

Improving patient safety and physician accountability using the hospital credentialing process

Authors:

1. Alan J. Forster^{1,2,3}, MD FRCPC MSc
2. Jeff Turnbull^{1,2}, MD FRCPC
3. Shaun McGuire^{1,4}, MD MBA
4. Michael L. Ho
5. J. R. Worthington^{1,5}, MB, ChB, FRCPC

Affiliations:

1. The Ottawa Hospital
2. The University of Ottawa, Department of Medicine
3. The Ottawa Hospital Research Institute
4. The University of Ottawa, Department of Family Medicine
5. The University of Ottawa, Department of Emergency Medicine

Corresponding Author:

Dr. Alan Forster
The Ottawa Hospital, Civic Campus
1053 Carling Ave,
ASB-1
Ottawa, ON
J9H 2H1

aforster@ohri.ca

613-798-5555x12777

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Abstract

The lack of systematic oversight of physician performance has led to some serious cases related to physician competence and behaviour. We propose a method of improving physician oversight by incorporating it into the hospital credentialing process. Our proposed credentialing method involves the development of four systems: a system for monitoring and reporting clinical performance, a system for evaluating physician behaviour, a complaints management system, and an administrative system for maintaining documentation. In our method, physicians are responsible for implementing a program of annual performance assessment. The hospital will be responsible for the complaints management system and the system for collecting and reporting relevant health outcomes. There will be shared responsibility for monitoring professional behaviour. For this method to have the desired outcomes, the following are required: medical leadership, effective governance, appropriate supporting information systems, and adequate human resources. Our program is proactive and will allow our hospital to enhance safety through a quality assurance framework and by complimenting existing safety activities. Our program could be extended to non-hospital physicians through regional health or provider networks. Central licensing authorities could help coordinate these programs on a state- or province-wide basis to ensure uniformity of standards and to avoid duplication of efforts.

Introduction

On November 12th, 2005 Ms Lori Dupont, a nurse, was stabbed to death in Windsor, Ontario by Dr. Marc Daniel as she left the hospital where they both worked (1;2). Dr. Daniel subsequently took his own life. Adding to the tragedy, the findings from a subsequent coroner's inquest identified many unheeded warning signs: Dr. Daniel had been the subject of numerous complaints to the hospital regarding serious inappropriate behaviour; and, Dr. Daniel was known to be suffering from a severe mental disorder putting him at risk of harming himself and others(1;2). Despite these problems Dr. Daniel was still practicing medicine.

While this case is particularly stark, it is unfortunately not an isolated one. There are several other high profile examples of instances where physicians were able to continue to practice medicine, despite a long history of inappropriate behavior or where there was clear evidence of incapacity or incompetence (3;4). We believe that these examples outline the opportunity for improvement in the medical profession's willingness and/or capacity to oversee its performance.

In this paper, we describe a novel approach, lead by the medical staff, for a hospital to ensure appropriate credentialing of its physicians. In our model, the medical staff is responsible for taking leadership in the process and for supporting the activities necessary to make it a success. Physicians are an important stakeholder: they are delegated the critical task of establishing whether performance-based criteria are met and whether maintenance of competence activities are appropriate. The model we propose is fair, transparent and provides many benefits to the public, physicians, and hospital administrators. It is built upon quality improvement principles and acknowledges that most physicians perform their duties at a high standard, and only a small minority of physicians cause problems. That group, however, costs a disproportionate amount in litigation dollars, and poses an unacceptable risk to their patients and co-workers. Furthermore, managing this group diverts attention from the real goal of the organization, which is to improve the quality of care provided by all doctors.

Our proposed model was designed with several principles in mind. First, we wanted to support the vast majority of physicians who are functioning at a high level. Thus, we have made the program formative rather than punitive. Second, we wanted to ensure a high level of physician accountability. Thus, for the components of the program related to physician clinical performance it will be physicians who are responsible for performance assessments and for setting targets, rewards and remedial actions. Third, we wished there to be real consequences for physicians not complying with the program. Thus, we have established explicit defensible processes.

The problem

There are data from several sources highlighting the wide extent of patient safety problems in the health care environment. For instance, it is estimated that preventable adverse events lead to 28,000 deaths in Canada, annually (5). In addition, significant numbers of patients have experiences in which they have increased pain or decreased functional ability as a result of preventable adverse events. Other countries have found similarly alarming results.

It would be wrong to attribute these preventable adverse events to inadequate physician oversight. In most instances, these problems are the result of system problems, including poor communication and technology infrastructures to support care processes, inadequate training, and inadequate resources (6). Even in the instances where injuries result from providers' errors, these are usually the result of predisposing system (also termed 'latent') factors in which the physician cannot avoid an error (7;8).

While it is inappropriate to associate inadequate physician oversight to most preventable adverse events, the lack of an effective oversight process reinforces the impression that physicians are part of the problem. At times, there are valid concerns over professional behavior and communication problems (9;10). Complaints over these can subsequently be brought to the attention of hospital administrators or regulatory bodies. However, the process of

managing these complaints can be adversarial, protracted and poorly coordinated (11). This can leave complainants with the impression that the organization and the profession are concealing facts in the interest of self-protection. In addition, the absence of a transparent process for sanctioning physicians makes it difficult for the profession and for administrators to respond to complaints in a fair, consistent, and defensible manner.

At other times, there may be concerns that a particular physician is practicing outside their scope of practice, that his/her outcomes are worse than peers, or that he/she may not be keeping current with evolving professional standards. These concerns may or may not be warranted. However, there is often little data to validate or disprove them (12). Even when there are data, they are usually not collected systematically in a pre-determined and scientifically sound manner (13).

There are several other legitimate concerns regarding physician oversight. One, activities supporting 'continuing medical education' or 'maintenance of competence' systems are not directly tied to requirements for ongoing licensure or hospital privileges. Two, the current system of credentialing physicians within hospitals is largely administrative. Obtaining the privilege to practice within an institution relies on the provision of several documents demonstrating that a physician has met certain training standards, has a current license, has up to date malpractice insurance, and has not been involved in any law-suits or complaints to the licensing body. Third, the physician's division chief must attest that the provider is fit to practice. This latter requirement has the potential to provide some peer-oversight to the credentialing process. However, the division chief's assessment, although important, has lacked objectivity and is susceptible to numerous biases and influences. Fourth, the current credentialing system is reactive. For a physician to lose privileges, he or she will usually need to behave in a particularly egregious manner (recall the aforementioned case of Ms Lori Dupont and Dr. Marc Daniel).

In summary, there are few routine opportunities for hospitals to pro-actively monitor and correct performance before a major complication or crisis. Furthermore, physicians, patients and the public may perceive unfairness in the present-day credentialing process, pointing to lack of objectivity and transparency.

A proposal to improve credentialing programs

We have designed a hospital credentialing program which we believe addresses many of the concerns outlined above. The program consists of four components. These include a system to monitor clinical performance, a system to monitor professional behaviour, a complaints management system, and a system to manage administrative requirements. All four systems will be fully managed by the medical leadership. In order for the program to function optimally, active engagement by physicians and their leadership is essential, see Figure 1. The components of the program are outlined in Table 1 and are discussed in further detail in the following sections.

Monitoring clinical performance

The first component of our program is a method of maintaining oversight of ‘clinical performance’. This term refers to whether physicians are providing the best possible care. As clinical performance is the purview of physicians, assessment must be delegated to the physician leadership. Our program specifies two broad areas in which it is to be assessed: ‘scope of practice’ and ‘performance.’

‘Scope of practice’ refers to the tasks and procedures a physician is capable of performing safely and effectively. We consider scope of practice to include procedures, such as surgeries, and cognitive tasks, such as patient assessments and prescribing, inclusively. In order to demonstrate capability, the physician must be able to prove having had training appropriate to qualify him or her to perform the procedure or task. In addition, the physician

must demonstrate he or she is performing a sufficient number of procedures or tasks to maintain competency.

'Performance' refers to whether a physician is meeting a standard of care consistent with his or her peers. Assessing performance can be difficult in light of differing practice circumstance. Still, there are initiatives to establish core competencies of performance, including the Good Medical Practice initiative (14;15). These initiatives create a framework within which performance indicators relevant to different specialties can be derived. For example, an interventional cardiologist might have performance metrics related to processes or outcomes such as post-myocardial infarction (MI) death rates, adherence to MI treatment guidelines, and post-angioplasty renal failure rates, to name a few. By focusing on clinical divisions within an institution using such a framework, it is possible to define specific criteria for best practices within the various scopes of practice encountered. Implicitly, a system with adequate statistical approaches for small sample sizes will be required to make calculated risk adjustments.

Measurement is another area which tends to challenge the completion of performance assessment (16). In general, performance can be measured explicitly by assessing pre-specified outcomes within particular diagnostic groups or by assessing compliance with evidence based treatment guidelines. This approach can be inexpensive and is relatively straight forward, as indicated above. Alternatively, performance can be measured implicitly by peer review. In this setting, the reviewer rates whether overall care quality met the standard of care. This method is also easily performed but can be expensive as it requires physicians as peer reviewers. Both methods of assessment are acceptable and well-grounded by evidence, assuming that appropriate case-selection methodologies are used to identify charts for review and assessors use appropriate rigour while performing the chart review. Our model uses both of these general approaches.

In our program, the clinical division chiefs are responsible for evaluating whether all providers meet standards of clinical performance. This responsibility includes three tasks. First, it includes establishing explicit criteria by which scope of practice is defined and by which performance is monitored. Part of this responsibility is ensuring that all physicians are familiar with the criteria involved. Second, it includes the measurement of whether physicians meet standards. Critical to this charge is ensuring that measurements are applied to all physicians equally, and take place in a standardized fashion on a known schedule. Finally, it involves ensuring consistent application of appropriate corrective measures if providers are not meeting their standards. We feel it is important for the hospital to delegate these responsibilities to clinicians as the hospital administration is not qualified to determine whether technical proficiency is maintained. However, the hospital must provide the infrastructure to monitor and report on physician performance in order for them to meet this responsibility.

Monitoring professional behaviour

The second component of our program is a system to monitor professionalism. Professionalism consists of a wide ranging set of behaviours, which pose challenges for measurement. To simplify the assessment of whether providers are fulfilling requirements, we have specified two domains of behaviour to focus on: 'maintenance of competence' and 'interpersonal relationships'.

With respect to maintenance of competence, there are existing and well established lifelong learning programs to monitor participation within them. These have been instituted at a national level in many different countries (17). Rather than re-inventing a process that is well established, we feel local activities should adopt the national standards. This has two benefits. First, there will be greater adherence to national efforts. More importantly, by linking assessment to hospital credentialing, there are real consequences for physicians if they do not comply – namely losing their hospital privileges.

We recommend that the responsibility for monitoring maintenance of competence activities be left at the divisional level as long as the activity is part of an accredited program.

(18) This ensures the learning activities are appropriate for the particular physician group and will help create and sustain interest in learning activities through peer-pressure.

Interpersonal relationships are the second component of professional behaviours we feel can be assessed relatively simply. We recommend using a '360-approach' in which several people are asked to provide input using a standardized and validated question set. This methodology is currently used in Alberta, Canada as part of its licensing process (19); it has also been recommended by the Dupont-Daniel inquiry (1). A part of the question set would involve the evaluation of a physician's adherence to the standards of conduct. This is particularly important because many interpersonal problems and complaints relate to a physician's failure to show respect or to consider the patient's interests first (10).

We feel the interpersonal relationships assessment process should be the joint responsibility of the hospital leadership and the clinical division heads. Implicit in this responsibility is the identification of individuals to perform the assessment. Assessors should be peers and input should be from colleagues, non-physician health providers, and patients. It also includes ensuring completion and collation of the results. Finally, it includes establishing appropriate corrective measures if problems are identified.

Complaints management system

The third component of our program is a system for managing complaints. While this component is the most reactive and least constructive aspect of our program, we see it as an important method of maintaining accountability. It can also be envisioned as a 'safety net' as it has the potential to capture aspects of physician performance and behaviour that are missed with other components of the program. Furthermore, using patient complaints in a systematic fashion is an excellent engine to drive the continued improvements to quality of care (20).

We have modeled our complaints management system from one built at Vanderbilt University (21). This system standardizes the complaint intake process, the complaint triage process (to identify important versus frivolous complaints), the investigation process, and the communication process. Each of these processes is documented explicitly and is available for public viewing.

Managing the complaints management system is predominantly the responsibility of the Patient Relations Department of our hospital. We feel it is important that the physician leadership is not responsible for managing complaints for two reasons. First, there is an inherent conflict of interest when investigating one's own peers, which might limit or cast a doubt on objectivity. Second, there is a need to create a standard process across the entire organization. If physicians were in charge of managing complaints, then it would open up the organization to criticisms of failing to provide a transparent and fair process. Management aside, the physician leadership is required to deal with the individual doctor, agree on corrective action and to monitor improvements. A joint effort between physician leadership and hospital Patient Relations is therefore required for optimal effectiveness of the complaints management system.

System for managing administrative requirements

The fourth and final component of our program is the system for managing administrative tasks. It includes two main tasks. First, the administration of the overall credentialing program is part of this system. Second, the administrative collection of documents required to prove practitioners are qualified. These tasks are managed entirely with hospital resources.

The administration of the credentialing program is complex and consists of several high-level tasks. First, it requires a mechanism for tracking compliance of each individual physician within all aspects of the program. This will allow individual physicians to see how they are performing in relation to their peers and accepted standards. It will also allow hospital leaders

to more effectively gauge the performance of physicians. Second, it requires an appropriate communication and education program. This will help to support physicians as they learn about their performance and how they are being measured. Third, it must maintain and oversee the complaints management system as a centralized complaints process is more likely to be fair and transparent.

The second aspect of our administrative management system is the remnants of our pre-existing credentialing program. Essentially, this is the process by which documents validating a physician's credentials are provided. While, as we have described, this method of credentialing is clearly not sufficient for ensuring a physician is maintaining their qualifications, it is certainly necessary.

What are the requirements to create this credentialing system?

The comprehensive credentialing system we have described will require significant resources to implement. While these resources may seem great given the current investment in credentialing, we feel it is required. Another requirement, to which a monetary investment cannot be assigned, is a trusting and constructive relationship between physician staff and hospital management.

The most critical aspect of this program is a clear description of its governance. This includes articulation of the roles and responsibilities of each member of the administrative staff and medical leadership as they relate to the credentialing program. It also includes communicating the assessment methods and complaints management processes, so that all who are affected are fully cognizant of the process and recognizes their responsibilities. Finally, once the governance framework has been established, it includes an unwavering commitment to work collaboratively and follow the program processes with the intent of improving care quality. Without effective governance, it is highly likely that important stakeholders will not trust the process. This will decrease the likelihood that there will be effective participation.

Another critical aspect of the program is the presence of a supporting information systems infrastructure. Information systems can be leveraged to help collect data describing clinical performance. For example, we are currently collecting information on various health processes and outcomes of care by extracting and analyzing relevant data from a hospital data warehouse (22). Other groups have similarly adopted such an approach. Information systems can also be designed to support the complaints management system. Finally, an information system will be required to manage administrative tasks. Unfortunately, such a system currently does not exist commercially and would require a local design. Any information system designed for these purposes must have controls to ensure appropriate disclosure of information to maintain privacy (both provider and patient) and security.

Moreover, new human resources are required for the credentialing program to succeed. Administrative staff will be required to manage the program. In addition, clinical divisions will require access to human resources data for monitoring clinical performance. The cost of these resources needs to be shared in an equitable manner between the hospital and physician staff.

A final absolute requirement for our credentialing program is clinical leadership. Clinicians need to be responsible for the credentialing process as only clinicians can judge the technical proficiency of other physicians. Without their leadership and engagement, very few of the activities that have been described above can go forward.

Expected benefits and limitations

There are five main benefits to our approach. First, the system will identify physicians who are having difficulties or problems much earlier than the current system. This will help the organization develop and deliver training opportunities to support physicians who may be having a performance issue, or provide health care if a physician is not performing well due to health related issues. Second, our program provides a greater capacity for the institution and its physicians to learn about quality problems, and thereby improve hospital care. By making

physicians accountable for performance, there may be added benefit as there will be greater incentive to participate in the development of systems solutions to improve care delivery. Third, it will be easier for hospital administration and for clinical leaders to take action against doctors who continually and repeatedly perform poorly, and who do not respond to feedback. Fourth, our system might provide protection against litigation by sanctioned physicians by virtue of it being more explicit, objective, fair and transparent. Finally, and perhaps most importantly, through this process there will be improved public trust in our healthcare institutions.

There are at least three limitations to our proposal. First, not all physicians are affiliated with hospitals or hospitals large enough to implement such a program. This limitation is important as ambulatory care physicians and physicians working in smaller hospitals require as much oversight as those in large hospitals, perhaps more, given they are often quite isolated from their peers. We agree this limitation is important but argue that given the size and resources available to large hospitals, it may be possible to generate solutions to this problem. If these solutions work in the hospital setting, then the same solutions could be applied in other settings including across regional health authorities or within health networks in which there are networks of providers or hospitals.

A second limitation of our approach is that it does not specifically address physician health as a factor to be addressed by the credentialing program. Other industries or professions regularly evaluate physical and mental health as part of an assessment of worker fitness (23). We believe this is important, and should be part of a working system for credentialing is established. If there are significant physician health issues influencing performance, we believe they will be identified by our program. In addition, a comprehensive program is needed to respond in a supportive fashion to issues of physician incapacity or incompetence.

A third potential limitation in our approach is the paucity of valid measures for clinical performance and professional behaviour. Any time performance data are generated, those being measured can and should question the validity of the data generated and the inferences

made from them. Efforts should be made to select standard measures of performance and to apply care during data collection and analysis. Physicians should design the indicators and monitor the process for data collection. They should agree to be measured by the methods that will be used. This will increase the likelihood that they will agree to its veracity and act on the results.

Conclusion

The current credentialing system for physicians is highly administrative and is mostly reactive in its interventions. We believe this results in a lack of systematic oversight of physician performance that is a serious quality gap in our healthcare system.

The program we have proposed is a systematic, comprehensive and proactive means of oversight of physician credentialing that has benefits for physicians, the public and for hospital administration. It is a transparent, objective, and practical means of physician oversight. In the long term, the program is designed to help physicians who are both problematic and excellent: the goal is not to oust the problematic doctors, but to identify weaknesses and help the individuals correct them. We acknowledge that this system will require significant financial and human resources, changes in governance, and increased collaboration between hospital leaders and physician leaders. We also recognize that our model has certain limitations. Nevertheless, we believe a process such as the one we propose is necessary to bridge the quality gap that currently exists, and to help fulfill physicians' fiduciary obligation to assure the highest standard of professional conduct and care by all practitioners.

Table 1 - Components and details of the credentialing program

| Component | Sub-components | Description | Examples | Assessment methods | Responsibility | Requirements |
|---|------------------------------|---|--|--|--|--|
| System for assessing clinical performance | Scope of practice | Defining the procedures and tasks a physician is capable of performing safely and effectively | Surgical procedures and techniques; Non-operative medical procedures; | Physician defined; Approved by division clinical chief | Division clinical chief | IT system to incorporate information on scope and performance; Clinical division leadership to define criteria |
| | Performance assessment | Is the quality of care offered by the physician consistent with his or her peers? | Specialty-specific core competencies; Interpretation of clinical tests and images; Appropriateness of practice decisions | Specialty defined; Compliance with evidence based practice guidelines | | |
| System for assessing professional behaviour | Maintenance of competence | Is the physician up to date with the standards of practice? | Newly approved procedures, New treatment guidelines. | Physician participation in a MOC program? | Division clinical chief | Access to MOC program data |
| | Inter-personal relationships | Physician relationships and interactions with other healthcare workers and patients | College of Physicians and Surgeons of Alberta Physician Achievement Review (PAR) Program | "360" assessment: Standardized and validation question for physician and non-physician workers in contact with the physician; Patients attended by physician | Division clinical chief; Hospital administration | Infrastructure to support regular "360" assessments. |
| Complaints management system | - | Standardized complaint intake, triage, investigation and | Triage protocols to identify important versus frivolous complaints; | Number and frequency of unsolicited patient complaints, | Hospital patient relations department; Clinical division | IT system to capture complaints and triage |

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|-----------------------------|---|---|---|---|-------------------------|---|
| | | communication system | Defined investigation protocol | malpractice suits; Available for physician viewing | chief | appropriately; Fair and transparent system to manage complaints |
| Administrative requirements | Administration of overall credentialing program | Centralized management and organization of the credentialing program; Communication and education of physicians | Tracking compliance; Peer performance comparisons; Organized learning sessions/seminars | Evaluation of organized data by physicians, hospital leadership | Hospital administration | Information systems infrastructure; Administrative staff; Physician collaboration |
| | Collection of physician qualification documents | Management of pre-existing credentialing program | Physician certification and licensure | - | | |

MOC = Maintenance of Competence, IT = Information Technology

Figure 1 – Components and hierarchy of the credentialing program



