PHYSICIAN-ASSESSMENT AND PHYSICIAN-ENHANCEMENT PROGRAMS IN CANADA

Gordon G. Page,* EdD; Joanna Bates,* MDCM, FCFPC; Sheila M. Dyer,* BA; Dennis R. Vincent,* EdD; Georges Bordage,† MD, PhD; André Jacques,‡ MD, FCFPC; André Sindon,‡ MD, FRCPC; Tiina Kaigas,§ MD; Geoffrey R. Norman,‖ PhD; Murray Kopelow,¶ MD, FRCPC; Joseph Moran,¶ MB, MCISc, CCFP

Abstract • Résumé

Since the mid-1980s, the licensing authorities in Quebec, Ontario and Manitoba have introduced programs to conduct in-depth assessments of the clinical skills and abilities of physicians with suspected deficiencies. These assessments are intended to supplement the provincial licensing authorities' existing peer review or patient-complaint mechanisms by confirming the physicians' overall level of competence and identifying specific clinical strengths and weaknesses. An "educational prescription," based on the results of the assessment, focuses on aspects of clinical practice in which the physicians need or wish to enhance their skills. In some situations, licensure decisions are based on the assessment information. This article describes the programs in Quebec, Ontario and Manitoba. Each program comprises a different process of personal assessment and individualized continuing medical education to help physicians improve their clinical competence, and each is built on sound principles of clinical-competence assessment and educational planning.

Depuis le milieu des années 80, les ordres des médecins du Québec, de l'Ontario et du Manitoba ont mis en oeuvre des programmes d'évaluation détaillée des compétences et des aptitudes cliniques des médecins chez lesquels on soupçonne des lacunes. Ces évaluations visent à compléter l'examen critique par les pairs et les mécanismes de plaintes des patients mis en oeuvre par les ordres en confirmant le niveau de compétence général des médecins et définissant leurs forces et leurs faiblesses cliniques précises. Une «ordonnance d'éducation» fondée sur les résultats de l'évaluation met l'accent sur des aspects de la pratique clinique où les médecins doivent ou veulent améliorer leurs compétences. Dans certains cas, les décisions relatives à l'octroi du permis d'exercice sont fondées sur l'évaluation. Cet article décrit les programmes du Québec, de l'Ontario et du Manitoba. Chaque programme comporte un mécanisme différent d'évaluation personnelle et d'éducation médicale continue personnalisée afin d'aider les médecins à améliorer leurs compétences cliniques. Chacun s'appuie sur des principes solides d'évaluation des compétences cliniques et de planification de l'éducation.

In the mid-1980s, the licensing authorities in Quebec, Ontario and Manitoba started programs to conduct personal, in-depth assessments of the clinical skills and abilities of physicians with suspected deficiencies in competence. These programs are intended to supplement the existing peer review and patient-complaint mechanisms by identifying physicians' overall level of competence and specific clinical strengths and weaknesses. The results of an assessment are the basis for an "educational prescription," which focuses on aspects of clinical practice in which the physicians may need or wish to enhance their skills. In some situations, provincial licensing authorities use the assessment information to guide licensure decisions.

Representatives from Quebec, Ontario and Manitoba met in November 1992 to review their programs and to begin a collaboration, with representatives from other provinces, to guide the development of such programs in Canada. This article describes the programs established in Quebec, Ontario and Manitoba. To set the

*From *the University of British Columbia, Vancouver, BC, †the University of Illinois at Chicago, Chicago, Ill., ‡the Collège des médecins du Québec, Montreal, Que., §the College of Physicians and Surgeons of Ontario, Toronto, Ont., ‖McMaster University, Hamilton, Ont. and ¶the University of Manitoba, Winnipeg, Man.*

Reprint requests to: *Dr. Gordon G. Page, 400–2194 Health Sciences Mall, Vancouver BC V6T 1Z3; fax 604 822-2495*

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context of these programs, we present an overview of the processes and organizations in Canada concerned with physician competence. We then describe the program and assessment and enhancement processes in each of the three provinces.

The context of physician-assessment programs

The academic criteria for a licence to practise medicine in Canada are a medical degree, successful completion of the Medical Council of Canada Qualifying Examinations (or the provincial qualifying examination in Quebec) and certification by the Royal College of Physicians and Surgeons of Canada (RCPSC) or the College of Family Physicians of Canada. Licensing authorities (the Collège des médecins du Québec [CMQ] in Quebec and the provincial College of Physicians and Surgeons in the other provinces) also require references concerning the physician's character and currency of competence.

Once they have received their licence, physicians are responsible for maintaining their skill level and knowledge base. This can be accomplished through various types of continuing medical education (CME), including reading articles in journals; attending hospital rounds, lectures and conferences; undertaking clinical traineeships; and interacting with peers. Although most physicians maintain their competence effectively, a small proportion do not. The provincial licensing authorities, whose mandate is to maintain public safety, face the challenges of identifying incompetent physicians, measuring their level of competence reliably, remedying identified incompetence and removing physicians whose incompetence cannot be remedied from medical practice.

Patient complaints

The first mechanism established by most licensing authorities to identify potentially incompetent physicians was investigation of patient complaints by discipline committees. However, this approach is ineffective in determining physicians' general level of competence or specific areas of weakness. In addition, when educational, clinical or other types of remediation are ineffective and a physician's licence must be suspended or revoked because of incompetence, it is difficult to document the problem on the basis of complaints alone in a way that will withstand a legal challenge.

Peer review programs

More recently, most provincial licensing authorities have developed peer review programs in which physicians are screened to find those having difficulty in their practices. A peer review is typically conducted by one or two physicians. They visit a physician's practice and review such aspects as ease of access, on-call systems, emergency supplies and the availability of a reference library. Patient records are audited to ascertain the quality of record keeping and of practice.

In Quebec, all of the province's physicians undergo peer review by the Inspection professionnelle of the CMQ within a 7-year cycle. This program serves an educational role, by making recommendations to physicians concerning the organization of their practice, their record keeping and the quality of medical care provided. Depending on the degree of deficiency identified, the college may also require a more in-depth assessment and a refresher training period, and may limit the physician's practice during this period.

In Ontario, approximately 400 physicians, selected through a process of stratified random sampling, undergo peer review each year.[1] This general screening program targets, in particular, physicians 70 years of age and older, who are considered at higher risk than other physicians of having deficiencies in their practices. Physicians with identified deficiencies who do not demonstrate improvement during the following 6 to 9 months may be referred for further assessment and remedial training, depending on the degree of deficiency present.

Elsewhere, colleges of physicians and surgeons in British Columbia and the Atlantic provinces have peer review programs that serve a strictly educational purpose, providing physicians with confidential recommendations for improvement if warranted.[2,3] Manitoba and Saskatchewan do not have peer review programs; the college in Alberta is introducing one.

Physician-assessment and physician-enhancement programs

As a "next step" in addressing physician competence, the licensing bodies in Quebec, Ontario and Manitoba have each developed a highly structured and formal physician-assessment and physician-enhancement program. These programs are among the first in North America. Similar programs have been developed in a few US states,[4] but most states employ less comprehensive assessment procedures.

In Quebec, Projet diagnostic was initiated in 1985 by the CMQ with the collaboration of the Centre d'évaluation des sciences de la santé de l'Université Laval, Quebec, and the Département de médecine familiale, Université de Montréal, Montreal. In 1987 the College of Physicians and Surgeons of Ontario (CPSO), in collaboration with McMaster University, Hamilton, Ont., initiated the Physician Review Program (PREP).[5,6] In 1988 the College of Physicians and Surgeons of Manitoba

(CPSM), the Manitoba Medical Association and the University of Manitoba, Winnipeg, jointly developed the Clinicians Assessment and Enhancement Program (CAEP). All programs are designed for physicians in family or general practice. Procedures are developed ad hoc for assessment and enhancement of physicians with certificates from the RCPSC who are referred to these programs. Approximately 90% of program participants are referred by the licensing authorities; the remaining 10% are mainly self-referred.

The purpose of the programs in Quebec, Ontario and Manitoba is to conduct a rigorous assessment of physicians' clinical competence. This assessment serves to identify deficiencies in competence and forms the basis for a focused educational remedy to address these deficiencies. Program development in each province was guided by an extensive body of published articles on the assessment of clinical competence[7,8] and on the effectiveness of programs to monitor and improve the competence of physicians.[9–12] The creation of such programs reflects a growing interest in the literature on "focused" or "individualized" CME as a way to achieve desired physician performance and clinical outcomes.

Physician-assessment and physician-enhancement programs

Overview

Quebec

A law adopted in 1973[13] contains a Professional Code that requires all physicians to participate in the CMQ peer review program, Inspection professionnelle. In the Inspection professionnelle, the competence of individual physicians is assessed with the use of "chart recall." This process involves a discussion with the physician about his or her patient records, to solicit his or her interpretation of clinical data or rationale for clinical actions. From this program, some physicians — typically those who have been out of practice for some time, who are reorienting their practice or who are identified as having serious deficiencies in their clinical competence — are referred to the CMQ's CME Division to participate in Projet diagnostic.

For Projet diagnostic, the CME Division developed an additional evaluation tool, the structured oral interview. This assessment instrument is designed to identify deficiencies in knowledge and problem solving through case work-up and management; it also provides a basis for designing remedial CME programs. If there is concern about a physician's skills or attitudes, further assessment may be conducted in a clinical setting. When deficiencies are identified, an educational plan is developed for the physician. This remedial education usually involves a period of supervised practice in a family-practice teaching unit.

The cost of each structured oral interview is approximately $2000, which includes the assessors' fees, a written report, a feedback meeting and administrative expenses. Depending on the reason for the assessment, the cost is paid by the participant, the CMQ or both parties. Eight physicians on average participate in a structured oral interview each year.

Ontario

Specialists, family physicians and general practitioners undergo peer review through the Peer Assessment Program run by the CPSO. Approximately 10% of those reviewed do not meet the standard set by the CPSO and must undergo a second peer review in 6 to 9 months. Physicians who have not improved their competence during this period are asked to participate in the CPSO's in-depth assessment of competence, the PREP. Until 1994 the CPSO had no legal power to enforce participation in PREP and subsequent remedial education. However, under the Regulated Health Professions Act,[14] the CPSO can now require assessment and remedial education and can suspend a physician's licence on the basis of an assessment.

In the PREP, physicians are assessed through a set of written tests and performance assessments.[5,6] An educational plan is then prepared to address the deficiencies in competence identified through the assessment. Like Projet diagnostic in Quebec, the PREP deals only with issues of competence that are amenable to an educational solution. Unlike the program in Quebec, the PREP was not developed and is not conducted by the provincial college, but by McMaster University, through a grant from the CPSO. The cost per physician assessed is $6000. Physicians from Ontario pay a program fee of $3700; physicians from outside Ontario pay $4500. The PREP typically has 20 to 25 participants each year.

Manitoba

The CAEP was developed and is administered by the Department of Medical Education of the University of Manitoba. The assessment component of the CAEP includes written tests and performance assessments administered over 2 days. Following the assessment, a detailed educational plan and "learning contract" is developed for each participant. Unlike the systems in Quebec and Ontario, the physician-assessment system in Manitoba does not include a peer review program. Referrals to the CAEP come primarily from the CPSM investigative chairman, in response to complaints, but also from physicians' practice groups and self-referral. Participants typically num-

ber eight each year. The CPSM has no involvement with the participant after referral to the CAEP unless the participant does not comply. Each assessment costs about $3000, of which program participants pay $1500.

Assessment procedures

The assessment procedures used in the programs in Quebec, Ontario and Manitoba are given in Table 1.

Quebec

In the structured oral interview, program participants are presented with 40 cases and are asked to work up and manage each one. The cases selected involve common, everyday problems seen in general practice. Hence, the interview provides a direct assessment of each participant's cognitive skills in relation to a full work-up and management of each hypothetical case. The physician's strengths and weaknesses are scored on the basis of whether he or she identified the critical steps in the resolution of the case.[15] This scoring procedure guards against the possibility that thoroughness, instead of effectiveness, will be excessively rewarded.

Ontario

The PREP employs four assessment procedures: an examination consisting of multiple-choice questions, a standardized patient examination, a structured oral examination and an examination involving chart-stimulated recall. The content of these procedures is tailored to the practice of the individual physician.

This examination format provides an assessment of a wide range of clinical skills: interpersonal communication, history taking, physical examination, diagnosis and management.

The PREP undergoes continual review and revision. Recently all assessors were asked to complete a questionnaire containing lists of diagnoses from family-practice residency programs and from a literature review. Assessors were asked to rate each diagnosis on the basis of how often it is seen: seldom, occasionally or often. The results of this survey led to major changes in the content of PREP assessment instruments. In January 1992, the time required for a PREP basic assessment was reduced to 1 day. When deemed necessary, a more in-depth assessment, taking up to 2 days, may be conducted.

Manitoba

The assessment materials for the CAEP consist of examinations with multiple-choice questions and short-answer questions, a standardized patient examination and structured oral examinations administered during 2 days. The programs in Manitoba and Ontario are similar in their use of oral, standardized patient and multiple-choice-question examinations.

Enhancement procedures

Specific areas on which to focus a participant's remedial education are identified through the assessment component of these programs. This individualized approach provides the programs with a mechanism for matching a CME program to a physician's learning needs.

Quebec

The enhancement component of the program in Quebec is managed by the CME Division of the CMQ, in close collaboration with the four university-based CME divisions and departments of family medicine in the province. A detailed analysis of each physician's performance on the structured oral interview guides the de-

Table 1: Procedures used in physician-assessment programs in three provinces

Assessment procedure	Province (program); content of procedure (and time limit)		
	Quebec (Inspection professionnelle)	Ontario (Physician Review Program)	Manitoba (Clinicians Assessment and Enhancement Program)
Examination consisting of multiple-choice questions	NA*	100 items (1 h)	130 items (2–3 h)
Examination consisting of short-answer questions about hypothetical therapeutic cases	NA	NA	15 cases (2 h)
Standardized patient examination	NA	4–6 cases (2–3 h)	10 cases (4 h)
Structured, case-based oral examination	40 cases (8 hr)	3–6 cases (1.5–3 h)	2–3 cases (1 h)
Chart-stimulated recall examination	NA	10 charts (1.5 h)	NA
Total time	8 h during 1 day	8.5 h during 1–2 days	10 h during 2 days

*NA = not applicable.

velopment of an individualized educational program.

Clinical supervision is the usual form of education. This type of training is conducted in university-based family-practice teaching units located close to the homes and practices of the participants. Participants may be assigned to a family-practice teaching unit full-time or part-time, depending on the degree of deficiency in competence, and they may be removed from practice during this period. Evaluation is a daily process; half-way through the educational program, the participant's progress is formally evaluated. Upon completion of the educational program, final assessment is provided by the faculty of the family-practice teaching unit. A peer review may be scheduled 6 months later.

Ontario

The report from the assessment component of the PREP identifies a participant's strengths and weaknesses and serves as a basis for planning an individualized educational program. The report focuses on knowledge deficiency, safety to practice and the participant's desire to learn and improve his or her practices. The educational programs were originally developed by McMaster University. They typically involved four or five participants in a series of problem-based "bring-your-own-chart" sessions conducted during a 1- or 2-year period. However, beginning in 1994, the CPSO's director of enhancement has assumed responsibility for the enhancement component of PREP. The director has developed a more flexible arrangement for planning and implementing clinical supervision and other forms of education suited to the needs of the physicians involved.

Manitoba

The enhancement component of the CAEP is administered by the Department of CME of the University of Manitoba. The CPSM plays no role in this educational process but may audit the practices of CAEP participants to evaluate the program's effectiveness.

The CAEP assessment results are presented in a detailed report for each participant detailing his or her strengths and weaknesses in knowledge and history-taking, physical-examination, therapeutic and interpersonal skills. The program director discusses this report with the participant, and they establish a learning contract, which outlines an educational plan for the participant.

The educational program involves a variety of activities, including CME courses listed in the university calendar, prescribed reading lists, videotaped sessions conducted with a social scientist to enhance interpersonal skills, tutorials with specialists in family medicine or in an RCPSC specialty based on patient problems in the participant's practice and self-directed CME with a group of physicians. Most participants avail themselves of many of these activities. Most also participate in "Saturday Morning at the University," a small-group CME activity. The topics are set in advance, and participants bring appropriate patient medical records from their practices. Participants are required to keep a record of changes in their clinical care of patients that result from their educational experience.

In addition to providing an educational experience, the program also coaches participants in taking up activities to reduce isolation, such as discussions with specialist colleagues and participation in existing peer groups such as journal clubs or hospital departments.

Effectiveness

The provincial licensing authorities in the three provinces view their physician-assessment and physician-enhancement programs as an effective adjunct to the other forms of physician review they employ. In comparision with reviews by discipline committees, peer reviews of office practices and assessments based on chart-stimulated recall, the physician-assessment programs described earlier in this article provide a more detailed and standardized assessment of a physician's competence and enable assessors to plan focused, individualized educational programs to address identified deficiencies. Each provincial licensing body has conducted analyses of its assessment procedures that provide support for their accuracy.[5,6] Studies of the effectiveness of the educational programs have generally supported their effectiveness in bringing about the desired changes in the competence of the participating physicians. An exception to this result was found in a study of the physician-enhancement program in Ontario, which showed that physicians 70 years of age and older with major deficiencies in competence did not demonstrate improvement in performance upon reassessment after 1 to 2 years of educational interventions (Geoffrey Norman, professor, McMaster University: personal communication, 1992).

The existing provincial programs have some limitations. Given their current resources, they have not developed the instruments and procedures needed to assess the knowledge and skills of specialists certified through the RCPSC. A second limitation is their high cost, both to their sponsors and their participants.

Conclusion

The development of the three physician-assessment and physician-enhancement programs described was

based upon sound principles of and practices in competency assessment and learning. The model of rigorous assessment, followed by CME focused on areas of identified deficiency, offers a highly individualized approach to CME for physicians. Most of the participants in these programs were referred to assessment because of suspected problems with their competence; a few participants were self-referred. Similar programs, some with a greater emphasis on self-referral, are now being developed and implemented in other provinces.

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