

Redesigning a Resident Program Evaluation to Strengthen the Canadian Residency Education Accreditation System

Jerry M. Maniate, MD, MEd

Abstract

Accreditation is an essential tool to ensure quality postgraduate medical education (PGME) in Canada (also known as residency or graduate medical education in the United States). Residents participate in the accreditation process of residency training programs in Canada primarily through three steps: completing a resident program evaluation (RPE), meeting with the surveyors during on-site visits, and participating as members of the surveyor team.

The author first provides a brief description of the current state of the

Canadian PGME system, examining how it connects to the existing accreditation system for residency training programs. The article describes the process that was undertaken to develop and implement a new set of RPEs informed by medical education principles, as well as the development of a new information package about the accreditation process for residents.

Through a multistage, consultative and iterative process, a draft RPE was developed and reviewed by various groups and was eventually implemented

at a full on-site survey. At each stage, the feedback was used to further refine and revise the RPE before moving to a subsequent stage. These consultations were to ensure both face and content validity of the tools.

This new RPE is one component of a new accreditation survey package that will be used to determine the residents' perspectives on their training program and to educate them on the importance of accreditation in ensuring quality PGME.

Acad Med. 2010; 85:1196–1202.

The goal of postgraduate medical education (PGME), also known as residency or graduate medical education (GME) in the United States, is to prepare medical school graduates to improve the health and health care of the general public as practicing physicians. The PGME system must ensure that each trainee acquire both an adequate knowledge base and sufficient clinical experience so that the individual becomes a safe and expert independent practitioner. In any educational system, ensuring that the desired outcomes are actually achieved is of utmost importance. For the Canadian PGME system, this process of quality assurance occurs through a collaborative system of residency training program accreditation that invites input from all stakeholders, including residents. The inclusion of residents in the process is recognized by the Royal College of Physicians and

Surgeons of Canada (RCPSC) and the College of Family Physicians of Canada (CFPC) as a necessary element. Residents contribute by completing resident program evaluations (RPEs), participating in on-site accreditation survey visits, and acting as members of the accreditation survey team. One of the most important components of residents' involvement in the accreditation process is through the completion of the Canadian Association of Internes and Residents (CAIR)—RCPSC RPE or CAIR–CFPC RPE, depending on the resident's training program. The RPE, a resident-developed tool, was first introduced in 1983.

Herein, I will first provide a brief description of the current state of the Canadian PGME system and especially focus on how it connects to the existing accreditation system for residency training programs. Second, I will describe the process that was undertaken to develop and implement a new set of RPEs for PGME accreditation in Canada, as well as the development of a new information package on the accreditation process for residents. The goal in developing both of these tools was to increase resident awareness of the importance of the accreditation process as a quality assurance mechanism for the PGME system in Canada while also

encouraging residents' active participation in the accreditation process.

Participants in the PGME Accreditation Process

Understanding the structure and process of the Canadian accreditation system for PGME, as well as its key participants, is essential to appreciate the significance of the new RPEs and information package. The RCPSC was established in 1929 by a special act of the Canadian Parliament to oversee the medical education of specialists in Canada and ensure the highest standards and quality in 60 specialties and two special programs (Palliative Care and the Clinician Investigator Program).¹ As a private, nonprofit organization, the RCPSC is the national body that certifies specialists in all branches of medicine and surgery and has over 42,000 members worldwide.¹ The RCPSC also plays a significant role in the continuing professional development phase of practicing specialists.

The PGME accreditation process currently occurs in six-year cycles of regular surveys of the residency programs of each of the 17 Canadian medical schools (14 predominantly English-language and 3 French-language) to ensure maintenance of standards in

Dr. Maniate is a community-based medical oncologist and general internist practicing at St. Joseph's Health Centre (Toronto) and is affiliated with both the Wilson Centre for Research in Education and the Centre for Faculty Development, University of Toronto, Toronto, Ontario, Canada.

Correspondence should be addressed to Dr. Maniate, Wilson Centre for Research in Education, Toronto General Hospital, 200 Elizabeth Street, 1E5-565, Toronto, ON M5G 2C4, Canada; telephone: (416) 340-3079; e-mail: jerry.maniate@utoronto.ca.

training across the country.^{2,3} These surveys and visits examine the ability of the residency programs to ensure that programs effectively prepare residents for independent clinical specialty or subspecialty practice on completion of their training programs. The RCPSC is actively responsible for the accreditation of over 675 university-sponsored, medical-school-managed specialist PGME training programs in Canada.

The CFPC was founded in June 1954 to support family physicians in providing high-quality health care to their patients.⁴ With a voluntary membership of over 19,000 family physicians, the CFPC seeks to promote high-quality health care through the encouragement and support of high standards in medical education at all levels. The CFPC pursues its mission through a wide variety of ever-evolving programs and services at the undergraduate, postgraduate, and continuing medical education phases of a physician's educational life cycle. The CFPC also plays a key role in strengthening the reputation of family medicine training in Canada through the evaluation and accreditation of all family medicine residency training programs.

Within Canada, residents have played an active role in the PGME system at the local, provincial, and national levels. Just one manifestation of this involvement is CAIR, the national organization that represents over 7,500 residents across Canada.⁵ Through a process of collaboration and consensus building, CAIR aims to advance the interests of residents in educational, professional, and well-being issues (such as intimidation, harassment, and discrimination) by ensuring that residents' perspectives are represented, especially on issues pertaining to and affecting PGME either directly or indirectly.

Accreditation of Canadian PGME Training Programs

Accreditation standards are published by both the RCPSC and the CFPC and are provided to the university residency programs to communicate what the respective colleges feel are critical to the maintenance of high-quality national PGME.⁶ For example, the RCPSC uses words such as "must" in its documentation to indicate standards that are absolutely necessary to be achieved for a program to be accredited, but uses the word "should"

to indicate an attribute that is highly desirable, though not required, for a program. In addition to general standards that apply to all residency programs, the RCPSC also provides specialty- and subspecialty-specific standards developed by the various RCPSC specialty committees, which are derived from the RCPSC Canadian Medical Education Directions for Specialists (CanMEDS) 2005 Physician Competency Framework (Medical Expert, Communicator, Collaborator, Health Advocate, Manager, Scholar, Professional).⁷ At the present time, the CFPC and RCPSC are discussing the eventual development and implementation of shared general accreditation standards for all postgraduate medical programs in Canada. Also under consideration is the use of the CanMEDS framework for CFPC training programs, which would occur in conjunction with the Four Principles of Family Medicine: (1) The family physician is a skilled clinician, (2) family medicine is a community-based discipline, (3) the family physician is a resource to a defined practice population, and (4) the patient-physician relationship is central to the role of the family physician.⁸ Thus, at this stage, CanMEDS not only plays a significant role in the curriculum and evaluation process of trainees but is now becoming more influential in the iterative development of all residency training programs through its integration into the formal PGME accreditation process.

The RCPSC and CFPC accreditation survey teams comprise a number of volunteer surveyors—typically physicians, educational administrators, and medical educators—who provide the team with differing areas of expertise and perspective, including clinical, administrative, and educational.⁶ Figure 1 illustrates the RCPSC specialty PGME accreditation process and appeals mechanism in Canada, with close similarities noted for CFPC programs. The size of the survey team depends on the number of residency training programs that are to be reviewed at the time of the university visit. The chair of the survey team is responsible for reviewing the function of the PGME office of the faculty and to assess the relationships and communication between the faculty and the health care institutions involved with PGME. Each

survey team includes resident-surveyor participants, who are appointed by CAIR or the Fédération des médecins résidents du Québec (FMRQ). Surveys within the province of Québec include a representative from FMRQ and are conjointly conducted with the Collège des médecins du Québec. All RCPSC surveys are conducted concurrently, but not conjointly with the CFPC.

Resident Input for the PGME Accreditation Process

In a 2000 paper published in *Academic Medicine*, Klessig and colleagues⁹ outlined the process that they undertook to include resident input along with that of program directors in their development of a questionnaire that examined the quality of internal medicine residency training in the United States. They noted that there was a strong level of agreement between faculty and residents for indicators rated as important, with an "emphasis placed on process rather than outcome indicators."⁹ The authors concluded that although "assessing the quality of training programs is a difficult but vital task to be undertaken," this process "must include all groups that have vested interests in residency training, including trainees and future employers."⁹

As noted above, postgraduate trainees within Canadian residency training programs have three methods of providing input into the accreditation process. First, they complete a CAIR RPE for RCPSC or CFPC programs, depending on the residency program in which they are enrolled. Second, residents contribute direct input during their participation with the on-site survey process, and, third, residents are active members of accreditation survey teams. The role and input of residents in the accreditation process is significant. At each stage, the RCPSC and the CFPC welcome and value resident input, which is seen as being critical to the process.

In June 1979, CAIR advocated that before each RCPSC and CFPC accreditation survey, residents should participate in a two-part data collection exercise: (1) detailed analysis of the local results of the CAIR-developed RPE, and (2) a further program-by-program survey of residents' opinions to gather more narrative and qualitative information on particular programs. CAIR also advocated ensuring

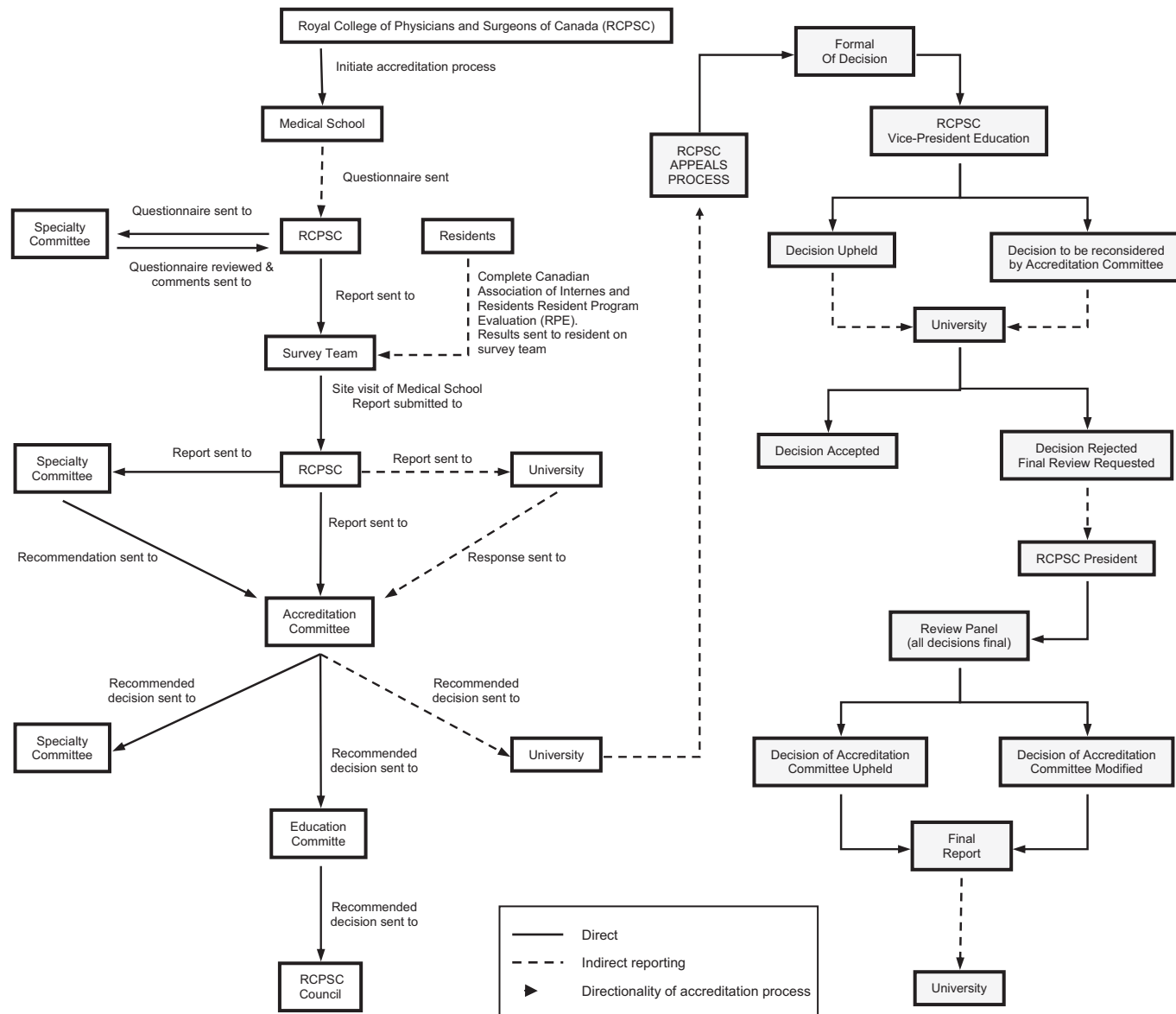


Figure 1 Canadian specialty postgraduate medical education accreditation process and appeals mechanism. Adapted from: Royal College of Physicians and Surgeons of Canada. General Information Concerning Accreditation of Residency Programs. 7th ed. Ottawa, Ontario, Canada: Royal College of Physicians and Surgeons of Canada; 2006.

that individuals appointed to RCPSC and CFPC accreditation survey teams are members of RCPSC-approved and CFPC-approved programs, respectively. By February 1983, CAIR approved the use of the first CAIR–RCPSC RPE. Subsequently, a similar program evaluation tool was developed for CFPC residency training programs.

Today, three to four months before each accreditation visit, residents in the program are asked to fill out an RPE designed to obtain the resident’s perspective on his or her training experience. The RPE is an invaluable tool, as it is the only source feedback exclusively from residents and is

confidential. The results of the questionnaire are only used if at least 60% of family medicine or 50% of specialty residents within the residency training program complete the RPE. The completed questionnaires are sent to the CAIR office for analysis. Results are compiled and sent to the Provincial Housestaff Organization (PHO), which creates an RPE summary report that is reviewed by the president of CAIR. At the present time, the RPE summary report on a CFPC residency training program is forwarded to the entire accreditation survey team; however, the RPE summary report on an RCPSC residency training program is sent only to the resident

surveyor(s) on the team, per the preexisting policies of the respective colleges. These reports allow the resident survey team member to ensure that both program strengths and challenges are explored and addressed by the survey team’s report on completion of the site visit.

Developing the New CAIR RPE

The existing CAIR RPE had proved useful since its initial development in 1983, but it had only undergone relatively minor revisions in the intervening years. After more than 20 years without a major revision, concerns began to arise about the length of the CAIR RPE, the relevance of certain questions, and whether

Table 1

A Comparison of Sample Questions Between the Old Canadian Association of Internes and Residents (CAIR) Resident Program Evaluation (RPE) and New CAIR RPE

Topic	Old RPE	New RPE
Program objectives	<ul style="list-style-type: none"> • Are you given formal “training objectives” at the beginning of your program? • Are there rotation-specific objectives? 	<ul style="list-style-type: none"> • Are you given formal “training goals and objectives” at the beginning of your program? • Are you provided with rotation-specific goals and objectives? • Are the rotation-specific goals and objectives in CanMEDS format? • Are the rotation-specific goals and objectives discussed at the beginning of each rotation?
Education and evaluations	<ul style="list-style-type: none"> • Do you have adequate opportunity to evaluate the residency program? • Do you have adequate opportunity to evaluate attending physicians? 	<ul style="list-style-type: none"> • Do your core faculty members teach and supervise in ways that facilitate your learning? • Do your core faculty members demonstrate a strong interest in the quality of your education? • How often does your program ask you to evaluate your residency training program? • How often does your program ask you to evaluate your faculty/attending physicians through confidential written/electronic evaluations? • How often does your program communicate the results of your written/electronic performance evaluations? • How often does your program provide a midrotation evaluation? • Are your written/electronic evaluations based on rotation-specific objectives? • Are your objectives adjusted to account for level of training (i.e., PGY-1 versus PGY-5)?

interpretable information could be collected from it because of the language used in some questions. Another significant concern noted in reviewing the existing RPE was the lack of focus on issues directly associated with the accreditation process and the quality of the residency training program. The RPE had incorporated issues not directly pertinent to the accreditation of the programs, such as contractual issues related to working hours. Contractual matters in the Canadian PGME system do not directly involve CAIR or the CFPC and RCPSC; instead, they are typically the jurisdiction of PHOs and universities, provincial governments, or their designates. Overall, most participants of the accreditation process—including residents—found the existing RPE to be an inadequate and unreliable assessment tool. In response to the previously noted concerns by PGME stakeholders, CAIR initiated a plan to create and implement a new RPE both for RCPSC and CFPC programs in 2006. In addition to developing sound evaluation and survey tools on accepted principles of medical education, the new RPE also incorporated and used CAIR's Principles of Quality PGME as its framework. Appendix 1 highlights the

principles that pertain to sample RPE questions shown in Table 1.¹⁰

Using these foundational principles, I independently developed drafts of new RPEs using a five-stage consultative and iterative process (Figure 2). Through this process, various groups, which are outlined below, reviewed and provided feedback on the new RPE. The feedback led to further refinements and revisions

to the evaluation tools before each subsequent stage of development.

Drawing on published processes for survey development, I based the first stage of RPE development both on the Principles of Quality PGME adopted by CAIR in April 2006 and on the accreditation standards of the RCPSC.^{10–13} In addition, I reviewed the existing U.S. Accreditation Council for Graduate Medical Education

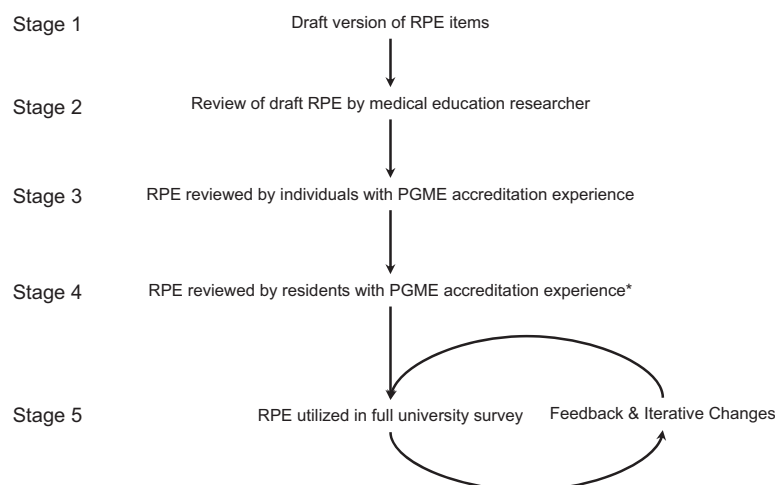


Figure 2 Canadian postgraduate medical education (PGME) resident program evaluation (RPE) development process. “Residents with PGME accreditation experience” (stage 4) completed the Surveyors Workshop and participated in a minimum of one full university survey.

(ACGME) resident surveys to ensure adequate coverage of accreditation issues that residents considered pertinent. This process was also informed through my personal experiences participating at multiple levels with the accreditation process, first as a resident but also as an RCPSC accreditation workshop participant and as a survey team member. I used a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) for most RPE items other than identification data, program objectives, call requirements, and experiences. For items pertaining to frequency of activities, I used either a five- or six-point Likert scale depending on the topic.

At the second stage, a medical education researcher with a background in assessment and survey tool development reviewed the draft RPE. The researcher provided feedback and commentary on the appropriateness and adequacy of the questions and the format of the questionnaire, all of which I used to refine the RPE further. In the third stage, I sent the revised draft RPE to a group of individuals in the RCPSC accreditation office with PGME accreditation experience. Once again, I used the feedback and recommendations provided by this group to refine the RPE.

In the fourth stage, I sent the revised draft RPE to a group of residents, each of whom had both participated in the RCPSC Surveyors Workshop and also had served on the accreditation team for a minimum of one full university survey. This eligibility criterion ensured that the input from this group of residents would be based on not only a greater level of knowledge of the accreditation process but also the practical workings of the process. Their input helped to ensure that all relevant accreditation issues and resident concerns were covered by the questions on the new RPE. Once this last stage of review had been completed, and after the feedback had been incorporated, the medical education researcher reviewed the RPE once again to verify that the proposed changes and additions to the questions did not result in a negative impact on the reliability and reproducibility of the questionnaire. The researcher referred to consultations indicated in stages 3 and 4 to ensure both face and content validity of the CAIR–RCPSC RPE. Although I did not employ

a formally accepted method of consensus building, such as the Delphi technique, the first four stages facilitated the development of consensus from all stakeholders regarding the final set of items included in the RPE.¹⁴

I also developed a survey questionnaire specific to the CFPC accreditation standards and issues affecting family medicine training programs. Although I used a similar process to develop this second RPE, it is tailored to CFPC programs' unique needs and is also different from the RCPSC-based RPE in that it reflects the CFPC Four Principles of Family Medicine, which have been integrated into family medicine residency training programs in Canada. CAIR officially adopted both RPEs for use in accreditation surveys of residency training programs beginning in January 2008.

In the fifth and final phase, both the CAIR–RCPSC and CAIR–CFPC RPE were used in a full on-site university survey. I once again used the feedback both from trainees and resident surveyors to fine-tune the RPE. This iterative process will continue with each subsequent use of the RPEs as a means of revisiting, updating, and adjusting these evaluation tools to reflect the changing conditions for training and clinical practice. For example, these RPEs will be transitioning from an anonymous paper-and-pencil format to solely online completion to assist in the collating of results.

The new RPEs for RCPSC and CFPC residency training programs will obtain a resident's perspective using the following framework: (1) Program Objectives, (2) Education and Evaluations, (3) Promoting Lifelong Learning, (4) Call Requirements and Experience, (5) Program Infrastructure and Resources, and (6) General Issues. This framework was determined after reviewing the previous CAIR RPE documents, in addition to both the ACGME residents survey and the RCPSC and CFPC accreditation standards.

Educating Residents About the PGME Accreditation System

Although the accreditation process is critical to maintaining a high-quality PGME system, the busyness of residency training and the long duration between full on-site survey visits by accreditation

teams mean that residents sometimes have a poor understanding of the accreditation process and its effect on their training experience. As a part of the revision process for the RPEs, the information package that CAIR provides to the residents participating in a full university survey was also revamped. The most significant addition was a new manual for residents: *The Accreditation Process: Ensuring Quality Postgraduate Medical Education in Canada*.¹⁵ This manual is published by CAIR and was designed to (1) describe the accreditation process, (2) describe the resident's role in accreditation, and (3) provide advice on dealing with some recurring issues related to accreditation. The goal of creating this manual was to emphasize the fundamental role that residents play in the accreditation process, and, as such, the manual is the second major component of the accreditation survey package I developed for residents.

How CAIR Will Use This Accreditation Survey Package

Before each full university survey of an RCPSC or CFPC residency training program, which currently occurs every six years, the RPE and residents manual will be sent to all residents by CAIR as a combined accreditation survey package. To prevent stagnation of the RPE, CAIR will obtain feedback from the residents after each full university survey to review and revise the document in an ongoing iterative process. As mentioned, this has already occurred once, resulting in minor changes to clarify a few of the RPE items. The new accreditation survey package was developed to determine the residents' perspectives on their training programs and educational experiences, and also to educate them on the importance of accreditation in ensuring quality PGME.

Implications and Lessons Learned

A strong and effective accreditation process is vital to evaluating and improving the quality of specialty medical training. For accreditation to be effective in any system, it cannot be static or infrequent but must instead be considered as a dynamic and continuous process. This is an important principle for all stakeholders to remember, but it also must apply to the tools these groups use to ensure the quality and integrity of the system. Thus, accrediting bodies and

other stakeholder organizations have the responsibility not only to create and maintain both an efficient and effective accreditation process to foster dialogue between all parties but also to create an environment that fosters advancement and innovation within the system. This is especially true for the medical education system, which is also tightly associated with the rapidly changing health care system. In fact, the tremendous changes that have been evident within the health care system, including the adoption of new technologies, new pharmaceuticals, and new models of patient care, underscore the importance of keeping the medical education accreditation system up-to-date so that our graduates are prepared to address these changes. Thus, the RPEs and accreditation survey package developed for residents will be updated iteratively by CAIR to ensure their ongoing reliability and validity and to assure collaborative partners that these materials have been adjusted to reflect the ever-changing reality of medical education.

As a result of this review of the PGME accreditation process and structure, a few recurring issues have emerged. For example, the accreditation process of PGME in Canada historically has been a summative process—that is, occurring every six years with minimal opportunities for feedback in the interim. The lack of formal interim or formative programmatic feedback is frequently noted by residents, program directors, and program surveyors as a recurring issue that often results in reactive rather than proactive decision making. Without ongoing opportunities for feedback and revision, stakeholders often make programmatic adjustments either in the immediate period before a survey visit or in response to the survey report submitted to the colleges. This issue serves as an example of the need for medical educators to examine comparatively the experiences of other countries and their medical education accreditation processes as a means of integrating their system strengths to address these and other recurring issues within the Canadian context. For example, residents are participants in the medical education accreditation system in the United States through their completion of the ACGME resident survey, the results of which are used to focus the questions of the surveyors

during the site visit.¹⁶ Similarly, the Australian Medical Council (AMC) ensures that trainees are members of the site visit team and that they respond to AMC surveys so that related data are up-to-date.¹⁷ In this era in which globalization is affecting medical education, it is important for medical educators to look beyond our borders to learn how other countries are addressing not only accreditation but also other issues including medical school admissions, career decision making, and continuing professional development.¹⁸

Summary

PGME accreditation is an essential part of ensuring that residency training programs provide high-quality training. As important stakeholders, Canadian residents are active participants in the PGME system and in the accreditation process. Over the years, this has occurred through their involvement in developing policies on accreditation, through their participation in accreditation surveys as resident members of the survey team, and through the direct input of all residents during interviews at the site visits. The CAIR RPE has played a valuable role since the early 1980s in ensuring that changes to residency training programs optimize the educational experience of residents. Since the 1980s, the RPE has been instrumental in making sure that the residents' perspective and concerns are accurately and adequately voiced to effect positive change on the PGME system in Canada. In fact, this level of involvement may be considered an individual's professional responsibility to strengthen the medical education system and ensure the development of high-quality medical practitioners who meet societal needs.

Klessig and colleagues⁹ note that “no clear consensus exists regarding the definition or measurement of quality in residency training.” This may be true, but both Whitcomb¹⁹ and the Association of American Medical Colleges policy guidance on GME,²⁰ published in 2003, have encouraged the medical education community to “focus on the overall quality of GME” by addressing, among other things, “the learning environments where GME is conducted.” Accreditation is necessary to ensure not only that trainees are adequately trained for clinical practice but also that trainees'

educational experience is optimal. Hopefully, the major revisions that have been recently undertaken will provide a more reliable and appropriate tool to obtain direct feedback from residents. After its initial development and use, my colleagues and I plan to review the resident feedback. If the two, newly created RPEs continue to be successful, resident feedback will provide usable and valid information that is pertinent to the accreditation process of residency training programs and that will help improve and strengthen the Canadian PGME system.

Acknowledgments: The author wishes to thank Cheryl Pellerin and the Canadian Association of Internes and Residents (CAIR) for their support, Eileen Egan-Lee for her involvement in the RPE development and review process, and Dr. Brian Hodges for his editorial assistance.

Funding/Support: None.

Other disclosures: None.

Ethical approval: Not applicable.

References

- 1 Royal College of Physicians and Surgeons of Canada. About the Royal College. Available at: <http://rcpsc.medical.org/about/index.php>. Accessed April 5, 2010.
- 2 Royal College of Physicians and Surgeons of Canada. General Information Concerning Accreditation of Residency Programs. 7th ed. Ottawa, Ontario, Canada: Royal College of Physicians and Surgeons of Canada; 2006.
- 3 Gray JD, Ruedy J. Undergraduate and postgraduate medical education in Canada. *CMAJ*. 1998;158:1047–1050.
- 4 College of Family Physicians of Canada. Giving voice to family medicine—CFPC history. Available at: www.cfpc.ca/English/cfpc/about%20us/college%20history/default.asp?s=1. Accessed April 5, 2010.
- 5 CAIR—Canadian Association of Internes & Residents. Available at: www.cair.ca/en/about/overview/. Accessed May 10, 2010.
- 6 Royal College of Physicians and Surgeons of Canada. General Standards of Accreditation. 7th ed. Ottawa, Ontario, Canada: Royal College of Physicians and Surgeons of Canada; 2006.
- 7 Frank J. The CanMEDS 2005 Physician Competency Framework. Better Standards. Better Physicians. Better Care. Ottawa, Ontario, Canada: Royal College of Physicians and Surgeons of Canada; 2005.
- 8 College of Family Physicians of Canada. Four Principles of Family Medicine. Available at: <http://www.cfpc.ca/English/cfpc/about%20us/principles/default.asp?s=1>. Accessed April 5, 2010.
- 9 Klessig J, Wolfsthal S, Levine M, et al. A pilot survey study to define quality in residency education. *Acad Med*. 2000;75:71–73.
- 10 Maniate JM, Karimuddin A. A set of principles, developed by residents, to guide

- Canadian residency education. *Acad Med.* 2009;84:1527–1532.
- 11 Dennison CR, Mendez-Tellez PA, Wang W, Pronovost PJ, Needham DM. Barriers to low tidal volume ventilation in acute respiratory distress syndrome: Survey development, validation, and results. *Crit Care Med.* 2007;35:2747–2754.
 - 12 Sateia MJ, Reed VA, Jernstedt GC. The Dartmouth Sleep Knowledge and Attitude Survey: Development and validation. *Sleep Med.* 2005;6:47–54.
 - 13 Mitchell R, Regan-Smith M, Fisher MA, Knox I, Lambert DR. A new measure of the cognitive, metacognitive, and experiential aspects of residents' learning. *Acad Med.* 2009;84:918–926.
 - 14 McLeod P, Steinert Y, Chalk C, et al. Which pedagogical principles should clinical teachers know? Teachers and education experts disagree. Disagreement on important pedagogical principles. *Med Teach.* 2009;31:e117–e124.
 - 15 Maniate JM. *The Accreditation Process: Ensuring Quality Postgraduate Medical Education in Canada.* 1st ed. Ottawa, Ontario, Canada: Canadian Association of Internes and Residents; 2007.
 - 16 Accreditation Council for Graduate Medical Education. Resident / Fellow Survey. Available at: http://www.acgme.org/acWebsite/resident_survey/general.pdf. Accessed April 5, 2010.
 - 17 Australian Medical Council. Part C. The Accreditation Framework. Available at: <http://www.amc.org.au/images/Accreditation/Part-C-Accreditation-Procedures.pdf>. Accessed April 5, 2010.
 - 18 Hodges BD, Maniate JM, Martimianakis MA, Alsuwaidan M, Segouin C. Cracks and crevices: Globalization discourse and medical education. *Med Teach.* 2009;31:910–917.
 - 19 Whitcomb M. It's time to focus on the quality of GME. *Acad Med.* 2003;78:1–2.
 - 20 AAMC policy guidance on graduate medical education: Assuring quality patient care and quality education. *Acad Med.* 2003;78:112–116.

Appendix 1

Canadian Association of Internes and Residents (CAIR) Principles of Quality Postgraduate Medical Education

Educational Methods

- Clear and attainable learning objectives must be developed for all specialties, specific to rotations and level of training. These must be clearly communicated to residents.
- Clinical activities must have unambiguous educational purpose and attainable educational objectives.
- Postgraduate training programs must ensure a rationalized and education-focused distribution between clinical training, supervised delivery of service and formal educational sessions.
- All programs must have an explicit evidence-based curriculum, which addresses each program's unique educational needs in a comprehensive manner over the course of an academic cycle. An academic half-day may be one such mechanism.
 - The curriculum must acknowledge the importance of career planning and strategies for transition to practice and involve all relevant stakeholders.
- Educational methodology should strive to ensure the success of the individual learner and ensure individual learner progress.
- Educational methods and curricula must be developed from input derived through consultation with learners, educational specialists and specialty/discipline specific groups.
- Procedural specialties must establish benchmarks which all learners must achieve, both in terms of numbers and proficiency.

Accreditation

- Accreditation standards need to be definitive, and provide firm guidelines and criteria to postgraduate medical education programs.
- Every program and university undergoing accreditation review by the RCPSC and CFPC must have a resident reviewer participate on the survey team.
- Educational accreditation standards must apply to all locations where residents receive training.
- Composition of all Residency Training Committees must be learner-centered, with significant and empowered representation coming from the resident body.

Resident Evaluations

- Evaluation of residents must be based on well-published, objective and distinct criteria, which is personally communicated in a timely manner.
- Evaluations must demonstrate validity, reliability and be derived from best-practice criteria based on national and international perspectives.
- The focus of evaluations at each level must be formative, not summative. Evaluations should provide further learning directions and opportunities for all learners.
- A strong global evaluation tool (i.e. FITER) must play a significant role in a resident's final evaluation or determination of competency.
- Must ensure that an equitable and impartial process is provided to all residents for any educational or evaluation conflicts.

Source: Maniate JM, Karimuddin A. A set of principles, developed by residents, to guide Canadian residency education. *Acad Med.* 2009;84:1527–1532.

Posted on the CAIR website with the permission of Wolters Kluwer Health.