectives.

The 360-degree feedback process is being implemented for all physicians across the Hospital. It will provide you with structured, relevant feedback to determine how you can best focus your development. It is administered by a web-based electronic questionnaire that asks Department Chiefs, peers, staff and others to evaluate your performance based on professional domains of competence.

Using a confidential on-line survey site, you will evaluate yourself against the professional domains; your Department Chief evaluates you; and you select individuals who will also provide confidential feedback, i.e., peers, other team members, consulting physicians and patients (if applicable). The feedback surveys are then collated into a confidential summary report providing you with a 360-degree feedback of competency strengths and areas for development.

The 360-degree feedback process is a valuable vehicle to provide all physicians in the Hospital with self-insight into those factors that contribute to and detract from their success within in the Hospital.

Appendix A: Sample Key Messages for Physicians
Email Subject: Physician 360-Degree Performance Review Process

Dear [name of physician participant]:

Thank you for participating in Physician 360-Degree Performance Review Process. As part of this process, it is essential that you and your respondents complete the surveys by [insert cut-off date]. Please see below for instructions on how to select your respondents and complete your surveys.

Please note that this process is being conducted as a component of the hospital’s Quality Assurance program. The results of the assessment will not be revealed to anyone other than you and the Chief of your department. Specifically, the information will not be shared with the College of Physicians and Surgeons of Ontario or hospital administration. The data will not, under any circumstance, be used for decision-making pertaining to academic promotion, credentialing, compensation or access to resources, such as the operating room.

If you have any questions about the survey, please contact [insert name, position title, telephone number and email address]

To select your respondents and complete your self-assessment questionnaire:

1. From your Internet browser go to [insert website link]
2. Enter your Username and Password exactly as they appear below (user names and passwords are case sensitive). Click the “Login” button to continue.
   - User Name: [to be provided by Administrator]
   - Password: [to be provided by Administrator]
   Make a note of your username and password, as you will need it to log on to the site.
3. Once you have logged on, you will be asked to select raters to complete surveys as part of the feedback process. Follow the instructions. E-mails will be sent to the selected respondents enabling them to complete surveys on-line. Please contact your raters personally and let them know you are interested in having them participate in the assessment process. [Wording is subject to the method for selecting raters.]
4. To access the self-assessment questionnaire, click on [insert term].
5. When you have completed the survey click the SUBMIT button. Wait for the confirmation before continuing.
6. When you return to the Survey Menu Page, you will see the date and time you completed or saved your survey.

Thank you again for your participation.
Email Subject: Physician 360-Degree Performance Review Process

Dear [name of rater]:

Dr. [insert physician name] has requested your feedback as his/her [insert rater category, i.e., peer, co-worker, etc.]. You have been asked to complete a confidential questionnaire through a dedicated, secure web-site. It is essential that you complete and return the questionnaire by [insert cut-off date].

Please note that this process is being conducted as a component of the hospital’s Quality Assurance program. The specific information you provide will be confidential and will be shared in aggregate form only. A summary of the results of the assessment will be provided to Dr. [insert name] and her/his Department Chief, and not to anyone else. More specifically, the information will not be shared with the College of Physicians and Surgeons of Ontario. The data will not, under any circumstance, be used for decision making pertaining to academic promotion, credentialing, compensation or access to resources, such as the operating room.

If you have any questions about the survey, please contact [insert name, position title, telephone number and email address]

To begin:

1. Make a note of your username and password, as you will need it to log on to the site (user names and passwords are case sensitive):
   Username: [to be provided by Administrator]
   Password: [to be provided by Administrator]

2. From your Internet browser go to [insert website link].

3. Enter your Username and Password exactly as they appear above. Click the Log In button to continue.

4. You have the ability to save the questionnaire in process and to complete it at a later time

5. After you complete the survey, if you would like to keep a copy for your records, print before clicking the Submit button.

6. When you have completed the survey click the SUBMIT button. Wait for the confirmation before continuing.

Thank you for your participation.
Appendix C:
Sample Coaching Guidelines for Department Chiefs

INDIVIDUAL DEVELOPMENT PLANNING

PURPOSE OF THIS DOCUMENT
This document contains background information and tools to assist Department Chiefs in conducting a coaching discussion with physicians to review the results of the performance assessment. The purpose is to provide general guidelines for effective coaching and feedback and some suggested questions and processes for holding a coaching discussion.

It is important to keep in mind that the central objective of the coaching discussion is to assist physicians in making the most of the performance review feedback, assist him/her in improving professional competence and facilitate personal change and growth.

BEFORE YOU BEGIN
Ensure you have thoroughly reviewed the PAR feedback report and identified key themes, including strengths, areas for development, and other general concerns. Consider also specific examples of behaviour you have noticed through direct observation that supports and/or contradicts the feedback data. Anticipate any questions and areas of concern and/or resistance and how you will respond. The physician will also have reviewed the feedback report and may have completed a development plan (reference the Physician Development Planner).

MODEL FOR EFFECTIVE FEEDBACK
In order for change to occur, people need to understand their current performance from their own perspectives and from the perspective of others. The PAR feedback report assists in accomplishing this objective.

For feedback to be effective, the receiver must understand it, accept it and action it. Below are some general techniques to consider when providing feedback:

Effective Feedback Model

Observations
- Be specific – refer to the feedback report
- Provide specific examples
- Emphasize behaviour

Thoughts/Feelings & Impact on the Hospital
- Be descriptive, not evaluative
- Ensure balance: Refer to successful as well as less successful behaviour
- Ensure recipient is focused
- Ensure a two-way discussion
- Use Active Listening

Needs
- Relate feedback to behaviours that can be changed
- Identify alternative positive behaviours
- Address only one or two key arenas at a time

How you communicate your observations, thoughts feelings and needs impacts on the hospital and other professionals. Your observations are the facts, evidence (e.g., results of the performance evaluation), and observable behaviour. Your thoughts and feelings include your judgments about the results and your opinions. Ensure your judgments and conclusions are supported by your observations of the physician in her/his daily activities. Be sure to describe the impact of behaviours – both positive and negative – on the organization (quality management, patient care, etc.). Your expression of needs include what you want the physician to do more of, less of, or differently to support his/her professional growth and the success of the Department.
OPENING AND GUIDING THE DISCUSSION
Consider using the following questions to open and guide your discussion:

- Does the feedback analysis make sense to you?
- Is anything in this surprising to you?
- Does this fit with how you see yourself?
- Do you think the feedback could provide a useful development area for you?
- What difference do you think it would make to you if you further develop that professional competency area?
- Would it make any difference to your professional work?

GENERAL COACHING GUIDELINES
Some general guidelines to consider when providing feedback:

- Clearly communicate expectations
- Ask questions to explore the physician’s underlying thinking and feelings:
  - Why do you think you have this challenge?
  - What was/is your goal?
  - What do you think would happen if you tried …?
  - How do you think other people would react if …?
  - What would be the benefits if you tried a different approach?
- Be an active listener:
  - Listen for unstated emotions
  - Look for hidden assumptions
  - Show interest
  - Listen for the whole story
  - Look for non-verbals – non-verbal messages speak as loudly as verbal ones; use encouraging non-verbal responses, such as eye contact, nodding, etc.
  - Paraphrase, summarize and feedback what you have heard to ensure understanding
  - Remember: it is acceptable to allow the other person do most of the talking
- Demonstrate empathy: “I understand why you might think/feel that way.”
- Provide feedback that is specific and behavioural – be more descriptive and less evaluative in your feedback
- Before ending the discussion, ensure the physician is able to answer the following questions:
  - What exactly is expected of me?
  - How will I track my progress and how will I know if I have been successful?
  - Is this a reasonable request?
  - Is it in my control? Is it part of my role?
  - What is the plan for moving forward?
- Reflect on your own coaching values and beliefs – to be an effective coach, you need to have the desire to foster the long-term development of others.
DEALING WITH RESISTANCE

A physician may refuse to accept the data/feedback and instead block any attempt to discuss it. It is important to be sensitive to the needs of the other person. Presenting the ‘personal’ change model to the participant can be useful in this type of situation; it helps a person to understand his/her initial resistance to feedback:

Personal Change Model

- Denial
- Defense
- Discarding
- Adaptation
- Internalization

It may be that the physician rejects the feedback initially but finds it useful when she/he has had time to think about it in her/his own time.

The essence of feedback is giving data on behavioural evidence and then asking questions to help the person integrate this into his/her own experience and view of themselves. It is important to be aware that any behavioural change will only occur through acceptance and ownership of the feedback by the person involved.

The usual rules about feedback apply:

- It should be given in a way in which the physician can understand it
- It should be concrete and behavioural, not judgmental
- It should be acceptable
- It should be given in a way that enables the physician to do something about it
- It should be provided with appropriate sensitivity and at the same time without avoiding the key issues

Giving feedback requires the competencies of a good counsellor:

- Empathy: putting yourself in the shoes of the recipient
- Genuineness: not playing a role
- Acceptance of others as they are: this means leaving the decisions about action plans to them, not imposing your own views
 Appendix D: Sample Development Planning Guide for Physicians

INDIVIDUAL DEVELOPMENT PLANNING

PURPOSE OF THIS DOCUMENT
This document contains background information and tools to help you prepare a development plan based on the results of your 360-Degree Physician Performance Assessment. The questions and guidelines are designed to help you think through your strengths and areas for development, and to identify development activities that will facilitate your professional growth and enhance the hospital’s overall quality management process.

DEVELOPMENT PLANNING TAKES TIME AND REFLECTION
Understanding and making use of your feedback data for personal development takes time and thought. It is not expected that you will complete your development planning in one sitting. Take your time. Work with your data. Ponder your strengths and development areas. It has been found that people are more likely to develop and change when their development is linked to their personal aspirations and goals. Discuss these with your Department Chief. Involve him/her in helping you to set the direction for your development.

Determining where you want to focus your development efforts requires a close examination of your strengths and development needs. Be sure to review your feedback prior to meeting with your Department Chief. Since not all elements of the review may be equally relevant for you, think carefully about your priorities and directions for your development.

Begin by taking time to reflect on both your personal and professional development needs. Ask yourself:

- What does my Department Chief and/or hospital need from me?
- What do I aspire to in my personal and professional life?

Your answers to these questions will help you begin to identify the professional competencies for development that will be most useful to you in both in your current situation and your future career planning.

PREPARING A DEVELOPMENT PLAN
Included in this guide is a Personal Development Planner (beginning on page 6) to assist you in defining your development objectives and action steps. These planners are structured to include the key elements of good development planning:

- **Role and Aspirations** – When planning for development, take a step back and think about your professional development and aspirations. Consider the requirements of your current or future role – this may provide you with direction when thinking about your development. There is, however, more to development than just being successful in the profession. Personal growth and development involves reinventing ourselves over time. To make the best use of your development time, be sure to focus your efforts on the right things not only for your professional success, but also for your personal long-term fulfillment and happiness.

- **Goals** – Setting clear goals, is a critical step in your development process. It is essential that you choose goals that interest and energize you, and that will also be of value to you. Ensure your goals are results-oriented, challenging and measurable. Your goal priorities should:
  - Support your current and future professional development, and
  - Link to your personal aspirations

Choose no more than two or three development goals for a given period. Attempting significant development on more than three areas of professional competence at once is likely to result in very limited progress for most people.

- **Obstacles** – To create a successful development plan, you need to understand what factors may make it difficult for you to demonstrate the professional competence areas you have selected for development. Gaining a better understanding of what is getting in your way will allow you to address these obstacles and increase the likelihood of successfully developing.

- **Action Steps** – Identify concrete actions that will meet development goals; these should be time-phased within a 6-12 month period.
Support Required – Identify any support you may require in the preparation and implementation of your Personal Development Plan – what specific involvement and support would be helpful from your Department Chief or others? These people can be quite instrumental in helping you carry out your development plan through participating in many of the action categories noted above or through approving funds and time allocation for developmental activities. Use the worksheets at the end of this document to outline the steps you feel these people could take which will provide practical support for your progress toward each development goal.

Time Frame – Indicate a time frame in which you will complete each action.

OUTCOMES OF DEVELOPMENT PLANNING
The outcomes you can expect from a well-organized individual development plan include:

- An accurate awareness of your current professional competency levels and an appreciation of your potential; and,
- Accomplishment of specific practical steps taken day-to-day to achieve that potential.

PRACTICAL ACTION STEPS
The practical action steps needed to meet your development goals should reflect a logical sequence of activities that support your learning and development in the professional competency area.

Your practical action steps will probably be drawn from one of the following categories:

- Reading Material – Books, articles and special publications that give you conceptual stimulation in the competency development area. Both research publications and written practical guides can be helpful.
- Seminars and Workshops – Intensive training sessions focused on your professional competency development needs. These should offer both conceptual learning and hands-on practice.
- Professional Tasks and Behavioural Practice – Tackling new professional tasks or carrying out behavioural practices, which will require the practical use of new competency-related behaviours.
- Project Assignments – Seeking new project assignments within the hospital, which require the competency you want to develop, for example, leading a task group. The specific role you assume should emphasize the specific competency-related behaviours you are trying to develop.
- Mentoring and Coaching – Observing, seeking advice, direction and feedback regarding competency development actions and progress from other physicians or non-physicians who demonstrate a high degree of proficiency in a competency area you want to develop. Seek suggestions from your Department Chief or other knowledgeable people.
- Review and Reinforcement – Asking others, including your Department Chief, to help monitor your development progress by observing, commenting upon, criticizing or recognizing specific efforts.
- Team Involvement – Pairing up with other peers or joining teams of other physicians or professionals working on tasks or projects that will help achieve your development goals.

Appendix D: Sample Development Planning Guide for Physicians
ONGOING SUPPORT TOOLS AND RESOURCES
Following are some examples of tools to support your ongoing development:

- Site specific resources including library materials, on-line tools, etc.
- Formal courses, training, seminars, etc.
- Personal Development Planner (included in this report)
- Peer Groups
- External professional coaching

WHAT TO DO NEXT
Begin preparing your development plan using the Personal Development Planner on the following page.

Once you complete a first draft of your development plan, arrange to meet with your Department Chief. The focus of this meeting should be (a) negotiation of development priorities, and (b) refinement of your planning process. Your role will be to:

- Share your development objectives and action plans
- Get reactions and input about your development needs
- Reach an agreement on development priorities and resources

Your Department Chief’s role will be to share with you his/her prepared analysis of your development needs and to work with you in reaching agreement on the plan. It is expected that your collaboration will be ongoing through the duration of the planning period.

Following your planning meeting with your Department Chief, it will be your responsibility to implement your development plan. Your plan will serve as the primary reference for you and your Department Chief in working toward the development objectives identified. Your development plan is owned by you. It should be protected and treated confidentially by each of you.
What are my professional goals and interests?

What is important to me professionally:

a) In the short-term?

b) In the long-term?
Based on my feedback, what are the 2-3 key development themes for me?

What are the specific areas of strength that I want to leverage?
Appendix D: Sample Development Planning Guide for Physicians

Personal Development Planner

What are the specific areas of development I need to focus on?

What ONE or TWO professional competencies do I want to improve first as part of my professional development in the next year?

1. 

2.
Appendix D:
Sample Development Planning Guide for Physicians

Personal Development Planner

What are potential obstacles or barriers to my development (e.g., situations, people, self, management)?

What can I do to avoid or eliminate these obstacles?

What support can I get from others for development (who, why, how, when, what)?
### Appendix D:
Sample Development Planning Guide for Physicians

**Personal Development Planner**

<table>
<thead>
<tr>
<th>ACTION STEPS</th>
<th>POTENTIAL OBSTACLES AND RESPONSES</th>
<th>SUPPORT REQUIRED FOR THIS ACTION</th>
<th>TARGET DATE</th>
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To help me achieve this goal, I need to involve/how:

Resources I need to achieve this goal are:
Goal:

<table>
<thead>
<tr>
<th>ACTION STEPS</th>
<th>POTENTIAL OBSTACLES AND RESPONSES</th>
<th>SUPPORT REQUIRED FOR THIS ACTION</th>
<th>TARGET DATE</th>
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To help me achieve this goal, I need to involve/how:

Resources I need to achieve this goal are:
## Appendix E: Sample Physician 360-Degree Feedback Process Implementation Checklist

<table>
<thead>
<tr>
<th>PROCESS STEPS</th>
<th>START DATE</th>
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<tbody>
<tr>
<td>1. Survey logistics and on-line documents finalized with vendor (CAHO)</td>
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<td>2. Hospital MAC (with assistance from legal counsel) develops/approves policy</td>
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<td>3. Hospital identifies physicians who will take part in this cycle</td>
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<td>4. Prepare communication plan for implementation (i.e., target audiences, key messages, timing, process)</td>
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<td>5. Communication/training sessions (and other communication vehicles) for Department Chiefs</td>
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<td>6. Communication/training sessions (and other communication vehicles) for physicians to launch assessment process</td>
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<tr>
<td>7. Communication/training sessions (and other communication vehicles) for raters (peers, other team members, patients, referring physicians)</td>
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<td>8. Survey administration</td>
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<tr>
<td>• Physicians receive notification (e.g., via email) to commence survey process and select raters</td>
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<td>• Physicians complete self-survey</td>
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<td>• Raters notified and complete survey</td>
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<tr>
<td>9. All surveys are completed and submitted on-line to administrator site</td>
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<tr>
<td>10. Administrator prepares feedback summary reports for each physician</td>
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<tr>
<td>11. Feedback reports prepared and distributed to physician and Department Chief</td>
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<tr>
<td>12. Department Chief and physician prepare for feedback session; physician completes Development Guide in preparation for feedback session with department chief</td>
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<tr>
<td>13. Department Chief and physician meet to review the feedback report and discuss development plan</td>
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<tr>
<td>14. Development plan implemented and follow-up takes place</td>
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<tr>
<td>15. If desired, aggregate reports for departments and hospital are reviewed to identify potential large-scale development activities</td>
<td></td>
</tr>
</tbody>
</table>
The CAHO office is located at:
200 Front Street West, Suite 2501
Toronto, Ontario Canada
M5V 3L1

Visit our website:
www.caho-hospitals.com

### Members – Council of Academic Hospitals of Ontario

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<thead>
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<th>Name</th>
<th>Location</th>
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<td>Bloorview Kids Rehab</td>
<td>Toronto, ON</td>
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<tr>
<td><img src="image3.png" alt="Logo" /></td>
<td>Bruyère Continuing Care</td>
<td>Ottawa, ON</td>
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<td>Centre for Addiction &amp; Mental Health</td>
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<td>Providence Care</td>
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<td><img src="image16.png" alt="Logo" /></td>
<td>Royal Ottawa Health Care Group</td>
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