



**ROYAL COLLEGE**  
OF PHYSICIANS AND SURGEONS OF CANADA

# The Royal College program directors handbook:

A practical guide for leading an exceptional program



# Preface

## Consider the following tale, which will be familiar to many new program directors (PDs) in Canada:

When I became a PD in 2000, I thought I knew what I was getting into. I was expecting a rewarding, challenging leadership position in education that would allow me to set a direction and provide support for a future generation of doctors. It turned out to be all of this and more; I'm thankful that the rewards far exceeded my expectations and the challenges were mitigated by a strong support network and resident cohort. But I admit that my initial experiences in the job were largely a trial by fire. I had a brief handover from my predecessor and was given a new book on the "newest thing" in residency education — CanMEDS 2000 — but other than that I was set adrift to run the residency program and seek help when needed. One resource that proved very helpful was the Royal College of Physicians and Surgeons of Canada's annual workshop for new PDs and accreditation surveyors. I was assigned to the surveyor workshop by mistake; it turned out to be very useful, as our accreditation visit was scheduled to take place in 8 short months' time, and I had still received no instruction on the nuts and bolts of running a program.

PDs come to their positions in a variety of ways. Some PDs seek out the role; others are invited to take the job and either embrace the opportunity or accept the position reluctantly. Some step into the job after receiving training and resource materials; others do so with no preparation at all. Some PDs run large programs and some run small ones. A few PDs start new programs, but most of them run established programs. Some are charged with the task of stepping in to reverse the downward course of a program in difficulty. Regardless of how they get their start, PDs work constantly to keep their programs alive, well and kicking. They will be faced with unique situations from time to time, but many of the challenges they encounter will be similar to ones successfully faced by other PDs in the past and can be overcome with techniques and processes (and some duct tape) borrowed from them.

The vignette that opened this Preface describes the experience of one of us (GB). When the other one (DD) was appointed to his PD position, he thought he was simply a place holder until someone else showed up. No one showed up. Without training, DD stumbled and toiled, designing solutions to problems that others had already solved and grateful to be able to learn along the

way from peers, support staff and residents. Our own experiences, then, prompted our desire to help others prepare for their PD roles.

Over the years we have delivered the Royal College's workshop for new PDs numerous times (both together and with various other "partners in crime") and surveyed many programs. We have come to realize that many PDs are in the same (leaky) boat we were in when we started. They need a practical resource on running a program. The Royal College's workshop for new PDs, although valuable, is offered only once per year, is limited in scope by the single-day format and provides no enduring support beyond the workshop. Furthermore, many new PDs simply cannot attend.

To supplement the informal feedback we received over the years at the new PD workshop, we sought to formally explore the needs of PDs across Canada. In 2010 we conducted a survey of 214 residency PDs, which produced a 93% response rate and generated valuable insight about what a new PD would find helpful in a manual. From this, potential topics emerged for a PD manual. We identified a wide range of suitable experts across the country and approached them about writing

chapters for the manual. The authors have focused on practicality and useful advice (rather than theory), drawing on their experiences and the literature.

We believe that this manual will be instrumental in helping new PDs become comfortable and effective in their role, providing a basic reference about the day-to-day operation of a residency program. In addition, it will provide an enduring reference should challenges arise.

We also anticipate that it will be valuable to more experienced PDs and other education leaders both within and outside Canada. The manual is meant to complement other Royal College publications and the annual PD workshop. Two companion publications for new PDs are the CanMEDS Assessment Tools Handbook and Educational Design: A CanMEDS Guide for the Health Professions. The former addresses the complex problem of matching assessment tools to the CanMEDS Roles in an integrated and evidence-informed manner. The latter focuses on the theory and practicalities of being an educator, embedding educational best practices into a residency program, and creating the best learning experience for residents. This manual will not duplicate the content of these other publications. Rather, it focuses on the leadership, administrative and procedural aspects of running a program as well as several specific challenges that were identified as being particularly problematic for new PDs.

Most chapters start with a case scenario to create some context and follow through with a literature review, best practices summary, lists of tips and pitfalls, and case resolution. With this format, we hope that the material covered will be accessible and easy to identify on first and subsequent readings.

## Being a PD is a rewarding experience

We hope that the Royal College Program Directors Handbook is a useful resource for you. We invite you to share your thoughts and experiences with us ([accred@royalcollege.ca](mailto:accred@royalcollege.ca)), and we would particularly appreciate any feedback you might be able to give us about the manual, including ideas about additional topics the manual should cover, to improve subsequent editions.

**Above all, we wish you a most enjoyable and enriching experience as a PD.**

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# The Royal College program directors handbook: A practical guide for leading an exceptional program

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# Postgraduate medical education in Canada: *evolution inspires innovation*

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## Objectives

**After reading this chapter you should be able to:**

- » describe how major developments at the Royal College have contributed to the evolution of postgraduate medical education (PGME)
- » describe how partnership with the universities has helped residency programs to raise standards of practice and prepare residents to respond to changes in the health system
- » give your faculty and residents insights into how the accreditation system has evolved
- » use your understanding of the history of PGME in Canada to contribute to its ongoing evolution

## Case scenario

You are an assistant professor in the Department of General Internal Medicine. You have just been appointed as the department's new residency program director. The department's faculty of 36 full-time and part-time specialists at the university hospital hosts a reception to celebrate the recent accreditation of the residency program, to thank the retiring program director, Dr. Richard Smith, for his significant contribution over the past five years, and to welcome you.

You arrange a meeting with Dr. Smith to learn about your new role and responsibilities as program director. At this meeting Dr. Smith summarizes the history of postgraduate medical education (PGME) in Canada over the past 80 years, as he feels that knowledge of its evolution helped him to better understand PGME and explain it to residents and teachers. This knowledge inspired Dr. Smith to participate in new program development and he hopes it will encourage you to do the same. Dr. Smith reminds you that program directors and residents across Canada have made major contributions to the development of PGME in the past decades, and the current Canadian PGME model is admired and emulated by leaders in education around the world. **You wonder how you can modify your own program in a way that will contribute to this ongoing evolution.**

## Major developments in postgraduate medical education

Several factors have had a significant impact on the evolution of PGME in Canada since the establishment of the Royal College of Physicians and Surgeons of Canada in 1929: partnership with the universities, the development of a competency-based residency curriculum, the evolution of the accreditation and evaluation programs of the Royal College and, most importantly, the development of a unique partnership between Royal College staff and program directors. Although each of these factors is discussed below as a separate entity, interdependencies exist between them.

### Partnership with the universities

Some Canadian residency programs used to be hospital based. Although some programs in university hospitals were dedicated to teaching, this was not the case in many community hospitals where the staff was less interested in teaching residents. The number of trainees accepted into residency programs was dictated by service needs and often exceeded the teaching capacity of the staff. Training was opportunistic, largely incident driven and based on the patient mix of the institution. Program directors were perceived to be too busy to respond to residents' concerns. The integration of hospital residency programs into university programs began in the 1950s and was completed in 1975, when the Royal College stipulated that all residency programs must be university based in order to be accredited.

In addition to enhancing the resident experience, partnering with universities has enabled residency programs to take advantage of changes in the health system and improve the educational and administrative components of their work. The advent of universal health coverage and the elimination of the public/private dichotomy in health care had a significant influence because it eliminated the pool of "teaching" patients that was once provided by the public system and brought all

patients into the teaching realm. Also, the Royal College's requirement that there be only one accredited program per specialty per university has made it easier to achieve uniform standards; it has also led to an emphasis on collaboration rather than competition across hospitals and it has stimulated the development of a new approach to funding and health human resource planning because hospitals no longer have the ability to bring in as many residents as they need to staff their wards.

The partnership between residency programs and universities has facilitated the evolution of specialty medicine. As advances in the biomedical sciences, genetics, medical physics and biostatistics have accelerated, the need for in-depth teaching in these areas has grown. Through their university partnership, residency programs have been able to capitalize on the universities' pool of expert teachers in these disciplines, and physicians have been able to use what they learn in their residency programs to advance their specialties. It is also important to note that university affiliation has contributed to the Canadian public's positive perception of certified specialists as experts in their field.

The affiliation between universities and residency programs has facilitated the career development of postgraduate deans, program directors and clinical teachers. For instance, promotion is now tied to educational achievements. Affiliation with the university also makes it easier for educators in specialty and family medicine to interact with the faculty in undergraduate medical education. Most importantly, universities have catalyzed research in medical education that has not only advanced the education of residents but has also provided an evidence-based foundation for the evolution of PGME.

### Development of a competency-based residency curriculum

The material that residents are expected to learn and then apply in their practice has steadily increased over the years as program goals and objectives have been expanded and continuously rewritten by the specialty committees of the Royal College. New topics, including ethics, biostatistics, critical appraisal and more recently the CanMEDS competencies, have been integrated into the

set of core competencies articulated by the Royal College. In parallel with increasing content, a sophisticated competence-based educational system has evolved, which in turn has driven changes in the accreditation system. Residency programs used to be perceived as simple **training** programs in which residents observed teachers as they provided clinical care and studied on their own to pass the Royal College's examinations, but they have evolved into today's **educational** programs that are based on adult learning principles and aligned with specialty goals and objectives. Particular attention is now paid to the balance between residents' formal ("protected") education in the classroom and clinical work.

The clinical component of the curriculum has also progressed significantly. In the past, residents were "exposed" to patients by shadowing faculty in acute care units; today, residents are required to be co-managers (with teachers) of a clinical practice of patients in all clinical settings, including acute, ambulatory and community care.

Ambulatory and community clinics provide residents with opportunities to learn, practise and be assessed in "practice" competencies that are not readily appreciated when their experiences are limited to in-patient settings. In addition to encountering patients with different clinical problems, residents working in ambulatory settings gain a better appreciation of CanMEDS competencies and experience a professional practice that is more like the office environment in which they will practise after graduation. For instance, they learn that communication with patients and professionals from other disciplines is different in outpatient settings than in hospital settings. They learn that they must take into account a patient's work and family responsibilities and socioeconomic challenges before giving medical advice. Most importantly, interacting with professionals from other disciplines, residents learn about the value of tacit knowledge and practical wisdom in making clinical judgments and how the skills of improvisation, bricolage and sense-making are used in applying evidence-based guidelines in practice.

The CanMEDS framework (Medical Expert and six Intrinsic Roles) was developed by studying society's expectations of what a good doctor should be. The framework helps residents develop their professional

identity in interdisciplinary communities of practice, defined as groups of people who share a practice and who deepen their knowledge and expertise by interacting on an ongoing basis. Reports suggest that communities of practice provide the ideal environment for practitioners to collectively reflect on practice and lay plans to improve their performance. Today's residents must develop skills for autonomous lifelong learning in practice, which are mostly learned from interacting with practitioners of different disciplines in communities of practice. Viewing learning as a social phenomenon rather than as a chore driven by the threat of examinations, residents will perceive lifelong learning in practice to be natural and a rewarding thing to do.

## Evolution of the accreditation system

Changes in the residency curriculum over the years have driven changes in the Royal College's accreditation system. If you understand how the accreditation process has evolved, you will be able to give insights into its progression to faculty and residents who may feel intimidated by its ever-changing nature. The first accreditation surveys in the 1950s focused on the availability and calibre of teachers in acute care hospitals. The accreditation process has evolved into what is today a critical examination of every aspect of residency programs. Accreditation reviews are organized under the framework of six groups of general standards for accreditation (known as the B standards): administrative structure; goals and objectives; structure and organization of the program; resources; clinical, academic and scholarly content of the program; and assessment of residency performance.<sup>1</sup> The Royal College has increased the staffing of its accreditation section to meet the needs of the expanding residency programs and has developed computing systems and databases to support surveys and enable the follow-up and support of programs that receive provisional accreditation status. The Royal College's accreditation system is now world renowned for its comprehensiveness and sophistication. Although it has changed over the years to accommodate improvements in the residency curriculum, it is also recognized for its ability to facilitate changes in residency programs.

## Evolution of the evaluation system

Not surprisingly, the Royal College's examination process for certification has evolved continually since the first Royal College examinations were held in Surgery in 1932. A critical review of the validity and reliability of the examinations in 1992 led to significant changes. The adoption of new techniques, such as multiple-choice questions and short-answer formats in the written examinations and the objective structured clinical examinations and mini clinical encounter examinations in the clinical component, has made the examination process more valid and reliable and more acceptable to both residents and examiners. The introduction of the in-training evaluation report was the first attempt to assess residents in real-life situations and signaled to residents and teachers that assessment of everyday competence and performance matters. Most importantly, in-training evaluation reports provide opportunities for residents to obtain feedback on their performance mid-course and for teachers to enhance their skills in giving feedback. Continuing efforts to improve the formative assessment of residents during their training and the summative expression of this assessment in the final in-training evaluation report are of special interest to program directors.

## Other forces driving change in postgraduate medical education

Forces for change in residency programs have come from many directions, not the least of which has been the determination of Royal College leaders to achieve the Royal College's mission of ensuring the highest standards and quality of health care. This goal has proven to be challenging, as the Canadian health care system has continuously undergone change as a result of fiscal pressures for more efficiency and effectiveness and patient demands for high-quality, safe and up-to-date care. PGME also continues to change, as the content and methods of delivering specialty care evolve, for instance in response to the needs of an aging population and the emergence of new diseases and syndromes. New areas of expertise emerge and established practices disappear as advances in medicine and technologies transform clinical practice. These changes in specialty medicine are constantly being incorporated into residency curricula.

Residency programs in Canada are expected to prepare their graduates for practice in a turbulent and ever-changing health care system. For instance, today's residents must not only be equipped with the knowledge and skills of their specialty; they must have the skills to adapt to change and continuously improve their performance, described by Fraser and Greenhalgh as capability.<sup>2</sup> In addition to carrying out the traditional tasks of teaching the core competencies of a specialty, today's teachers help residents acquire the skills of capability that are embraced by the Scholar Role in the CanMEDS framework and include competencies to reflect on and assess practice, construct learning goals and develop plans for performance improvement.

## Partnership between Royal College staff and program directors

A trusting relationship has developed over many years between Royal College staff and program directors and educators and empowered the program directors and educators to be creative and contribute to the development and piloting of program innovations. The need for research into new educational methodologies and faculty development has led to investments in education innovation by teaching hospitals, foundations, local communities and medical schools as well as national bodies including the Royal College and research foundations such as the Canadian Institutes of Health Research and the Canadian Foundation for Healthcare Improvement. Worthy of note are the Royal College's international conferences on residency education, its simulation summits, the affiliated workshops and interactive Web 2.0 facilities that create forums for program directors, postgraduate deans, teachers and education researchers to network and share knowledge. The international conferences on residency education and simulation summits have strengthened the partnership between the Royal College and the major stakeholders in residency education in Canada. Surveys of conference participants indicate that program directors attending these conferences feel supported by Royal College staff as they return home to the challenges of administering their residency programs.



## Case resolution

You review the most recent accreditation survey report on your residency program with Dr. Smith. The surveyors commend the program for its high-quality academic sessions and the expert teaching its residents receive. However, the surveyors point to the need for the program to provide more opportunities for residents to participate “in more meaningful ways” in outpatient and community practices. You and Dr. Smith acknowledge that your residents currently have very traditional experiences in outpatient clinics in that the residents relate to teaching faculty but have little opportunity to interact with other professionals, such as dietitians, physiotherapists, nurse educators, self-care coaches and social workers, who provide care to patients in multidisciplinary clinics.

You and Dr. Smith recognize that by shifting the emphasis in learning environment from in-patient wards to outpatient and community settings you can not only present residents with a different patient mix and different clinical problems but you can also help residents to gain a better appreciation of the true nature of professional practice. For instance, residents would learn that communications with patients and professionals from other disciplines are different in outpatient settings than in in-patient wards and more like the office environment in which they will practise after graduation. You recognize that residents learning in community settings will gain a better appreciation of the CanMEDS competencies and how to use them in daily practice.

You are encouraged by Dr. Smith to explore the literature on communities of practice and workplace learning and to work with members of the teaching faculty to create a fresh approach to how residents could work and learn in multidisciplinary outpatient settings.

Receiving encouragement from the associate dean for PGME and the departmental executive, you and your faculty colleagues present an outline of a new program at the weekly meetings of select interdisciplinary

outpatient clinics, which is enthusiastically received by physicians and staff. You arrange further meetings with staff in the multidisciplinary clinics in General Internal Medicine, diabetes and rehabilitation to implement the new program with the five incoming first-year residents in July. It is decided that each clinic will invite a new resident to participate in its quarterly half-day retreat, which this year will be scheduled during the first week in July. At the retreat, clinic members will formally “adopt” the new first-year resident, and the clinic and its interdisciplinary community of professionals and support staff will become the resident’s home base. Although each resident will rotate through clinics and health care facilities as dictated by the formal residency curriculum, the new residents will also have specific responsibilities as co-partners in the community of practitioners in their home-base clinic.

## Take-home messages

- » Residency programs in Canada have evolved over the last 80 years from simple training programs in which residents shadowed clinical teachers as they provided patient care to multi-faceted educational programs that combine formal teaching with hands-on clinical experiences.
- » The evolution of Canadian postgraduate medical education has been shaped by residency programs’ partnerships with universities and the Royal College, by the evolution of the Royal College’s accreditation and evaluation programs, and by the development of a competency-based residency curriculum.
- » In addition to acquiring the competencies traditionally associated with practising specialty medicine, today’s residents need to acquire “competencies to practise,” many of which are included in the CanMEDs framework.

## References

<sup>1</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards.* rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)

<sup>2</sup> Fraser S, Greenhalgh T. Coping with complexity: educating for capability. *BMJ*. 2001;323:799–803.

## Other resources

Dauphinee WD. Evaluation and the Royal College of Physicians and Surgeons of Canada. A 35 year story of initiatives and influence. In *The evolution of specialty medicine, 1979–2004*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2004. p. 109–143.

Cooke M, Irby DM, O'Brien BC. *Educating physicians. A call for reform of medical school and residency*. San Francisco: Jossey-Bass; 2010.

Dornan T, Boshuizen H, King N, Scherpbier A. Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Med Educ*. 2007;41:84–91.

McKnight D, Ruedy J. Changes in residency education and accreditation. In *The evolution of specialty medicine, 1979–2004*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2004. p. 89–107.

Parboosingh IJ, Reed VA, Caldwell Palmer J, Bernstein HH. Enhancing practice improvement by facilitating practitioner interactivity: new roles for providers of continuing medical education. *J Contin Educ Health Prof*. 2011;31:122–127.

Wenger E. *Communities of practice: learning, meaning, and identity*. Cambridge (UK): Cambridge University Press; 1998.

# Creating the future for your program:

*sage advice about your first steps as a new program director*

## Kenneth A. Harris, MD, FRCSC

Dr. Harris is executive director of specialty education at the Royal College of Physicians and Surgeons of Canada. He is a former director of the residency program in General Surgery and associate dean of postgraduate medical education at the Schulich School of Medicine and Dentistry at the University of Western Ontario.

## Objectives

After reading this chapter you should be able to:

- » consider changes that program directors will face in the coming years
- » build on the techniques and adapt the methods of successful program directors
- » identify various sources of help and support for program directors

## Case scenario

You sit back. Not so long ago, you were a resident in this program. Now you are in charge. Although you know a lot about the program, you suddenly feel unprepared to actually run it. Much has changed in the educational environment since you began your residency. Your program is successful, but it is not without its challenges.

**How can you prepare yourself for this job? How can you help your program to move into the future?**

## The challenges and rewards of being a program director

The role of program director (PD) can be a fulfilling and enjoyable one. It enables individuals to experience an important administrative role while remaining at the forefront of clinical medicine and education. It allows for the advancement of an academic career and provides the opportunity to pursue leadership in the field of education. It may serve as a stepping stone for those who wish to advance in the local university or hospital structure or volunteer for roles at the Royal College of Physicians and Surgeons of Canada. It also provides an opportunity to provide meaningful input into the lives of those who will eventually be providing care to us.

A program directorship is a position of leadership. The roles and responsibilities may be new and somewhat foreign to individuals who take on the role early in their careers. In addition to ensuring regulations and policies are adhered to, they must advocate for trainees, faculty and processes. They are also expected to provide exceptional patient care and be an extraordinary role model in both the clinical and administrative realm. This all takes place in an extremely complex system that is constantly changing. Rules are dictated by certifying colleges, licensing colleges, universities, hospitals, departments, funding bodies and others. At times the rules seem counterintuitive and unhelpful and they may not appear to be applicable to all situations.

The practice of medicine has changed for all of us since we completed our training, and it will continue to change for both us and our trainees. Our training programs must assist our residents to acquire the knowledge, skills and attitudes they need to enter into unsupervised practice and face the challenges that arise as the practice of medicine continues to evolve at both the specialty-specific and global level. The teaching and assessment of trainees are also changing, as are accreditation processes.

Some changes are predictable and some are not. Some will occur across an entire system and others will occur at a level closer to the domain of the PD. Several recently released documents provide an indication of some of the changes that may be on the horizon. The Royal College has developed a series of white papers (now branded Competence by Design) addressing issues associated with the delivery of good medical education (available at [www.royalcollege.ca/portal/page/portal/rc/advocacy/educational\\_initiatives/competence\\_by\\_design](http://www.royalcollege.ca/portal/page/portal/rc/advocacy/educational_initiatives/competence_by_design); Textbox 2.1). The Future of Medical Education Postgraduate Project released a wide-ranging report in March 2012 that outlines the challenges facing medical education in Canada and recommends future directions.<sup>1</sup> Maximum duty hours, patient safety and issues of resident fatigue and health need to be addressed without sacrificing the provision of exemplary health care to patients and vitally important services.<sup>2</sup> Simulation and learning outside the clinical context are a reality and will continue to be an important part of medical education. We are living in a globalized world in which health care teams contain members with very diverse backgrounds, and we must prepare for an increased focus on practitioners' wellness. As PD you will have the ability to lead and influence, rather than react to, the changes that must be made to respond to the challenges facing postgraduate medical education.

### Textbox 2.1: White paper series on the future of graduate medical education

- » addressing societal health needs
- » generalism: achieving a balance with specialization
- » diversified learning contexts
- » the resident's dual role as learner and service provider
- » professionalism
- » just culture of patient safety
- » competency-based medical education
- » assessment
- » faculty development re-imagined
- » the continuum of medical education
- » the clinician scientist

## Competency-based medical education

Although the CanMEDS framework is based on the concept of competency-based medical education (CBME), momentum is only now building around this approach in medical education. **Competency**, defined as “an observable ability of a health professional,”<sup>3</sup> can describe any level of ability from novice performance to mastery. However, it is sometimes interpreted incorrectly as meaning simply “adequacy.” This causes consternation because we all want to aim for excellence in practice, rather than just adequacy. However, CBME is predicated on defining both the fundamental competencies and the acceptable level of performance for a given situation (e.g., promotion from one level to another within a program versus impending independent practice). Another principal philosophy behind CBME is that learning experiences for trainees are tailored to allow the trainee to achieve competent performance toward desired outcomes. Hence, variation in trainees' abilities means that tailored learning experiences may be different between individuals and can be delivered differently in programs across the country.

In a completely CBME program, residents would be promoted after successfully demonstrating competent performance of outcome-based objectives. In contrast, in traditional time-based curricula they are promoted after being exposed to typical content for a given time period on a given rotation. A hybrid model would ensure that time is built into the system for maturation of the clinical reasoning processes and for trainees to experience responsibility in service provision. A CBME curriculum will add flexibility to the training as well as to individual trainees' experiences by taking advantage of the various experiences a program can offer to help a trainee to achieve competence. The historic and common practice of creating a template of program rotations and fitting trainees into it is convenient. However, the order and year of most clinical training experiences (with the exception of the senior resident role) are not proscribed by the Royal College. Therefore, as a PD, you have many opportunities to move the training path in a more trainee-centred, competency-based direction. If you are uncertain whether particular experiences you wish to add and other changes you wish to make will meet current Standards of Accreditation, you can seek support and guidance from your accrediting college.

A good way to begin to move toward CBME is to review definitions of and current thoughts on CBME either in the Royal College white paper series mentioned earlier or in the collection of articles on CBME published in the August 2010 issue of *Medical Teacher*.<sup>3</sup> Given that postgraduate trainees have dual roles as both learners and care providers, opportunities abound for innovation. For instance, learning does not need to occur in lecture halls, in small groups or at a desk with a textbook. Instead, encourage your faculty to turn every clinical encounter into a two-way learning experience for themselves and the resident. Short, concise “pearls” in the clinical setting are as helpful as exhaustive lectures and very much appreciated by the trainee. Encourage trainees to reflect upon their activities. Clinical activity often perceived as “service only” or “scut” work can, instead, generate valuable learning insights in all of the CanMEDS Roles if faculty who have an interest in teaching the Roles are at hand.

## General advice on how to approach your job as program director

Our goal is to train residents to enter unsupervised clinical practice. The structure of the residency program helps us to organize the elements needed to achieve this goal. As you have no doubt seen in your own practice, we learn from the changes we experience and from the way we address those changes. Indeed, competence in the CanMEDS Scholar Role requires a commitment to lifelong learning. The **process** of learning from, coping with and addressing the complexities of practice is important for residents to learn. Therefore, do not hesitate to involve your residents in decisions you have to make about your own practice; think aloud, as this will allow them to understand and emulate your processes when they are practising on their own. Remember that every patient encounter is also a teaching opportunity. It does not need to be exhaustive, but **explicit** role modelling (pointing out what it is you are doing and how it relates to a CanMEDS Role) and **explaining** decision making (identifying decision-making nodes that require choices and solutions and how you weigh and combine factors to come to a decision) can be some of the most effective teaching techniques as you conduct your clinical business. Engage your faculty in the teaching of residents and be sure that feedback is provided to them. The excellent ones will be thanked for their hard work and those who have areas of weakness can be helped to improve.

When you become a PD, you become a governor but not necessarily a guardian of a program. That is, you will guide your program and see to its welfare and future, but you will not protect and preserve its current state. There are many traditions in the teaching of medicine, some good and some bad, which become ingrained in local training programs. Some of our processes were designed to address yesterday's problems and it will take vision, reflection and good judgment to understand which of these deserve to be challenged and which of them contribute to the stellar aspects of the program.

When changes are requested by either faculty or the residents, reflect on what is good for the patient and the program. Try not to scuttle an unworkable idea entirely; instead, keep its good points and dispose of its bad ones. If you are too combative and rigid you may not achieve anything except resentment among your team members. Help those who suggested the change to craft their idea into a more workable form so that they learn from the process and are empowered to bring forward additional suggestions in a collaborative, collegial atmosphere.

Keep the outcome in mind; a competent and safe trainee who is ready to enter practice and is able to address his or her ongoing educational needs is our goal. The route to that goal is not the same for everyone, but the outcome should be the same.

Accept the realities of the time. The delivery of medical care has changed, the practice of medicine has changed and the attitudes of many people, including ourselves, have changed. It is not enough to maintain the status quo or the old ways of doing things. Society needs and expects us to continually improve the delivery of health care and therefore to organize medical education so that our learners are good at identifying the need for change and developing better ways to practise.

We have a responsibility to the public and to the profession to set and maintain national standards for specialty medicine and provide assurance that they are being met. The Royal College is the vehicle by which that responsibility is made explicit. The programs and their faculty uphold the standards while training new cadres of doctors. Collaboration between the Royal College and the residency programs across the country, including good communication and feedback, is paramount in ensuring that we meet our responsibility.

## Challenging issues you will face as a program director

### Time management

There is never enough time in the day or month to accomplish all that you want to do. The best time for you to develop a full understanding of the program director's role and the time commitment required is before you take on the role. The next best time is right now. The support available to you will vary depending upon the structure of your university and department and the size of the program. Many smaller programs are very capably run from the PD's clinical office whereas larger ones require a greater infrastructure. Do not be afraid to share resources (both educational and administrative) across a number of smaller programs or to participate in the activities of larger programs. Your PD colleagues can help you to brainstorm ideas and can offer practical, local tips. Ask for their advice, and save yourself the trouble of reinventing the wheel. You may also find the Royal College's *Time Management Guide* helpful.<sup>4</sup>

Some of your tasks as PD can become part of your program's routine. The residency program committee is required to meet at least four times a year, career review meetings must be conducted with residents, you should liaise with other programs regarding rotations, you will need to prepare for CaRMS (Canadian Resident Matching Service) interviews and your program may also have traditional events such as welcoming or graduating social events and research days. Book all these events and tasks well in advance so they do not overwhelm you and you are not scrambling to find time at the last minute. Decide which of the events you will attend and delegate someone to represent you at the events you will miss. Communicate your expectations regarding attendance to your delegates ahead of time and debrief with them afterward. When you schedule time for events, don't forget to allocate enough time to complete any paperwork and tasks arising from the event.

## Assessment

Many view success on the final summative Royal College examination as the ultimate goal of residency and a marker of a qualified doctor. To facilitate the growth and learning that will lead residents to success on the summative assessment, however, formative assessments should be conducted on a regular basis throughout the program. Even the very best residents benefit from feedback. However, the implementation of a programmatic system of assessment may prove a challenge. If you establish requirements for regular formal assessment, you will also need to ensure that trainees receive timely feedback on their learning trajectory. Deviations from the desired or expected path are much easier to correct early, and the help will be appreciated by the trainee. Ensure that assessment encounters are well documented, as these will help the trainee and possibly also the trainee's next teacher. Many formal assessment tools have been described, but no single method will cover all requirements. Today's assessment experts feel that multiple smaller assessment experiences are more reliable, not to mention more helpful, than larger, more formally structured events. Assessment is discussed at greater length in Chapter 12 in this book.<sup>5</sup>

## The learner in difficulty

Trainees have a passion for constant improvement. Most need a little guidance to determine what areas they need to focus on, and some need help finding solutions to weaknesses. You will occasionally face the problem of a trainee who "just doesn't get it." Dealing with such trainees can be quite problematic in our typically polite society. At times a difficult conversation must be held. When this need is identified, do it — and do it soon. Immediate attention to the problem is important for both the trainee and the program. When you meet with the trainee, be specific about the problem, seeking his or her perspective on the issue, identify areas requiring improvement and set out a plan for resolution. If you clearly state the specific behaviour changes that are expected and the milestones that must be met, there will be a greater likelihood of success. A global deficiency can sometimes be made to appear much less daunting if it is broken down into its components (the CanMEDS framework<sup>6</sup> is a wonderful

tool in this regard). The difficult conversation need not be long but it must deliver a clear message. At times a prepared script will be your best friend. These problems require meticulous documentation and follow-up. For additional information on handling residents in difficulty, see Chapter 14 in this book.<sup>7</sup>

## The difficult faculty member

At times the performance or attitudes of individual faculty members will be problematic. In some cases, they can be your greatest resistors as you institute changes. This can represent a challenge for PDs who may not feel that they have the authority, seniority or capacity to address the issues. For example, new PDs may feel unable to address affectively charged situations when they involve faculty who were recently their supervisors. You may need to seek advice or assistance from your department head, your chair or the postgraduate office in these instances, and you can develop your ability to meet these challenges by reading two books on crucial conversations and crucial confrontations.<sup>8,9</sup>

Some issues can be solved with simple conversations whereas others will require greater intervention. It is important to address significant issues right away as they usually intensify instead of dissipate if left alone, and addressing them later is not only difficult but awkward. Consider that disruptive attitudes and behaviours may be markers of some negative, unforeseen consequences of changes that were instituted that may only have affected those closer to the teaching interaction or those who work at different sites or in different contexts from the PD. The first step is to ensure that faculty members are aware of the issues and the concerns they are causing. Next, allow faculty members to present their views and concerns, to identify root causes for their behaviour and correct any misperceptions that may exist. Further steps will require your thoughtful reflection and planning and will depend on the context of the situation and the response of the faculty member.

Teaching is core business of the residency program and your faculty members will make the program shine. Rewarding productive and effective teachers is one way of promoting improvement in the teaching ranks.

Teaching awards are meaningful and can generate some friendly competition. However, if you find that certain teachers are consistently winning your program's annual teaching awards, promote them to the rank of master teacher and indicate that this rank is not eligible for the annual awards. If you regularly gather data on teaching performance it will help not only those teachers who wish to improve to focus their efforts but will also support the actions that may be required for those in deeper difficulty.

## Accreditation is coming

The regular cycle of Royal College accreditation visits ensures a high level of quality assurance in Canadian training programs. The standards for accreditation for all programs are freely available on the Royal College's website; they are set out in a suite of documents for each specialty (Objectives of Training, Specialty-Specific Standards of Accreditation, and Specialty-Specific Training Requirements; available from [www.royalcollege.ca/portal/page/portal/rc/credentials/specialty\\_information](http://www.royalcollege.ca/portal/page/portal/rc/credentials/specialty_information)).

### Flexibility for optimal training outcomes

There is significant leeway for individual programs to vary the order and context of rotations as long as the objectives are met. In fact, rotations can vary for individual trainees, although some programs have a fairly rigid structure of rotations. There may be benefit in having a set pattern for trainees to follow as they progress through your program, but in many cases you have the discretion to vary this path as you see fit (e.g., in the case of transfers or remediation).

As a PD, you have substantial flexibility in how to respond to requests of individual trainees for a transfer. In these cases, there are mechanisms to allow for the granting of specific credit that may involve accepting overlap of training between specialties, credit for postgraduate medical education other than specialty residency training (such as family medicine training or clinical research), and even double-counting of credit, subject to the recommendation of your postgraduate dean and the approval of the corresponding specialty committee of the Royal College. These actions are dependent upon the requirements set out in the Specialty-Specific Training Requirements of the programs involved.

It is a good idea to approach the Credentials Unit of the Royal College for more information and clarification of current policies if this situation presents itself. An early request for assessment of training can indicate what credits can be allowed.

Residents may request a variety of additional experiences to help them achieve their career goals, and it may be possible to accommodate these within your training program while still meeting the Royal College's requirements.

If you review the standards for your specialty annually there will be no need to panic at the time of the on-site survey. However, reality is such that an impending accreditation visit precipitates reflection and the institution of change. You can use this time to tidy up outstanding issues and conduct an overall review of your program. The task of preparing for an accreditation visit will always be easier if you keep the paperwork up to date. Your residency program committee should conduct an annual review of its functions to ensure that it is carrying out all of its work well.

One frequently heard concern is that a program will not be accredited if the residents are not happy. This is not the case. Morale in the program will vary; the main issue is not how happy the trainees are but rather whether the leadership of the program provides a mechanism for residents to bring forward their concerns and then acts upon them responsively. See Chapter 17 in this book for additional information on accreditation.<sup>10</sup>

## Where will this lead?

A program directorship is a fulfilling role that brings you closer to both faculty and students. It also gives you insights into the inner workings of both your department and your university. You will face challenges, but you will always be able to find support to help you to address them: internal support may come from your department and postgraduate medical education office, specialty support may come from your fellow PDs and you can find support at the national level from the Royal College's staff and volunteers.



## Tips

- » Embrace the advantages that come from being a PD. Enjoy the ride and leave your mark.
- » The position of PD facilitates academic career advancement.
- » A PD is a leader in medical education; the position requires you to learn and demonstrate good leadership skills.
- » A successful PD will change and improve the residency program.
- » As PD you will need to hold difficult conversations. Prepare yourself.
- » Collaborate – with your chair, your postgraduate dean, the Royal College, your specialty committee, your residents, your fellow PDs and anyone else you can reach.
- » Don't spend your valuable time developing resources if something suitable already exists. Use your network to borrow and lend.

## Case resolution

When the tachycardia settles and reason returns, you settle on a course of action. First, you decide to seek some advice from a mentor. You place a phone call to the postgraduate office, which proves to be an excellent step. The postgraduate dean and administrator book a meeting to review your responsibilities, and the postgraduate dean makes a point of introducing you to the other PDs at the monthly postgraduate medical education meeting. Next, you discuss your program with your colleagues at the annual specialty society meeting and find that some of the challenges you are facing are shared by others. When you go to the department chair to discuss possible solutions, you find that you have a great deal of support. You also call the Royal College to seek clarification on the requirements, which leads to an invitation to the annual meeting for new PDs.

After this meeting you volunteer to participate in a survey, and you develop a greater sense of the empowerment and joy of being a PD.

# References

- <sup>1</sup> The Future of Medical Education in Canada Postgraduate Project. *A collective vision for postgraduate medical education in Canada*. Ottawa: Association of Faculties of Medicine of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec, Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.afmc.ca/future-of-medical-education-in-canada/postgraduate-project/pdf/FMEC\\_PG\\_Final-Report\\_EN.pdf](http://www.afmc.ca/future-of-medical-education-in-canada/postgraduate-project/pdf/FMEC_PG_Final-Report_EN.pdf)
- <sup>2</sup> National Steering Committee on Resident Duty Hours. *Fatigue, risk and excellence: towards a Pan-Canadian consensus on resident duty hours*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013. Available from: [www.residentdutyhours.ca/final\\_report.php](http://www.residentdutyhours.ca/final_report.php)
- <sup>3</sup> Frank JR, Snell LS, ten Cate O, Holmboe ES, Carraccio C, Swing SR, et al. Competency-based medical education: theory to practice. *Med Teach*. 2010;32(8):638–645.
- <sup>4</sup> Patel H, Puddester D. *The time management guide: a practical handbook for physicians by physicians*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012.
- <sup>5</sup> Hamstra SJ. Designing and selecting assessment instruments. Chap. 12. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>6</sup> Frank JR, editor. *The CanMEDS 2005 physician competency framework: better standards, better physicians, better care*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2005. Available from: [www.royalcollege.ca/canmeds](http://www.royalcollege.ca/canmeds)
- <sup>7</sup> LeBlanc C, Beatty L. A resident in difficulty, or a difficult resident? Chap. 14. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>8</sup> Patterson K, Grenny J, McMillan R, Switzler A. *Crucial confrontations: tools for talking about broken promises, violated expectations, and bad behavior*. New York (NY): McGraw-Hill; 2004.
- <sup>9</sup> Patterson K, Grenny J, McMillan R, Switzler A. *Crucial conversations: tools for talking when stakes are high*. 2nd ed. New York (NY): McGraw-Hill; 2011.
- <sup>10</sup> Bandiera G, Dagg P. Accreditation. Chap. 17. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.

# Collaborating for success:

## *an essential skill for a medical educator*

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## Objectives

**After reading this chapter you should be able to:**

- » identify tasks that require or benefit from a collaborative effort
- » map out the techniques and collaborative processes that you can use to accomplish your tasks
- » list those with whom you can collaborate and how they can contribute to your tasks

## Case scenario

You usually blaze through tasks. However, every time you try to draft the curriculum map (blueprint) for your residency program you feel lost, and you end up switching tasks in frustration. You have tried to search the literature but do not really know where to look, and you find it difficult to interpret what little information

you do find. You feel an uncharacteristic lack of confidence in your ability to proceed. For example, you do not know which rotations best suit which parts of the curriculum. Not only do you have trouble with the content of the task, but you also do not know how to go about getting it done. You are starting to think that perhaps you are not ready for these administrative challenges. You are used to completing tasks yourself, often finding it easier to go solo than to go through the trouble of involving and working with a team. However, in this case, **you realize that you will have to get help.**

## Background and context

Collaboration is complicated. To be an effective PD, an individual must have a conglomeration of people skills and must pay attention to how he or she interacts with others, with constant reflection and adjustment. There is no substitute for effective interpersonal skills. However, various forms of collaboration are often not taught in undergraduate curricula or residency programs, and trainees may not have the opportunity to practise collaborative skills to the point of competence. As a result, new PDs, who now bear responsibility for running a program, usually need to consciously work on their competence in this area.

A PD heads an increasingly complex process of medical education that

*“must assist our residents to acquire the knowledge, skills and attitudes they need to enter into unsupervised practice and face the challenges that arise as the practice of medicine continues to evolve at both the specialty-specific and global level.”<sup>1</sup>*

To keep up with the changes both in the educational sphere and in their clinical field, PDs must work harder and brighter and develop good collaborative skills and processes: they will need to call on collaborators to help them with the work of program governance through repetitive challenges and over a long period of stewardship.

Three concepts are important to understand at the outset. First, collaboration is not the same as delegation. A collaborative process involves sharing the work, the responsibility and the benefits of running a program and takes advantage of the myriad strengths that a collaborative team can bring to any task. A good collaborative effort can be synergistic in that multiple parties benefit from the collective wisdom of the group and duplication of effort is reduced. Second, collaboration is neither magic nor a panacea; in fact, in some cases it can be counterproductive. Counterproductive collaboration can occur when the efforts of more participants will not significantly affect the outcome in terms of accuracy, validity, meaning, effectiveness or quantity. In such cases, the longer timelines resulting from scheduling difficulties and extended discussions, the greater expenses in technology and support staff resources to coordinate the process, and other “costs” of collaboration will outweigh any benefits that collaboration might provide. Third, the investment in collaboration may produce benefits that are only seen later. For instance, a PD may correctly feel that a small group of wise people can design a change initiative, but if he or she does not involve a breadth of stakeholders it can be difficult to secure the broad acceptance needed later for implementation of the change. Another common late benefit of collaboration is the reasonable expectation that others will collaborate to help you if you have already demonstrated a willingness to collaborate with them.

Collaboration can be defined as working “jointly with others or together especially in an intellectual endeavor” or cooperating “with an agency or instrumentality with which one is not immediately connected.”<sup>2</sup> Collaboration is so broad in scope and ubiquitous in practice that it has been elevated to the status of meta-competence and given a place as an Intrinsic Role in the CanMEDS framework. **Participating in an interprofessional team** and **working with other professionals to prevent, negotiate and resolve conflict** are the two key Collaborator competencies in the CanMEDS framework.<sup>3</sup> These two key competencies, as well as many of the elements of the Role, aptly describe the competencies of collaboration as applied to medical education and program leadership.

PDs must strategically deploy collaboration competencies in all areas of their professional activities, including their clinical, administrative, research and educational work. This chapter will describe how and where collaboration may be important in running a residency program, discuss some collaboration techniques that you may find useful and highlight some important collaborators with whom you should consider working.

## Literature scan

Most of the literature on collaboration in all aspects of the practice of medicine has been published recently, but elements of collaboration have been investigated widely and for much longer in domains outside medicine.<sup>4</sup> Many articles in medical education deal with the CanMEDS Collaborator Role and how to teach it to residents or how to assess residents’ competence in collaboration. Medical articles on collaboration and leadership generally pertain to clinical work but contain concepts generalizable to other situations.<sup>5,6</sup> You may therefore find it useful to scan the non-medical literature for concepts of collaboration. As you uncover the general lore on collaboration that is often hidden in leadership books,<sup>7,8</sup> we caution you to use critical appraisal skills in your explorations and to choose references that are relevant to the particular challenge you are researching. A concept that requires special mention is emotional intelligence, which addresses the non-cognitive side

of dealing with people.<sup>9,10</sup> However, we will limit our discussion in this chapter to the two key collaboration competencies in the CanMEDS framework.

## Working effectively in a team

Groups are not the same as teams. A group consists of people who have some common identity — but that could describe the people at a bus stop. Individuals in groups may work together, but they are not necessarily all working toward the same goal. They perform tasks that may move the group forward or advance their own agendas. Groups do grow and group members develop relationships as they work; groups may morph into teams, especially when a particular incident or event triggers that change. There are many definitions of the word *team*, but most suggest that a team consists of people with diverse skills and a coordinating leader who come together to work for a common goal.<sup>11</sup> A medical educator will belong to some groups and some teams. However, the ability to work well in teams is one of the major skills that any medical educator needs. It is a particularly important skill to the PD who must run a residency program committee (RPC) and serve as the main liaison between the residency program and other departments, hospitals (and other practice environments), the postgraduate office, the specialty committee and the Royal College of Physicians and Surgeons of Canada. Good PDs will develop collaborative relationships with a variety of people, both in formal committees and in informal, perhaps short-term, working partnerships. Leadership skills for medical educators can be found in the literature or in short courses such as those offered by the Canadian Association for Medical Education's Canadian Leadership Institute for Medical Education (CLIME).

The RPC is a natural focus of teamwork for each PD and is one very specific and explicit example to use in this discussion. However, PDs work on many other teams and committees and in different capacities. Hospitals may include PDs in teams that plan how residents work and learn in clinical settings. A PD may provide program representation on an internal research committee or be a resource person on a team that oversees simulation in the residency program. The PD is usually the chair of the RPC; as the team leader, he or

she must be able to clearly define the overall function of the RPC and keep this definition as the guiding principle behind the team's work. The PD must show confidence and be able to inspire the other RPC members to complete the team's work. The Royal College's guidelines about the constitution of the committee give you some latitude to appoint individuals whose skills will complement those of other RPC members in such a way that the committee members can together fulfill the function of the RPC. The guidelines make it easy to ensure diversity in representation and skill, but you must also ensure that the people chosen for the committee will work well together (we should note, however, that some of the membership of the RPC may be fixed by position — for instance, the chair, the elected resident representative, the clinical head-of-service — instead of appointed by the PD). One of your key responsibilities in heading this diverse committee is to ensure that each member understands and respects the skills and responsibilities of the other team members. The myriad functions of the RPC may require you to delegate or assign leadership to other individuals, and in those instances you may function as a member of a subgroup with specific skills. To collaborate well, you must be a savvy and flexible team member who can ask another team member to take the lead or offer a particular subset of your skills to suit the needs of a given team.

As team leader, you must make sure that the team adheres to a reasonable schedule and you must keep track of the work being done. To carry out these important managerial functions effectively, you must be able to “read” the members of the RPC as they participate in the meeting and must understand the issues of group dynamics. The RPC will naturally have some membership turnover, and there will be some senior members and some junior members. Some of the members will have known each other for a long time, and other members will be new to everyone. This mixture results in complicated group dynamics. To ensure appropriate collaboration, you may need to build bridges between individuals and, in some instances, help to flatten the hierarchy between senior members and junior members. It will require some skill to be able to identify the processes of forming, storming, norming and performing that are typically used to describe group

dynamics in complex teams such as the RPC.<sup>12</sup> If you are able to identify some of these processes, even within subgroups, you will be able to delegate appropriately and to bring together members who can work together easily, who may complement each other's skills and who may challenge each other appropriately without developing paralyzing conflicts.

As a liaison between the residency program and the rest of the world, you can also be considered to be a team member in wider circles. You will be required to sit on committees in the postgraduate department and to communicate and collaborate with peers in other disciplines and departments. Each PD becomes a corresponding member of a specialty committee of the Royal College and may assume a leadership role within that committee. The Royal College's work benefits from the voluntary participation of its fellows. As leaders in education, PDs are encouraged to participate in this work. Collaboration in these wider circles benefits both you and your program. You will gain invaluable perspective, insight, skills and connections that will help you to situate your program better on the national stage.

## Managing conflict

Conflict can be defined as tension between individuals, organizations or societies. Conflict is a complex construct that is encountered in many spheres of human interaction and may develop in relation to people, substance or content, or processes. Much of what has been written in the medical literature about conflict describes clinical situations and the medical work environment, but discussions are becoming richer and the non-medical literature is being referenced to access conflict management techniques developed in the business world.<sup>15-16</sup> You can decide on the right literature to consult (and sometimes the right advice to try) by carefully considering the source of the conflict that needs to be managed. Conflict may occur when<sup>17</sup>:

- » a party is required to engage in an activity that is incongruent with his or her needs or interests;
- » a party holds behavioural preferences, the satisfaction of which is incompatible with another person's implementation of his or her preferences;

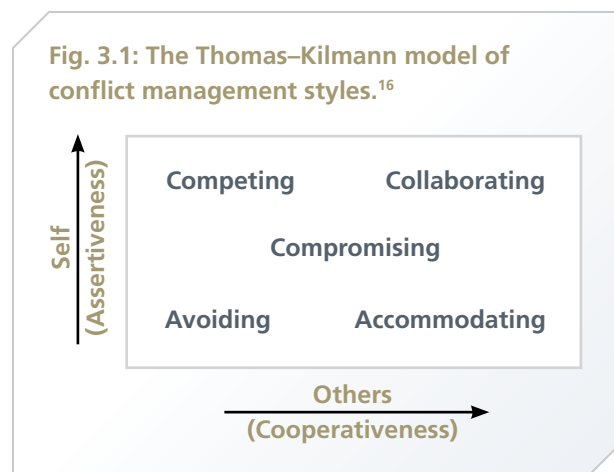
- » a party wants some mutually desirable resource that is in short supply, such that the wants of everyone may not be satisfied fully;
- » a party possesses attitudes, values, skills and goals that are salient in directing his or her behaviour but are perceived to be exclusive of the attitudes, values, skills and goals held by the other(s);
- » two parties have partially exclusive behavioural preferences regarding their joint actions; or
- » two parties are interdependent in the performance of functions or activities.

Several concepts about conflict are well accepted and described in the medical and non-medical literature. This chapter will describe one valuable concept (affective versus substantive conflict) and one conflict management approach (the Thomas-Kilmann model) to whet your appetite for this topic. A good preliminary concept is the classification of conflict into two broad categories. Affective conflict arises from an emotional basis and is different from substantive conflict, which arises from task or content elements. Affective conflict is almost always detrimental. It can be sparked by strongly held opinions, differences in personality and differences in ethical beliefs. Strong emotions can blind the parties involved to the harm that conflict causes and to the available solutions. Affective conflict situations generally worsen over time if they are not addressed and resolved. If PDs themselves engage in affective conflict, they need to be able to reflect, identify the source of their problems and seek solutions to their own situations. PDs will more commonly need to help others avoid these types of situations by choosing people (on the RPC, for instance) to work on tasks who are not likely to have these problems and by finding ways to defuse these problems when they arise. Consulting relevant references will help you to understand the principles and techniques of affective conflict resolution; to achieve this important competence, you will need to pay careful attention to practising the techniques.<sup>9</sup>

Substantive conflicts can also be destructive. However, in addition they are felt to be the instigators of change, of learning and of improvement. In general, without

a conflict situation arising or being generated on purpose, matters simply slide on in their usual groove, undisturbed but unimproved. Perhaps you may think this is reasonable, especially during prosperous times. However, as the rest of the world continues to change and improve, a high-quality residency program that remains stable risks becoming less impressive both relatively and absolutely. Current thinkers describe conflict **management** rather than conflict **resolution**: we should not aim to remove all conflict but instead we should recognize when conflict is helpful. A PD, collaborating as a participant on a team, may stir things up by being challenging and instigating conflict. When collaborating as a leader, you may need to provoke others into conflict. In the RPC, you will always have to manage the level of conflict by keeping conflicts in the realm of constructive discussion and not allowing them to escalate to shouting matches or impasses. Do not underestimate the benefit of educating your collaborators (through faculty development) about what conflict is and how to manage conflict in a group.

The Thomas-Kilman model of conflict management<sup>16</sup> is useful, widely accepted and easy to understand and apply. It organizes five styles of conflict management along two axes (Fig. 3.1). The axes represent the degree to which the style represents or advantages the self (i.e., one's assertiveness), or the other party (i.e., one's cooperativeness) in the conflict. It is thought that we each may have a default style of conflict management but that we need to understand all the styles so that we can choose and apply the appropriate style to the situation at hand. They are briefly described below.



- » **Competing** is a style that is useful when there is much to lose in the conflict, when you must make a difficult or important decision, when you have to “get on with it” or when you feel strongly that you have to defend an ethical position. You will have to accept the consequences of the other party losing this conflict. This style is high on the self-axis, as it relies on asserting your position through your own actions, and it is low on the others-axis as the interests and outcomes of others are not main considerations in the process.
- » **Accommodating** is at the opposite end of both axes. It is useful when you can afford to back down or recant your position, you realize that the other party's position is better, or the issue is one for which you feel it is important to be of service to others. Strategically, this concessionary style of managing a conflict may allow you to seek the other party's reciprocal concession either on a different issue that is more important to you or when you collaborate with them again at a later time.
- » **Avoiding** a conflict situation is not often useful, but this style can be important in preventing time from being wasted when your position is not the strongest or in allowing you and the other party to defer a matter that deserves more thought, cool down over an emotional issue, deflect discussion on a trivial or distracting matter or avoid negative repercussions that may come from insisting on your position.
- » **Collaborating** allows you to get a better understanding of a situation from all sides and fosters consensus (true acceptance by all parties). By collaborating, you demonstrate that you understand the importance of including others in reaching the best solution. Collaborating is often called the win-win style.
- » **Compromising** sometimes fixes conflicts with temporary solutions, stretches the latitude in each party's position to allow agreement, ends stalemates or gives all parties some concessions to their strongly held positions.

Conflict situations are dynamic, may be complex and rarely fall squarely into the neat boxes of a model. However, by using a model such as this one, you can improve your understanding of a situation and can employ the experience-driven skill necessary to reason through the process and choose the best styles with which to deal with conflict.

## Best practices

As a PD, how should you collaborate in the process of running your residency program? Unfortunately, there are no formulaic answers. However, given that collaboration is a people skill, it is helpful to understand with whom you should collaborate and what your collaborators can offer.

### Program assistant

The program assistant (PA) will be your closest collaborator and will be the best link between you and your residents. PAs are the engines that power programs. They know all the parts of their program and all the events and duties associated with it, and they keep the program on track. There is much that they can do to schedule tasks, organize the regular business of running the program and document the program's progress. An established PA who welcomes a new PD is able to ease that PD's transition into his or her new position. PAs tend to "own" their programs, taking personal responsibility for and pride in running the best possible program and graduating the best residents, just like PDs do. Therefore, the PA will know the pulse of the program and can function as an additional channel between you and your residents. Because they can develop excellent relationships with residents, your PAs can identify problems early and help solve them or refer them to you as necessary. You and your PA should collaborate openly to determine the balance of responsibility and autonomy in your working relationship.

### Residency program committee

Much of the work of running a program must be done by those involved with the program. Therefore, the residents and staff in your program are natural allies. Your RPC will necessarily consist of members who hold particular positions, such as research coordinators and

elected residents. These members bring special value to the committee and have immediate stakeholder interest in the program's outcome. As they contribute to the formal processes of collaboration that you develop for your RPC, they will develop a sense of pride in accomplishments that improve the program. If you have the opportunity to select some or all of the members of the RPC, bring together the members of your program whom you feel are the most valuable collaborators. Chapter 8 in this book outlines some benefits of collaborating with your RPC team.<sup>18</sup>

### Other members of your program

As you settle into your PD role, make a note of the members of the department (both faculty and residents) with unique skills or who have shown special interest in helping to do the work of running the program. Ensure that they have ways to contact you easily when they need your collaboration to do something innovative and that you keep them in mind when you have tasks to do that will benefit from their expertise. You will also come to know which faculty have a talent for mentoring your residents and which ones are great teachers. These collaborators can help you with difficult residents and with residents who need extra help to get through the program. Recent graduates, some of whom may now practise near your institution, may want to collaborate with the program by supervising residents at their community sites. PDs at institutions with distributed education should ensure collaboration with educationally engaged individuals at distributed sites. This will help residents at those sites to benefit from the unique educational opportunities that may exist and to have the same quality of education that they would have had at the central sites of the institution.

### Departmental chair or division head

Your chair or division head is usually your immediate boss. This valuable collaborator is responsible to the institution for the overall running of your program and the educational, research, clinical and administrative outcomes of your program. The chair will liaise with others at a high level in the running of the institution and may be the first person to inform you about matters that concern your program in your institution. You may need



to take direction from and be responsible to the chair, but the chair may in turn be able to allocate much-needed resources or advocate for your program or your program initiatives. It is useful to have regular, even statutory meetings with the chair to discuss common issues and to identify strategies to resolve problems in the program.

## Other program directors

The colleague who most recently held your position may be a rich source of advice about the program and will often have a great interest in your ideas to improve the program. Former PDs will know what has been tried and what will or will not work. They can give you valuable historical information and introduce you to other collaborators who will be valuable to you in your position. Keeping your predecessor on your RPC for a year to help with transitioning is a good way to allow that individual to continue to help with the program.

You will need to collaborate locally with other PDs on two levels: in your department if it includes several divisions of medicine, as departments of Surgery or Internal Medicine typically do, and in the faculty network at the university. Remember that these PDs have similar departmental, institutional or geographic challenges such as defining goals and objectives for rotations, determining resident quota allocation, resident scheduling, and developing common policies. Much of the work and many of the processes of running a residency program are standard, and if you form an alliance with your fellow PDs you will probably be able to do your job more easily. For instance, you can share the tasks of developing policies or teaching events (easily modifiable to be specialty-specific) for residents who need to meet the same educational objectives.

You can start the process of collaborating with PDs in your own department at departmental meetings that all of you already attend. It can also be easy to initiate collaboration with PDs in other departments in your school. Local PDs may have developed workshops or curricula that port over to your program easily, or they may have secured resources for those events at your institution so that you have an infrastructure with which to begin. Scan your local school news and electronic event broadcasts to find potential collaborators at your institution, and announce

your initiatives so that others may access and partner with your program too. Do not forget to secure advice and guidance from someone who has already blazed a trail in a direction that may be new to you.

## The postgraduate medical education office

The postgraduate dean and the postgraduate medical education (PGME) office can be a great support for, and a potent collaborator with, the PDs in your institution. PGME deans have significant experience in running educational programs, can offer advice and can advocate for your ideas and projects. Do not hesitate to seek a meeting with the postgraduate dean when you start your term as PD. It will ease future discussions about problems in your program if you have already developed an acquaintance. The PGME office will coordinate the internal review of your program and help prepare your program for external review. The PGME office will help with common issues of resident applications, assessment, discipline and remediation and will have standard policies in place to ensure that residents work safely and adhere to the standards of the institution. The PGME office is also responsible for maintaining the standards of the accreditation office of the Royal College. For efficiency, some initiatives common to all programs will already be organized through the PGME office.

## Hospital clinical administrators

It is important to ensure that your program collaborates and works well within the hospital systems in which it is housed. The clinical heads of departments may need to understand your program well and may benefit from inclusion in your RPC so that they can advocate for residency and education issues at the hospital level. Clinical heads of services can help to ensure that residents have similar or complementary educational experiences at their hospitals in accordance with the program's curriculum and rotational objectives for the residents. The executive committee or business meetings of your department offer an opportunity to communicate regularly both for you to inform them about the initiatives and requirements in the program and for you to be informed of issues that may have an impact on residency training.

## Specialty committee and regional clinical organizations

Your specialty committee can offer you the opportunity to collaborate with other programs across the country. For instance, committee participation may facilitate elective rotations in other faculties of medicine and establish common curricula for topics that are not easily accessible in your program. As a corresponding member of the committee, you will be kept current on the standards and guidelines to which your program must adhere and you will have the opportunity to help develop those documents. Involvement in the specialty committee will allow you to network with other PDs to share the work of developing educational programs that are of high and equal standard across the country. By being involved in local and regional clinical organizations you can strengthen your program's ties to good clinical practice, and you may be able to offer your residents opportunities to meet clinical leaders, prospective colleagues and employers.

## Specific resource providers

CanMEDS Intrinsic Role champions, research leaders, ethics consultants, medical educators, specialty experts, faculty developers and other valuable individuals can help you to meet your program's special needs. Many of these people serve as resources to the entire faculty; your PGME office can point you to people who can be helpful in the running of residency programs. As these individuals assist programs in the university, they develop local expertise, can serve as cross-pollinators of ideas and can help share work to prevent duplication.

## Summary

PDs are leaders in medical education who coordinate and rely upon the collective work of many people to run a successful program. The PD must be a skilled collaborator to engage and manage this collective process. Working in teams and managing conflict situations are key competencies for the PD to develop or hone. An inventory of those with whom the PD can collaborate and an understanding of what they offer will facilitate the collaborative process. Specific attention to collaborative skills should smooth the process of running a residency program.

## Tips

- » **Expect and manage conflict in collaboration.** Whenever you assemble a team, make sure that the members understand that there will be different skill sets, different points of view and different goals.
- » **Take the initiative.** Reach out to people who have the skills, experience or other assets that you need to get your work done. Because most people are busy, even those who oversee your domain (your chair, your division head, your chief) may not know when you need help and may not intervene on their own. Don't hesitate to ask them to help you directly with specific tasks or to help you develop the necessary capacity to do the work you need to do.
- » **Embrace differences.** Collaboration involves including people with a different viewpoint, interest or opinion in your process so that you can capture a broad range of ideas and skills.
- » **Look around to find others** who have dealt with the problem or challenge that you are facing and ask them to tell you their stories. Most of us are good at narrative learning, and the stories of others can be very instructive.
- » **Collaborate early.** Don't wait to ask for advice or help until you are stuck or surprised at the point you have reached.
- » **Collaborate with your learners.** They have a stake in the outcome of your work, have a right to be involved and are motivated to do a good job. Collaboration also allows them to practise their CanMEDS Roles.
- » **Collaborate with obvious partners,** such as people with common interests. For instance, surgeons and gynecologists train their residents to operate and can share the responsibility to develop and run operative simulation events.
- » **Collaborate to pool resources** and to decrease workload.

- » **Collaborate to build bridges** and develop your network. If you collaborate with others to help them reach their goals, they are likely to reciprocate when you need help in turn.
- » **Ensure that your collaborators understand** what they are getting out of the process: staff can use participation on the RPC for promotion and tenure; residents can gain opportunities to learn new skills, to network with faculty with whom they would not otherwise work and to participate in tasks or processes that may lead to publications or outcomes that help make their CVs more attractive.
- » **Organize your pool of collaborators** (e.g., create a dedicated list) so that you know whom to call and how they can help.
- » **Acknowledge the contributions** of your collaborators publicly so they can be rewarded for playing a part in the well-being of the program.

## Pitfalls

- » Do not collaborate for collaboration's sake. Some jobs don't require help or inclusivity. They are just work. If you cannot immediately write down good reasons to collaborate, then the job may be best done by a committee of one (you or someone you delegate to complete the job).
- » Do not initiate collaboration with others who either cannot work at your pace (i.e., others who work too quickly or too slowly) or cannot communicate at the frequency you need or meet when your group is available.
- » If the project you are working on requires content expertise, don't fail to include a collaborator with that expertise.

## Case resolution

As you consider how to go about creating a curriculum map for your program, you suddenly remember hearing something about this subject at the workshop for new PDs that you attended at the International Conference on Residency Education. A light bulb goes on.

You log on to the Royal College of Physicians and Surgeons of Canada's website and download the *Royal College Program Directors Handbook*. You find a chapter in the manual on how to write a curriculum map. As you flip through the book, you chance upon the chapter on collaborating and find some material that could be helpful. Perhaps, you think, this could be a collaborative process. You list the names of two other PDs at your institution who you know have addressed curriculum mapping. You send off an email to the chair of your specialty committee asking if any other programs have developed curriculum maps. You write up a little background paragraph on curriculum mapping, including some goals and objectives, and add this to the new business section of the upcoming RPC meeting. You decide to ask the site directors on the RPC to help assign the program's goals and objectives across the rotations, and you will ask the residents to help validate the process. Finally, you fire off an email to your postgraduate dean and ask if there is anyone with whom you can have an educational consultation to gain a better understanding of the application of curriculum mapping and to get some advice. After a little while, you smile.

"We can get this done together," you think.

## References

- <sup>1</sup> Harris KA. Creating the future for your program: sage advice about your first steps as a new program director. Chap. 2. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>2</sup> Merriam-Webster Dictionary. Definition of collaborate.
- <sup>3</sup> Frank JR, editor. The CanMEDS 2005 physician competency framework: better standards, better physicians, better care. Ottawa: Royal College of Physicians and Surgeons of Canada; 2005.
- <sup>4</sup> Hansen MT. Collaboration: how leaders avoid the traps, create unity and reap big results. Boston (MA): Harvard Business Press; 2009.
- <sup>5</sup> Nakai RC. Leadership in medicine. *McGill J Med*. 2006;9(1):68–73.
- <sup>6</sup> Strack van Schijndel RJM, Buchardi H. Bench-to-bedside review: leadership and conflict management in the intensive care unit. *Crit Care*. 2007;11(6):23.
- <sup>7</sup> Covey SR. *The 7 habits of highly effective people: powerful lessons in personal change*. New York (NY): Free Press; 2004.
- <sup>8</sup> Kouzes J, Posner B. *The leadership challenge*. 4<sup>th</sup> ed. San Francisco (CA): Jossey-Bass; 2007.
- <sup>9</sup> Goleman D. What makes a leader? *Harv Bus Rev*. 1998;76(6):93–102.
- <sup>10</sup> Goleman D. Leadership that gets results. *Harv Bus Rev*. 2000;78(2):78–90.
- <sup>11</sup> Richardson D, Glover Takahashi S, Nasmith L, Leslie K, Bandiera G, Paterson M, et al. *The CanMEDS train-the-trainer Collaborator faculty development program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2007.
- <sup>12</sup> Tuckman BW, Jensen MAC. Stages of small-group development revisited. *Group Organization Management*. 1977;2(4):419–427.
- <sup>13</sup> Weiss J, Hughes J. Want collaboration? Accept - and actively manage - conflict. *Harv Bus Rev*. 2005;83(3): 92–101,149.
- <sup>14</sup> Rahim AM. Towards a theory of conflict management in organizations. *Int J Conflict Manage*. 2002;13(3):206–235.
- <sup>15</sup> Hansen MT. Collaboration: how leaders avoid the traps, build common ground, and reap big results. Cambridge (MA): Harvard Business Press; 2009.
- <sup>16</sup> Thomas K. *Conflict and conflict management: reflections and update*. *J Organ Behav*. 1992;13(3):265–274.
- <sup>17</sup> Rahim M, Antonioni D, Psenicka C. A structural equations model of leader power, subordinates' styles of handling conflict, and job performance. *Int J Conf Manage*. 2001;12(3):191–211.
- <sup>18</sup> Webber EM, Walton JM. Running your residency program committee (RPC) meetings. Chap. 8. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.

# Becoming an effective postgraduate medical education leader

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## Objectives

**After reading this chapter you should be able to:**

- » describe strategies to facilitate an individual's transition into a new postgraduate leadership role
- » recognize the capabilities that are required in postgraduate education leaders and understand how to identify areas for personal development or support
- » appreciate the importance to leadership work of soliciting input from a range of stakeholders and considering diverse thinking

## Case scenario

You were recently selected to become the program director for your department's residency program. The program trains 86 residents at nine teaching settings, three of which are community settings. You were asked to apply for the position because of your noted excellence in teaching and your experience designing the communication skills curriculum for the residency program. The program has its strengths and weaknesses. At the last accreditation visit, the program was noted to have an inconsistent curriculum characterized by varied clinical experiences that are delivered in multiple settings. The residents raised concerns at the visit that had not been anticipated: they questioned whether they were receiving a sufficiently diverse exposure to patients and were concerned about the workload demands of services. As well, there is no apparent career planning or mentorship for residents, although the faculty insists that such activities occur informally. In addition, during the last resident site survey a concern was raised about harassment at a site that had previously been rated very highly.

## Background and context

In the Canadian health care environment, postgraduate education is often delivered in multiple settings in the community, in primary hospitals and in tertiary hospitals. The faculty members who deliver the postgraduate program often have clinical, administrative, research and other responsibilities, in these and other settings, that go beyond the training agenda. Their support can derive from multiple sources. Faculty and education leaders within postgraduate programs are typically not employees of, or directly accountable to, the postgraduate program. Residency program directors need to understand the complexity of these contexts, they must be aware of the loyalties and identities of faculty members and they must recognize the need for nuanced and relationship-centred approaches in influencing and effecting change in the program.

Novice program directors and leaders in other fields have historically been selected for leadership roles on the basis of their technical expertise, such as teaching skill. Such expertise, however, does not often prepare them for the demands and responsibilities of leadership. Although the outgoing program director can orient the incoming program director to the demands and settings for the job if they overlap in the position for a period of time, the new program director will still need to develop his or her own perspective and relationships to facilitate the educational agenda.

Hill's work on new managers indicates that new leaders often enter their roles believing myths and holding misconceptions about what it means to be a leader.<sup>1</sup> Our experience suggests that Hill's concepts are applicable to new program directors. She points out that new leaders may believe that they now have the formal authority and power necessary to implement their ideas. They can be preoccupied with control and compliance and may see their role as managing individuals on a one-on-one basis. They may believe that their key challenge is to make sure that things run smoothly. The reality of their role is that they have little formal authority; they need to recognize that authority is bestowed or earned and that their role

is interdependent with that of others. Although they may be preoccupied with compliance by others, what they really want is commitment from others. Their focus needs to be on leading groups to fulfill their potential.

Program directors must also have a clear sense of the scope of their responsibilities. If Mintzberg<sup>2</sup> had studied program directors (one of the few leadership communities he has not), he would have noted that they have to manage in, out, up and down. Within their department they need to attend to faculty and students as well as the clinical chiefs, program/division heads and department chairs. Outside their department they need to engage with a variety of stakeholders in the university; these include members of the Faculty of Medicine's postgraduate medical education office, representatives of other programs, and potentially representatives of other faculties or other stakeholders. They may also need to work with organizations beyond the university, such as the Royal College of Physicians and Surgeons of Canada, governments, hospitals and community groups.

## Literature scan

Much has been written about leadership characteristics, behaviours, mindsets and competencies in academic medical and other educational settings. In academic medicine, practising and aspiring leaders identify the following attributes as desirable for academic physicians: knowledge related to one's academic role and health professional practice, interpersonal/social skills, vision and an organizational orientation.<sup>3</sup> Rich and colleagues' literature review of desirable qualities of medical school deans identifies a variety of management and leadership skills and attitudes as well as specific knowledge regarding academic medical governance, processes of medical education, legal issues and challenges and expectations of faculty.<sup>4</sup> Leithwood and colleagues found that successful school leaders engaged in four sets of core practices: setting directions, developing people, redesigning the organization and managing the teaching program.<sup>5</sup>

The literature surrounding medical education leadership is, however, still in its infancy. Bland and colleagues

were among the first to empirically study the specific education leadership behaviours that were exhibited in successful university–community collaborations related to curricular change.<sup>6</sup> For those projects that were successful, the leaders most frequently used participative governance and behaviours that influenced cultural value: communicating vision, goals and values; creating structures to achieve goals; attending to members’ needs and development; and creating and articulating symbols and stories representing dominant values. Bordage and colleagues set out to identify the desirable competencies, skills and attributes of prospective educational program directors in a variety of health professions as judged by potential employers.<sup>7</sup> Competence as a practitioner, educational skills, decision-making skills, communication skills, interpersonal skills, teamwork skills and fiscal management skills were all identified as being desirable. The top personal attributes were being visionary, flexible, open minded, trustworthy and value driven. McKimm’s study of health and social care education leaders in the United Kingdom describes similar skills and attributes, but adds self-awareness, self-management, strategic and analytic thinking skills, tolerance of ambiguity, being willing to take risks, professional judgment and contextual awareness.<sup>8</sup>

More recently, the UK Academy of Medical Educators proposed three elements of management, leadership and governance that are necessary for medical educators:

- » an ability to manage personal time and resources effectively to the benefit of the educational faculty and the needs of the learners,
- » a consolidated understanding of his/her role in the work of an educational faculty, and
- » an ability to describe the roles of relevant bodies in the provision of medical education.

To be effective, leaders must know how to think and make decisions in complex environments, which are dynamic and constantly evolving in response to internal processes as well as external demands that can’t be predicted.<sup>2</sup> For complex issues, leaders are encouraged to act and learn at the same time by conducting small experiments with tight feedback loops that illuminate

the path forward.<sup>9</sup> Education leaders must realize that fragmentation is a natural tendency of a complex system; therefore, their role is to enable coherence making. They must keep their eye on the central focus of student learning and ideas that will further the thinking and vision of the school as a whole.<sup>10</sup>

## Best practices

How should a recently appointed program director approach his or her new leadership role? It is important to develop an understanding of the nature of the work to appreciate the scope of the work and the skills required. Lief and Albert studied the leadership practices (what leaders do and how they do it) of a diverse group of medical education leaders in a faculty of medicine to inform the design of leadership development.<sup>11</sup> They found that medical education leaders’ practices fall into four domains: intrapersonal, interpersonal, organizational and systemic. These findings align with the primarily relational and complex nature of leadership work in an ever-changing medical education system that must simultaneously attend to education and health care service needs.

Practices in the intrapersonal domain related to the leaders’ views of their personal qualities. They were aware of their personal values, strengths and limitations and believed that integrity and transparency were critical to their success. They felt that being human, caring and approachable were also important qualities. They appreciated their role as a role model and the importance of developing credibility in their ability to engage others; their work in this regard was facilitated by clear and effective communication.

In the interpersonal domain, getting to know and bringing out the best in people was a priority for the leaders in the study. They invested effort in understanding individuals’ strengths, skills, motivations and interests. They encouraged learning and growth by mentoring and providing people with development opportunities and challenging work. They appreciated others’ perspectives and styles. This knowledge informed

their assignments and their communication and influence strategies. As well, they thought very carefully about bringing together the right mix of people for group effectiveness. To motivate people, they tried to articulate explicit values, listen to and empower others and infect people with enthusiasm. Because their roles meant that they often had to work in isolation, effective leaders sought out colleagues for support, information, advice and feedback.

The leaders often had to mediate conflict and negotiate in their roles, so they had to exercise judgment about when and how to get involved. Having clear and transparent processes to openly address issues, feelings and perspectives facilitated their work in this area. They also fostered informal linkages among people to enable social networks around common interests to form.

Practices in the organizational domain focused on what the leaders could do to move their program in a particular direction. Meaningful faculty engagement in and contribution to the development of a shared vision underpinned this work. Faculty needed to feel ownership of what was constructed. Appreciating the role of individuals and the organization's culture in the facilitation of change, effective leaders used a range of efforts to shift attitudes, strengthen engagement and diffuse resistance. They identified the need to understand planning, governance and resource management.

Practices in the systemic domain consisted of the leaders' practices outside their program. The leaders deliberately got involved with outside committees and organizations to understand and appreciate the big picture. They tried to be at the "right tables" and to be thoughtful about who and when to contact others, and they anticipated the systemic impact of their actions. To navigate politically they engaged in continuous learning about the politics, power and culture that surrounded them. They developed relationships with others whose knowledge or networks could support or inform their work or build their profile.

These leaders saw themselves as lifelong learners of leadership. They made use of experiences that forced them to stretch beyond their perceived sense of competence (stretch experiences), reflective practice, formal or strategic mentoring, advanced training or watching other leaders to enhance their capability.

In a related study, Lief and Albert confirmed the mindsets that medical education leaders use to approach their organizational work.<sup>12</sup> Leaders favour the human resource frame followed closely by the political and symbolic frames. Their attention to valuing and supporting faculty is directed at aligning faculty interests with organizational needs. From the political perspective, they recognize, understand and engage with stakeholders' interests to inform themselves, to advocate and to cultivate support. They identify and leverage diverse sources of power and appreciate the complexity of resource and political issues as underpinning tensions in educational work. Symbolically, they work to ensure a direction with which people can engage. They attend to the importance of modelling values and messages in their behaviours, program activities, structures and policies. They also appreciate that histories, traditions and belief systems can impede or enable change.

More recently, competencies to enable these practices and mindsets have been identified. Lief and colleagues developed a multi-source feedback instrument for residency program directors that was informed by the leadership literature, expert opinions and national consensus.<sup>13</sup> The competencies in the instrument fell into five domains: communication and relationship management, leadership, professionalism and self-management, environmental engagement, and management skills and knowledge. As they use the instrument for self-development, program directors need to solicit feedback from others on their performance in these domains of competence to situate their self-assessment and target areas for improvement.



## Tips

- » **Be aware of your strengths, limitations and values** and how they may facilitate or hinder your leadership work.
- » **Be aware of and try to develop a diversity of leadership styles** or find compensatory strategies to deal with your limitations so that you will be more versatile and effective.
- » **You alone are not the residency training program.** Carefully select and refine a high-performing residency program committee to ensure that the objectives of the program are shared and can be accomplished and that effort is sustainable.
- » **Invest the time necessary to get to know the members** of your residency program committee well so that their work can be aligned with their interests and strengths and their contributions can be explicitly valued.
- » **Ensure that your educational administrative staff are highly competent** and meet regularly and proactively to ensure that communication is good and that managerial and operational issues are being addressed.
- » **Develop meaningful and frequent feedback loops** on the performance of your residency program to ensure that issues will be detected early and appropriate changes can be implemented. These can include curricular evaluations and teacher or rotation assessments.
- » **Give residents a voice** and empower them to engage in educational quality improvement.
- » **Develop excellent working relationships** with people within and outside the program upon whose support you depend.
- » **Appreciate that integrity, role modelling and approachability** are the most important attributes for a program director to work effectively with residents and staff.
- » **Identify potential successors** for your role. Provide them with leadership opportunities and encourage their development.
- » **Become a student of leadership.** Seek development, mentorship or coaching and projects that stretch beyond your perceived capabilities. Observe others. Solicit and reflect on feedback to identify specific competencies in the domains described for which you need additional development.
- » **More than half the time you invest in solving a problem should be spent framing the problem** and preventing cognitive bias from causing you to prematurely eliminate possible solutions. Ask questions and seek or apply multiple perspectives to the issue to enrich your comprehension of the issue and to expand your options to solve the problem.
- » **Recognize that conflict is an inevitable part of leadership.** Discussion of differing perspectives, when facilitated well, is fertile ground for development of creative and innovative solutions and program growth. Consider the importance of maintaining critical relationships in dealing with conflict to avoid unintended consequences.

## Pitfalls

- » Avoid adopting the same leadership style for all situations.
- » Avoid rigidity and inflexibility when making decisions. Be cognizant of the need for the program to have guiding values and principles.
- » Don't assume that a leader shouldn't admit mistakes or apologize because his or her authority will be damaged. If you fail to admit your errors and apologize, the resulting relational damage may be far more significant and long lasting.
- » You can never communicate too much about critical issues. Failure to communicate effectively, repeatedly and using different modalities can reduce the cohesion and integrity of the program, especially in the face of a crisis.
- » Dealing ineffectively with an unprofessional resident or supervisor can be damaging to the culture and reputation of a residency program.
- » If a resident is not performing well during a rotation, it is far better to initiate remediation earlier than later.

## Case resolution

You arrange to meet with a trusted mentor in the department on a monthly basis and set up regular monthly meetings with the chair of the department to get additional support for the changes that must be implemented in the program. You meet with each member of the residency program committee to get to know them and their interests, attitudes and concerns regarding the program. Working collaboratively with the committee, you prioritize the challenges that the residency is facing and encourage individuals within the program to take

on leadership roles within specific taskforces of faculty and residents to address these challenges. You decide that one of your first tasks should be to address the intimidation and harassment of residents by a particular supervisor. Carefully following the processes of the department and the university postgraduate medical education office, you work with the chair to limit this supervisor's contact with residents until the supervisor is able to demonstrate through mentoring and faculty development that there has been a credible and durable change in attitudes and behaviour.

Through an online resident survey and a large town-hall meeting, you work with the residents and faculty to find novel ways to address the needs for curricular reform and the rotation concerns that had been raised by the residents. With resident input, you form a new subcommittee of the residency program committee. You empower the new subcommittee of the residency program committee, which includes resident representatives, to meet over the course of one year to implement the changes to the curriculum and make the rotation training changes that the residents had requested. Throughout the change process, you maintain a very high profile within the department. You communicate regularly with the residents and faculty and solicit their input about the changes so that there is very strong engagement in, and ownership of, curriculum renewal. After these initial challenges are effectively addressed, the morale of the residency program is strengthened. Subsequently, you work with the residency program committee and the residents to develop a comprehensive mentoring and career planning program that includes resident peer mentoring. Faculty had complained about being overworked as supervisors three years earlier, but morale within the residency training program has now changed dramatically, such that 75% of the faculty have volunteered to participate as official mentors in the new mentoring program.

## Take-home messages

- » Leadership is not a personality trait but rather a discrete set of skills and competencies that can be acquired and refined through deliberate practice, feedback, reflection and development.
- » Leadership of a residency program requires strong relational skills, given the highly complex nature of both the medical education and health care systems.
- » Residency program directors should carefully attend to the intrapersonal, interpersonal, organizational and systemic dimensions of leadership associated with their role.

## References

- <sup>1</sup> Hill LA. Becoming the BOSS. *Harv Bus Rev*. 2007;85(1):48-56.
- <sup>2</sup> Mintzberg H. *Managing*. San Francisco: Berrett-Koehler; 2009.
- <sup>3</sup> Taylor CA, Taylor JC, Stoller JK. Exploring leadership competencies in established and aspiring physician leaders: an interview-based study. *J Gen Intern Med*. 2008;23(6):748-754
- <sup>4</sup> Rich EC, Magrane DM, Kirch DG. Qualities of the medical school dean: insights from the literature. *Acad Med*. 2008;83:483-487.
- <sup>5</sup> Leithwood K, Day C, Sammons P, Harris A, Hopkins D. *Seven strong claims about successful school leadership*. Nottingham (UK): National College for School Leadership; 2006.
- <sup>6</sup> Bland CJ, Starnaman S, Hembroff L, Perlstadt H, Henry R, Richards R. Leadership behaviors for successful university community collaborations to change curricula. *Acad Med*. 1999;74:1227-1237.

- <sup>7</sup> Bordage G, Foley R, Goldyn S. Skills and attributes of directors of educational programmes. *Med Educ*. 2000;34:206-210.
- <sup>8</sup> McKimm J. *FDTLA Leadership Development Programme*. Developing tomorrow's leaders in health and social care education. Case studies in leadership in medical education. Heslington (UK): The Higher Education Academy; 2004. Available from: [www.medev.ac.uk/static/uploads/resources/SR5\\_leadership.pdf](http://www.medev.ac.uk/static/uploads/resources/SR5_leadership.pdf)
- <sup>9</sup> Snowden DJ, Boone ME. A leader's framework for decision-making. *Harv Bus Rev*. 2007(Nov):69-76.
- <sup>10</sup> Fullan M: The change leader. *Educ Leadersh*. 2002;59(8):16-21.
- <sup>11</sup> Lief S, Albert M. What do we do? Practices and learning strategies of medical education leaders. *Med Teach*. 2012;34:312-319.
- <sup>12</sup> Lief S, Albert M. The mindsets of medical education leaders: How do they conceive their work? *Acad Med*. 2010;85:57-62.
- <sup>13</sup> Lief S, Zaretsky A, Bandiera G, Spadafora S, Imrie K, Glover-Takahashi S. Walking the talk: developing a multi-source feedback instrument for the leadership capabilities of residency program directors: OP-109. *Med Educ*. 2012;46(Suppl 1):63.

## Other resources

- Fisher R, Ury WL, Patton B. *Getting to yes: negotiating agreement without giving in*. New York: Penguin Books; 2011.
- Fraser SW, Greenhalgh T. Coping with complexity: educating for capability. *BMJ*. 2001;323:799-803.
- Goleman D. Leadership that gets results. *Harv Bus Rev*. 2000(Mar):78-90.
- Goleman D, Boyzatis RE, McKee A. *Primal leadership: realizing the power of emotional intelligence*. Cambridge (MA): Harvard Business Press; 2002.
- Kotter J. Leading change: why transformation efforts fail. *Harv Bus Rev*. 1995(Mar):59-67.

# Change management solutions for program directors

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## Objectives

**After reading this chapter you should be able to:**

- » translate the concepts and principles of change management into a change plan with discrete objectives and outcomes
- » increase the likelihood that the desired outcomes will be achieved by setting up and guiding a change team with the right members
- » evaluate the process and the outcomes along the path of change and at the planned endpoint and use the evaluation to modify the process and to institutionalize the outcome

## Case scenario

You shake your head as you review the collated, summarized to-do list from the resident retreat. Clearly the residents feel most strongly that the teaching that they receive in clinics throughout the program must be improved. Dissatisfaction has arisen because some faculty members are not taking the time to teach and because some clinics are frequently cancelled, are supervised by fellows instead of the staff, or have a paucity of teaching cases. Junior residents feel they are an unwelcome burden. Senior residents feel that they are not getting the opportunity to make decisions and discuss case management. You realize that you will need help to improve the teaching in clinics because the necessary changes will cross the entire department and require both the staff and the residents to embrace a new way of managing clinics.

## Background and context

Educational principles should underpin the design and implementation of residency programs. However, many programs simply piggyback education onto existing clinical situations without optimizing those situations to incorporate elements of sound educational design. Much needs to change in our programs, and the responsibility for making the necessary changes often rests on the shoulders of program directors (PDs). At any given moment, myriad changes are taking place in residency programs across the country. Whether the changes are

planned and proactive or responsive and reactive, residency programs are the furnaces of educational change. By following the principles of change management, PDs can take a more defined approach to change.

Change is commonly carried out in an ad hoc manner, with variable success. If changes are implemented without a plan, faculty and residents may become frustrated, and their morale and confidence in the program may be reduced. Many recipes for change management exist, but most have been published outside the medical literature.<sup>1-6</sup> Their need to administer residency programs in a transparent and accountable manner has led physicians to look outside the medical literature and delve into the business and management literature for help.<sup>7,8</sup> Medical educators have thereby become aware of models for change management, and there is a growing number of publications<sup>9,10</sup> and courses (offered through such organizations as the Canadian Association of Medical Education's Leadership Institute for Medical Education [CLIME] and the Canadian Medical Association's Physician Management Institute [PMI]) designed to give physicians the knowledge and skills they need to successfully manage changes in their programs. Although change models offer users a structure for the change process and can be used for guidance on how to go about making changes, users must still do a considerable amount of thinking to interpret their own situations and come up with appropriate solutions to the problems they've identified.

I strongly advise PDs to read the chapter on change management entitled *The Pursuit of Program Excellence: Overcoming Barriers to Change in Educational Design: A CanMEDS Guide for the Health Professions*,<sup>11</sup> in which the frameworks of two complementary, readily adaptable change models are described. Herold and Fedor's model sets out four key factors that should be considered when thinking about change (what, who, context and how) and sets the stage for a popular, eight-step model described by Kotter. The four factors and eight steps of the two frameworks are applied to managing change in a residency program in the sections to follow.

## Applying change management frameworks in a residency program

### Herold and Fedor's framework

#### Textbox 5.1: Herold and Fedor's four factors to consider when thinking about change

1. **What** needs to change?
2. **Who** should lead the change?
3. What is the **context** of the program?
4. **How** will the change be implemented?

The most pressing thing to get straight is **what** needs to change. As PD, you must gather the opinions of residents and staff, preferably by holding separate meetings with each group, and you should collect relevant information from others who may have different perspectives. The aim of this process is to clearly articulate the problem(s) that affect(s) the current situation and to propose an acceptable, feasible solution, chosen from a well-developed list of possibilities. The residency program committee (RPC) will often be involved in making the final decision about how to address the problem(s) (see Chapter 8 in this manual for information on how to run a RPC).<sup>12</sup> Ensure that this process is documented for accountability.

The next factor to consider is **who** should lead the change. The PD is the natural choice to lead most changes in a residency program but cannot perform all the functions of program change. The RPC includes members whose position affords them the authority and the mandate to make change and to improve the program, and whose expertise in a particular area makes them credible leaders. For instance, the staff member in charge of research will need to play a big role in any change in the research requirements of the program. When factors outside the PD's (or the RPC's) bailiwick need to be modified, choose a change sponsor who has the authority to make broader changes, such as the chair or postgraduate dean on the academic side, or the chief of the department

on the clinical side. Do not forget that almost any change to a residency program will affect the residents. Thus, you should include in the change process some senior residents who can perform some functions of the change and lead their junior peers through the change.

You must also consider the **context** of the program. Does the program have an academic or community focus? Is it large enough to offer all options or is it small and relationally strong? These and other factors that constitute the culture of the program are not usually the aim of the change initiative but will colour how the change has to occur. The program's internal contextual factors are not always explicit, so you will have to make a conscious effort to consider them. For example, a program that draws residents who want to graduate to a community practice should consider the cultural changes that will happen (and the predictable resistance from the residents) when it decides to mandate research projects for the residents. The contextual factors outside the program must also be taken into account as the change is planned. For instance, you will have to adhere to the guidelines or mandates of the hospital corporation and the department and university in which your program is based, and you will have to follow the relevant Royal College guidelines.

Finally, consider **how** the change will be implemented. When a complex change is envisioned, the process of change itself needs careful planning and documentation so that details of the change are not missed or forgotten later, so that the components of the change mesh together to optimize strategy, timing and resource use, and so that the process and end result are consistent with the program's values. It can be helpful to construct diagrams and responsibility charts and to communicate frequently with everyone involved in the change. Meetings should be documented and actions arising from decisions should be assigned with clear, closed-loop communication. Consider asking a core group of people (a subcommittee of the RPC, perhaps) to take charge of the change process.

## Kotter's framework

### Textbox 5.2: Kotter's eight steps for leading change

1. Create a sense of urgency
2. Build the guiding team
3. Get the vision right
4. Communicate for acceptance
5. Empower action
6. Create short-term wins
7. Don't let up
8. Make the change stick

The first step in this framework is to **create a sense of urgency**. Given that there are always other things to improve, residents and staff who will have to deal with the change you wish to implement must feel convinced that this initiative must happen now. Realistic timelines, clear descriptions of intent, a careful articulation of the benefits of the change that align with the program's culture and values, and worthwhile challenges will draw adherents to the change initiative. Remember that an accreditation visit, even if is two years away, may motivate people to institute a major change and complete the process before the surveyors arrive.

The second step is to **build the guiding team**. The RPC will be the source of many team members for change initiatives, but you may need to set up a separate subcommittee of the RPC to enable the change team members to get their work done. They must, however, be in regular communication with the main RPC. Individuals outside the program may be able to play an important role (i.e., resource allocation, policy changes). It may not be practical to ask these outside agents to participate fully in the change subcommittee, as they may need to continue to give priority to their other duties: they may be able to make sufficient use of their influence by making themselves available occasionally or by simply staying in communication with the PD or another designated individual. A resident with a special interest in the change in question is a natural ally, as is a colleague in another program who may have transitioned through a similar change and can offer advice and solutions to problems that may arise.

Third, **get the vision right**. Think carefully about your vision for the change and how best to convey it in a clear, emotive way. You want everyone who hears about the change to understand the “goodness” you want to accomplish. Not all change initiatives have to result in world peace, but all should nevertheless have clear merits: the listener who feels that the change will bring a sense of accomplishment, who sees a tangible benefit or who understands how the change advantages someone else or the next generation is more likely to follow the change initiative and play a part in the overall process of change.

Fourth, **communicate for acceptance**. Advance notice, reminders, mass communication and directed communication strategies must accompany significant changes in a residency program. There are standard ways to carry out these functions. Although repetition is absolutely necessary for new initiatives to stick, if you communicate too much your emails will be funnelled to the junk folder, unseen. If you communicate too little, significant events will not happen and milestones will not be met because key players don't know what is expected of them or have differing assumptions. You can help to ensure that the change is successful by communicating at predetermined times (to coincide with events or milestones, for instance), broadcasting successes, rewarding or acknowledging special achievements openly and producing mass notices to communicate procedural or policy changes. Before sending out any communication, consider what has to be stated, who has to know, what is the function of the communication (reward, information only, seeking ideas, etc.), which method of communication will be optimal for the purpose and when you need replies. Some communications will require follow-up, some will need to be short, and some will need to be delivered face-to-face either in the open or in private (e.g., initial discussions with resisting parties). Your communication strategy needs to be well considered, continual, consistent in style and organization and always clearly related to your change.

Fifth, **empower action**. In the hierarchy of a residency program, juniors will expect seniors to provide guidance and seniors will expect guidance from staff. However, much of the work of change can be carried

out and must be embraced by the residents themselves. Assigning the residents a part in a change initiative can be rewarding for them as they will see themselves as being part of the process. Their achievements in the change process can provide evidence of competency in the CanMEDS Advocate, Communicator, Manager or Collaborator Roles. By building resident assessment into the change initiative you can motivate the residents to work toward the change and deter resistance to the change.

Sixth, **create short-term wins**. It is no mystery that obvious success along a path to change builds motivation and momentum. A complex change will have definable phases or sections. The completion of each phase is a natural time for trumpeting success and sharing congratulations. If the change is big or will take a long time, design your change initiative with milestones so that you can celebrate successes along the way: residents move through rotations or programs, and successes can be forgotten. Sometimes, you can reduce resistance simply by conveying that something has changed and the world has not come to an end as foretold by naysayers.

Seventh, **don't let up**. The momentum of change is bound to falter if constant attention is not paid to the change process. It can take a long time to set up a large change initiative, and the set-up process can outlast a cohort of residents or an individual's time in the position of site director or PD. To complete the vision of the change may require a staged approach with serial responsibility. There also needs to be some marker of completion and someone must be assigned the responsibility for guiding the initiative to its completion. Regular reviews of the process can be scheduled. A dynamic approach, in which subsequent activity depends on the results of a previous stage instead of being scripted, can keep interest fresh.

Finally, **make the change stick**. There is no better way to make a change stick in a residency program than to accept the change as a permanent way of doing things in the documentation of the program. For instance, new teaching can be permanently incorporated into the program by inserting it into the curriculum blueprint (see Chapter 11 in this manual for information on curriculum mapping<sup>13</sup>) and identifying the rotation(s)

where that teaching will take place, the objectives of the teaching, and how the content will be taught and assessed. The responsibility for the teaching can then be jointly held by the program, its teachers and its residents. The objectives can be stated in the rotation's orientation package and can be clearly identified for assessment in the in-training evaluation report. However, documentation by itself is not enough. Rotations must be regularly evaluated to ensure that they provide the expected teaching, teachers must be reminded to cover the material and the resident assessments must be reviewed to ensure that the introduction of the new teaching resulted in a change in behaviour.

## Best practices

The published models for change management were derived by studying successful and unsuccessful changes. This retrospective process has its limits. However, even now, it is difficult if not impossible to find published best practices of changes that were planned and organized proactively around sound models. In the absence of prospective research findings I present below a major change initiative at McMaster University and illustrate how its components align with the models discussed above. As in any large change initiative, all of the elements of the two models discussed earlier are present in this example, but they overlap to a great extent.

When I became PD for the core curriculum in Surgery at McMaster University, I discussed the residents' perceived problems in the program with the previous director, some of the surgeons, the divisional PD and three years of resident cohorts. Preparation sessions for the Principles of Surgery examination (currently called the Surgical Foundations examination) occupied the formal half day of protected time in the Department of Surgery but were poorly attended and evaluated. The residents wanted to be involved in improving the program and wanted a dynamic curriculum that was responsive to their needs. There were only a few Royal College guidelines for the program's content, no institutional directions and no literature base. I used adult education principles to guide the development of a new curriculum structured around the CanMEDS Roles and incorporated other curricular elements such as technical skills training and

training in research methodology to make the best use of the protected teaching time, taking into consideration the perceived shortcomings of the existing curriculum and the possible solutions that had been proposed. New elements of the curriculum were pilot tested for three months and then incorporated into the program after all feedback was taken into account.

All PDs in the department whose programs incorporated the core curriculum in Surgery became partners in the process, were updated regularly at the departmental RPC and participated in solving issues as they arose and determining the direction of the program. To help guide the program and to disseminate news, an executive team was elected from the resident body. A clear job description was written for each role on this team. A colour-coded curriculum map, dynamic and populated with regular input from the executives, was posted on the department's website. The departmental RPC, its director and the chair of the department (who initially championed this initiative and was a strong sponsor) were instrumental in helping secure a base of funding for a program assistant and for technical skills resources. A mission statement was written along with goals and objectives in a CanMEDS format and this was communicated to the PDs and the residents.

Residents evaluated the program at every event and were encouraged to use the evaluation form to offer suggestions or make complaints. Poor attendance at the protected half-day sessions had been part of the culture of the department. We tackled this problem by gaining support for the new curriculum from all PDs, making attendance mandatory and regularly reporting attendance data to each participating program. Staff surgeons and senior residents changed their perception of the sessions when we made them aware that junior residents were to be excused from clinical duties because they now had a high-quality, defined, formal, mandatory teaching session to attend. Stellar attendance numbers coupled with very positive program evaluations were reported to the RPC, and these data along with information on the curriculum modifications that we made were presented as a program change at the annual conference of the Royal College of Physicians and Surgeons of Canada. In two years, the program was positively reviewed at an external site visit and the residents, who were now an



integral part of running the program, were congratulated on their hard work. The PDs of participating programs were polled yearly to ensure that their program needs were being met. Further enhancements to the program continued yearly, and increased funding was obtained to schedule more frequent and more sophisticated technical skills sessions. The program became an accepted part of the formal training offered in the department and a venue for regular, formal CanMEDS sessions for all junior surgical residents. The Royal College's decision to formalize foundational junior surgical training helped to further institutionalize this program at McMaster University. This process took seven years.

## Tips

- » **Take time to understand the current situation** and the perceived problems. Get a lot of input about possible solutions. Write down what you learn because you will need this documentation for brainstorming, for evidence and for planning.
- » **Look for evidence.** Seek the opinions of those in charge, including the previous PD(s), the postgraduate dean and the departmental chair. Seek the opinions of those using the service or resource. Ask other observers. Look for history and trends. Look at other programs, both in the same specialty and in other specialties.
- » **Tie your change to relevant objectives.**
- » **This is not a solo job.** Any meaningful change in a program will need the coordinated effort of a team, and you will have to keep the team members interested and active.
- » **Choose your team wisely.** Include people who know what to do as well as people who are good at getting things done. Assign the proper person the proper job.
- » **Designate a leader** (if not you) who will take overall responsibility for seeing this change

project through to completion and establish a clear reporting plan (to whom, how often, final product, etc.).

- » **Expect resistance to change** and solve foreseeable problems before they become reasons for resistance. Resistance is like cancer, always trying to metastasize: cut it out or keep it small.
- » **Don't let naysayers gain traction** in convincing others to be cynical or distrusting or to actively work against the change. A negative focus can gather much attention and torpedo the process.
- » **Be reflective** enough to understand when a resistor is pointing out a genuine flaw in your change process, thank the resistor, repair the flaw and continue, renewed.
- » If you **tell everyone** who will listen what you are doing in this change initiative, some people whom you don't expect to do so may contribute ideas or effort. For instance, a medical student may be able to help because of some unique capacity, such as skill in webpage design.

## Pitfalls

- » Beware the creeping timeline. Complex changes always have multiple, integrated timelines. Changes fail when integrated timelines start to get tangled.
- » Change takes a long time. Don't expect too much too soon.
- » A change initiative won't satisfy everybody. If a reasonable effort to convince someone is not successful, you may need to continue your change initiative without his or her support. Don't take resistance personally.
- » Lack of documentation in a complex process is a recipe for mayhem.

## Case resolution

After some reading and discussion with colleagues, you decide to use a defined strategy to implement the change and document the process along the way. You interview the staff to understand their perspectives and to get their input about how to change. You call a special meeting of the RPC to discuss all of the factors. Your goals at the meeting are to generate interest in improving clinical teaching, restoring the time-honoured reputation of the program, and to expose an existing urgency for change or at least demonstrate the timeliness of the proposed change. Members of the RPC take responsibility for developing the change plan. They identify key clinics requiring substantial change and institute some policies that can be easily implemented to improve small components of the clinic teaching. They charge the site directors with responsibility for overseeing these changes and reporting on success or remedying failures. The RPC resident representatives communicate the strategy to their peers, lauding the process and converting resistance to acceptance. Suggestion/feedback sheets are placed in all clinics, and residents and staff are encouraged to use them. In clinics not requiring substantial change, the evaluation process is implemented immediately: each resident is required to evaluate the clinic teaching once per week and to return the evaluations anonymously to the clinic directors every two months. Clinics requiring substantial change each first go through a planning process that includes the nurses, the clinic managers, the chief of the division, the departmental chair and the teaching staff to ensure adequate resources and to align the clinical and teaching missions. When they have completed their planning, these clinics join the ongoing evaluation process. Staff who receive less acceptable teaching scores are offered faculty development. Review of clinical teaching by site is made a line item on the RPC agenda. The program and its residents prosper.

## References

- <sup>1</sup> Jones J, Aguirre D, Calderone M. The 10 principles of change management. Tools and techniques to help companies transform quickly. In: *Strategy + Business*. 2004 Apr 15. Available from: [www.strategy-business.com/article/rr00006?goback=%2Egde\\_4306043\\_member\\_104007629](http://www.strategy-business.com/article/rr00006?goback=%2Egde_4306043_member_104007629)
- <sup>2</sup> Mento A, Jones R, Dirndorfer W. A change management process: grounded in both theory and practice. *J Change Manag*. 2002;3(1):45–59.
- <sup>3</sup> Kotter JP. What leaders really do. *Harv Bus Rev*. 1990;68(3):103–111.
- <sup>4</sup> Kotter JP. *Leading change*. Boston (MA): Harvard Business Publishing; 1996.
- <sup>5</sup> Kotter JP, Cohen DS. *The heart of change: real-life stories of how people change their organizations*. Boston (MA): Harvard Business Publishing; 2002.
- <sup>6</sup> Herold DM, Fedor DB. *Change the way you lead change: leadership strategies that really work*. Stanford (CA): Stanford University Press; 2008.
- <sup>7</sup> Ford JD, Ford LW. Decoding resistance to change. *Harv Bus Rev*. 2009;87(4):99–104.
- <sup>8</sup> Garvin D, Roberto M. Change through persuasion. *Harv Bus Rev*. 2005;83(2):104–112.
- <sup>9</sup> Sherbino J, Frank JR, editors. *Educational design: a CanMEDS guide for the health professions*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2011.
- <sup>10</sup> Silversin J, Kornacki MJ. *Leading physicians through change: how to achieve and sustain results*. Tampa (FL): American College of Physician Executives; 2000.
- <sup>11</sup> Dath D, Lacasse L-A. The pursuit of program excellence: overcoming barriers to change. In: J Sherbino, JR Frank, editors. *Educational design: a CanMEDS guide for the health professions*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2011.
- <sup>12</sup> Webber EM, Walton JM. Running your residency program committee (RPC) meetings. Chap. 8. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013. and Surgeons of Canada; 2013.
- <sup>13</sup> Ladhani MB, Writer H. Developing a meaningful curriculum map. Chap. 11. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013. and Surgeons of Canada; 2013.

## Other resources

Heath C, Heath D. *Made to stick*. New York: Random House; 2008.

12Manage. The 7-S framework of McKinsey. Available from: [www.12manage.com/methods\\_7S.html](http://www.12manage.com/methods_7S.html)

# Resources

## Parveen Wasi, MD, FRCPC

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## Objectives

**After reading this chapter you should be able to:**

- » identify the types of resources that should be considered when planning or reviewing a residency program
- » understand how to apply Standard B4 of the Royal College of Physicians and Surgeons of Canada's General Standards of Accreditation to an analysis of a program's resources
- » identify strategies to address any deficiencies in a program's resources

## Case scenario

You are the program director for an Internal Medicine residency program. Residents are required to complete a logbook in which they record the number of procedures they performed in each of the procedural competencies outlined in the Royal College of Physicians and Surgeons of Canada's Objectives of Training in Internal Medicine. After conducting your annual review of the logbooks, you have concerns that residents in your program are not gaining sufficient experience performing as team

leader in response to cardiac arrests. To validate this concern, you survey the residents who have recently completed the third year of training in core medicine and discover that at least 40 per cent of them do not feel confident that they have achieved this competency. A number of factors seem to be involved, including the reduction in the number of call shifts per resident as a result of the increase in the size of the program over the last five years and the decrease in the overall number of cardiac arrests noted since a critical care response team was implemented at each of the hospital sites. There also appears to be competition between residents on the critical care response team service and the senior medical residents to perform as team leader during in-patient cardiac arrests. You wonder how you can further develop these skills within your residents and ensure that they receive sufficient exposure to achieve this competency.

## Introduction

Residency programs are complex systems that require great attention to their organization and to the resources that are needed for them to run well. The Royal College provides a guide to these requisites in the general standards that it produces for all residency programs (the General Standards of Accreditation, also known as the blue book) and in additional standards for each specialty (the Specialty-Specific Standards of Accreditation). The blue book offers the program director a holistic set of objectives for organizing and running a residency program. It is no surprise, then, that the Royal College uses these same objectives in its regular

cycle of program evaluation. By aligning your residency program with the standards outlined in the blue book you will ensure that you are on track to develop and maintain a program of the highest standard.

Standard B4 covers the resources that are needed to provide trainees with a complete residency experience.<sup>1</sup> It can be challenging to ensure that a residency program has sufficient resources and that it fulfills the requirements of Standard B4. In this chapter I will interpret this standard from the perspective of a program director and provide some guidance on how to apply it to your program.

Standard B4 reads as follows: “There must be sufficient resources including teaching faculty, the number and variety of patients, physical and technical resources, as well as the supporting facilities and services necessary to provide the opportunity for all residents in the program to achieve the educational objectives and receive full training as defined by the Royal College of Physicians and Surgeons or CFPC [College of Family Physicians of Canada] specialty training requirements.”<sup>1</sup>

The resources necessary for residency training constitute an important component of the Royal College’s accreditation standards for postgraduate training programs. There are general resources that will be applicable to all training programs as well as ones that are specific to the specialty. The specialty-specific required resources will vary according to the discipline but can be grouped into the following categories:

- » the number and expertise of faculty and hospital staff involved in the teaching and supervision of residents,
- » the number and variety of patients, procedures and/or laboratory specimens needed to provide residents with adequate exposure to attain competence,
- » the physical and technical resources needed to support residency training, and
- » supporting facilities and services.

As clinical care requires effective communication with, and integration of, many departments, programs often require the expertise of faculty members from other disciplines to train residents. The evaluation of appropriate resources for a residency program must include a review of the capacity and availability of faculty members and physical and technical support from other departments.

## Initial steps in the assessment of resources

To organize the resources necessary to run your program, you must be armed with two sets of information. The first is the series of documents from the Royal College that outlines national standards. The second is a local document, generated within your program, that blueprints the application of the national standards in the local institution.

The Royal College has produced specific standards of training in each of the accredited specialties, which are briefly described below. You must review these standards as part of your evaluation of your program’s resources. Specialty-specific documents are created and updated by the specialty committees of the Royal College and are readily available on the Royal College’s website (<http://rcpsc.medical.org/information/>).

In the **Specific Standards of Accreditation for Residency Programs (SSA)** for each specialty, specific program accreditation standards (B1–B6) are detailed for that specialty. Standard B4 outlines the specific resource requirements for the specialty.

For each specialty, the **Objectives of Training (OTR)** document describes the objectives for trainees in the specialty in each of the CanMEDS Roles. It is particularly important that you review the objectives for the Medical Expert Role for your specialty when designing a curriculum map (or blueprint) for your program and assessing the adequacy of your program’s clinical and physical resources (see Chapter 11 in this book for information on curriculum mapping<sup>2</sup>).

The Royal College also produces a **Specialty Training Requirements (STR)** document for each specialty. This document specifies the required length of training programs in the specialty and describes the mandatory and elective content for programs in that specialty. Programs must fulfill all of the specialty training requirements to be fully accredited by the Royal College.

In an era in which there is an increasing emphasis on competency-based medical education, adequacy of resources is best evaluated by first determining the knowledge, skills and attitudes required to produce competent independent practitioners within the specialty.<sup>3</sup> Once you know your goals for your trainees, you will need to evaluate whether your program's clinical and academic resources are sufficient to achieve these goals. Your task will be greatly facilitated if you can refer to a curriculum map for your program, which documents key areas of specialty-specific content and indicates where each component of the clinical and academic curricula will be delivered (see Chapter 11<sup>2</sup>). A well-constructed curriculum map can match the desired academic and clinical core content, the timing of educational experiences and the evaluation of training and competence with the available teaching resources and opportunities. A curriculum map makes it possible to identify areas of potential deficiencies and bottlenecks for resources.<sup>4</sup> Note that it isn't enough to examine your program's teaching and assessment of the Medical Expert Role: you must also take into account the opportunities to teach and assess the other CanMEDS Roles, known as the Intrinsic Roles. If your curriculum map includes these Roles you will be able to identify the clinical areas and rotations where they may be appropriately taught and assessed.

The key elements of Standard B4 for the evaluation of the adequacy of the resources in a residency program are discussed below.

## Faculty resources

**Standard B4.1:** There **must** be a sufficient number of qualified teaching staff from a variety of medical disciplines and other health professions to provide appropriate teaching and supervision of residents.

The specialty-specific standards of accreditation seldom specify the exact number of teaching faculty needed to support a program. Generally, the number of clinical teachers necessary will correlate with the number of residents in the program and the ability of the clinical teachers to provide the needed expertise to each resident. You will need to conduct an initial evaluation to determine what faculty expertise your program requires and which faculty members are currently available to participate in residency education. Each resident must have equal access to the teachers who are responsible for the mandatory content of the curriculum.

A variety of issues can arise in terms of faculty resources:

- » Your program may not currently have access to a faculty member who has the expertise required to teach a specific area of competence.
- » There may be an insufficient number of faculty members for the volume of clinical responsibilities, and thus the existing faculty members may have insufficient time to adequately teach and supervise residents.
- » Even if your program has a sufficient number of faculty members, you may find that an insufficient amount of time is being spent on teaching and/or that your residents are not receiving adequate supervision.

These issues are difficult for a program director to address without enlisting the help of the departmental or divisional chair or equivalent. If your residency program is lacking a faculty member with a particular area of expertise it is possible that the department or division has a corresponding clinical need, and recruitment may be necessary. However, if it is not possible for you to offer your residents a mandatory experience because of a lack of expertise and/or infrastructure within your institution, you may consider setting up an inter-university affiliation (described below).

Aside from clinical expertise, your program will need to have faculty members with research experience who are capable and available to provide mentorship for residency research projects. The availability of such faculty members often depends on the size of the department.

If faculty members do not have sufficient time to devote to teaching and supervision because of clinical volume, all components of the program can be affected and residents may be unable to achieve their objectives of training. Again, this issue needs to be addressed at the departmental level with assistance from the hospital administration. If it is not feasible to increase faculty numbers to support patient volumes in the short term, clinical and faculty resources may need to be restructured and focused to deliver the appropriate educational experience (e.g., teaching and non-teaching clinical services may need to be developed).

If there are sufficient faculty numbers to meet the necessary clinical workload but the faculty aren't engaging in sufficient teaching and supervision, you may need to consider whether expectations are unclear or whether the faculty do not feel a sense of engagement in medical education and/or have underdeveloped teaching skills. The quality of teaching and supervision in the residency program must be reviewed through formal faculty evaluations, with a clear process of remediation and faculty development. Ideally, effective faculty development should be linked to the identified needs of the individual faculty member to produce and sustain change.<sup>5</sup>

In many specialties, health professionals other than medical faculty members and laboratory technologists will play a

significant role in the training and assessment of residents. Inadequate numbers of these personnel can result in an increased service to education ratio for faculty and residents as well as the loss of key educational experiences. The impact of reduced numbers of technologists and health professionals on residency education may come to light for the first time during internal and external program reviews. It is important to review the number and expertise of relevant members of staff who are directly involved in residency education as well as the quality of their teaching.

## Patient volume and characteristics

**Standard B4.2:** The number and variety of patients or laboratory specimens available to the program on a consistent basis **must** be sufficient to meet the educational needs of the residents. There **must** be both male and female patients or specimens to provide appropriate experience for the specialty or subspecialty.

The quality of the training received by residents in medical specialties will primarily depend on the volume of patients and the variety of clinical conditions seen within their training centre. Depending on the specialty and the size of the centre, residents may not receive enough exposure to certain areas within that specialty to achieve competence. Areas that can be particularly problematic in smaller centres include the following:

- » highly specialized procedures that have been regionalized to larger centres (e.g., organ transplantation),
- » uncommon conditions or congenital disorders occurring primarily in an ethnic population that is underrepresented within that centre (e.g., hemoglobinopathies), and
- » conditions or situations that are infrequently seen at that centre (e.g., trauma).

Paradoxically, residency programs based at specialized sites may find it challenging to expose residents to a sufficient variety of cases.

The surgical and laboratory specialties must expose residents to a sufficient number of procedures and specimens for them to gain competence. The Royal College's STR documents for the surgical and laboratory specialties do not specify a minimum number of procedures that must be performed to attain competency. This information was deliberately left out of the STR to give programs flexibility: the idea is that educators should decide how many procedures an individual resident must perform on the basis of an objective assessment of the resident's level of competence rather than expecting all residents to reach a similar standard with the same level of exposure. As well, experts seldom agree on the minimum number of procedures that need to be performed to reach competency.

The training requirements for many surgical specialties require residents to keep a logbook of procedural exposures or experiences that is regularly reviewed by the faculty, residency program committee and program director. The logbook should be constructed to identify areas of sufficient and inadequate exposure.

The curriculum map will be especially useful to you as you review the required training content and match it with available resources. If you find that your residents have limited exposure to a particular type of disease, procedure or clinical situation, you can consider several options.

First, an inter-university (IU) affiliation agreement can be useful when another university can provide residents with a mandatory experience that the primary university is unable to provide. Both universities must agree to the IU affiliation, and the IU affiliation document should outline the exact clinical experience, the number of residents expected to participate in the experience per year and the number of months residents will spend at the partner university. A site coordinator at the affiliated university must be clearly identified and liaise actively with the residency program committee and/or program director of the parent program. An IU affiliation agreement makes it possible for smaller centres to

operate residency training programs even if not all of the required mandated experiences can be delivered at that university.<sup>6</sup> As additional resources become available, the IU affiliation agreement can be reconsidered. An IU agreement is not necessary for elective experiences or for experiences at community sites affiliated with the parent university. Residents who are required to travel to other centres for mandatory training content must be assured of appropriate funding for travel and accommodations.

Second, a careful review of the number and distribution of patients with uncommon disorders may reveal ways in which experiences can be consolidated for residents. For example, patients with an uncommon disorder can be consolidated to a single monthly clinic attended by residents rather distributed across many different clinics. Again, a curriculum map will identify these areas and facilitate the deliberate grouping of resources to maximize resident exposure.

The Royal College documents may specify time-based experiences as either blocks or months. If you feel that a specified block clinical experience is best delivered as a longitudinal exposure in your program, it is important to document equivalency of exposure for accreditation purposes.

Elective and formal teaching times offer a third option. It is important to determine from the specialty training requirements whether the exposure in question is a mandatory one or rather it is part of a general list of recommended items for the Medical Expert Role. In the latter situation, if the number of patients is not sufficient it is useful to supplement the on-site clinical exposure with opportunities for electives and for increased awareness of the topic in the academic curriculum.

Finally, simulation is being increasingly used in medical education to supplement and enhance the residency experience. Simulation can facilitate acquisition of content knowledge, it can help residents to improve and refine their technical expertise and it can be used for objective assessment. Simulation laboratories are available in the majority of Canadian universities. Again, you should review the content knowledge in the CanMEDS Roles that residents in your specialty are

required to obtain and the specific procedures used by practitioners in your specialty to determine if simulation will help your residents to attain these competencies.<sup>7</sup>

As discussed above, in determining your program's capacity for learners, you will need to consider the availability of potential teachers and supervisors, the numbers and variety of patients treated at your institution, the procedures performed at your institution, the types of laboratory specimens that are assessed and the program's physical and technical resources (the latter resources are considered further below). When both undergraduate and postgraduate medical education programs expand, individual residents may have decreased exposure to elements of the curriculum if capacity does not expand correspondingly. In addition to considering the number of residents in the program, capacity evaluation for residency training must also take into account the impact of undergraduate learners and fellowship trainees.

## Physical and technical resources

**Standard B4.5:** The physical and technical resources available to the program **must** be adequate to meet the needs of the program as outlined in the specialty-specific standards of accreditation for a program in the specialty or subspecialty.

### General physical and technical resources

The postgraduate medical education (PGME) office is essential in ensuring that all residency programs in an institution have adequate hospital resources. The PGME committee must include hospital representation from all major teaching sites within the institution to identify and resolve issues pertaining to hospital resources. The integration of, and communication between, the university and teaching sites for residency education is accredited by the Royal College according to the

A Standards during each on-site university survey. It is each program's responsibility to identify and communicate to the PGME office any resource deficiencies that may affect the education of its residents.

The PGME office can help you to negotiate with your hospital administration for various resources, including the following:

- » **Technical resources:** pagers; access to computers for medical records, educational resources and videoconferencing, library resources and electronic learning facilities. Videoconferencing is becoming increasingly important as programs move toward using distributed sites for elective and mandatory clinical experiences. Ensuring that the number of workspace computers is adequate can be challenging, particularly in high-volume areas with multiple learners and staff, such as operating areas, emergency departments and clinics.
- » **Physical resources:** work areas designated for residents, resident lockers, call rooms in close proximity to the clinical areas. Resources that may have an impact on resident safety, such as parking, accommodations for community rotations and safe patient assessment areas, are also important.

The other potential ally that can help you to ensure that appropriate physical resources are available for your residency program is the provincial resident organization that negotiates resident contracts with the appropriate governing bodies. These contracts vary from province to province but standard clauses in every contract address the basic needs of residents, such as call rooms, lockers, access to pagers and computers, and resident safety. If there are issues associated with a hospital's provision of appropriate resources, it can be very helpful to have the provincial resident organization advocate for the needs of the residents and the program.



As an example from my jurisdiction, consider this excerpt of the contract between the Professional Association of Internes and Residents of Ontario and the Ontario Council of Teaching Hospitals pertaining to resources: “Each hospital will provide appropriately located on call facilities. On call facilities will include secure and private rooms, each equipped with a functional bed, chair, desk, lighting and telephone. These facilities will include separate female/male washrooms/showers and adequate lounge facilities, and daily linen service including weekends and holidays. Daily linen service will include clean sheets, blankets and towels, as well as bed-changing and room cleaning services. The hospital will endeavour to provide secure access between hospitals and call room facilities where necessary. The on call facilities shall be off limits except for housestaff and other individuals authorized by the hospital. Each hospital will provide reasonable access to the hospital’s information systems as dictated by the hospital’s network deployment strategy, which shall incorporate the clinical and educational needs of the resident.”<sup>8</sup>

If community sites are being used for residency training, the above resources must be provided if deemed necessary for the clinical experience (e.g., call rooms if in-house call is expected). If you have to develop a new site for residency training, you may find it useful to prepare a checklist highlighting the necessary physical resources as defined by the Royal College’s accreditation standards and provincial contracts.

### **Specialty-specific technical and physical resources**

Hospital resources and patient care must be organized to ensure optimal educational experiences for residency training. For example, in-patients in a clinical teaching unit model should be grouped geographically within the hospital to optimize team-based care, communication, time management and efficiency of patient care and education.

The specialty-specific requirements for your specialty may outline specific requirements for technical and physical resources. Many specialties will require that the training

centre include supporting departments such as emergency departments and intensive care units. Residents in the majority of specialties are required to assess patients in a variety of settings with different levels of acuity; they will need access to an emergency department to conduct acute patient assessments, to a critical care unit to assess the critically ill, and to ambulatory care settings to conduct outpatient assessments.

As many programs will need access to these and other common areas, they can be a source of bottlenecks for resources. Programs may have to compete for access to a variety of resources, commonly including the following:

- » space in conference rooms for teaching and academic half-days,
- » space in the emergency department for consults, charting and confidential team discussions,
- » computers in the emergency department and ambulatory clinics, and
- » clinic rooms to accommodate learners.

## **Conclusion**

Appropriate resources, as defined by the Royal College’s accreditation standards, are essential to the success of a residency program in training competent physicians. The evaluation of resources should start with a comprehensive review of the required competencies and include evaluation of faculty number and expertise, volume and variety of patients and the program’s physical and technical infrastructural support. Along with the Royal College’s specialty-specific documents, the university PGME office and the provincial contracts for residents can provide information and support for the program director to identify and attain needed resources for residency training. Finally, the curriculum map will lay out where resources are available and used to fulfill the program requirements.

## Tips

- » It is important that you review the Royal College's training documents and accreditation standards to determine what resources are required for your specialty.
- » You will find a curriculum map for needed competencies to be a useful tool as you work to determine the faculty, staff, physical and technical resources that you need to run your program. The map can also highlight areas of potential bottlenecks and deficiencies that will need to be addressed.
- » Your institution's PGME office and the provincial resident organizations are invaluable supports in ensuring that your program has appropriate physical and technical resources. The PGME office is the appropriate liaison for negotiating resources with participating hospitals. You should involve the departmental or divisional chair or equivalent in issues concerning faculty resources.
- » Not all programs can deliver every required component of a training program. You can set up an interuniversity affiliation agreement for mandatory experiences that cannot be delivered within your university.
- » Consider consolidating and reorganizing patients and services to focus clinical and educational content in areas of relatively low exposure and volume.
- » When considering human resources, it is important to review the number of other health professionals and laboratory technologists involved in the education and supervision of residents.

## Case resolution

You review your hospital's policy on code blue teams and see that the hospital assigns the code blue leader position after hours to the senior medical residents. You clarify this policy with the critical care response team staff in each hospital, reiterating that the senior medical resident must be allowed to function as code leader, with the critical care response team staff and residents as backup. You review the core curriculum with the residency program committee to determine if any other clinical areas could be considered to increase residents' exposure to cardiac arrests. You also review the number of "mock codes" in the hospital and discover that they have markedly decreased in frequency over the past year because of shortages of staff to organize and supervise them. You arrange meetings with the hospital administration to emphasize that mock codes are essential for patient safety and are a hospital mandate. As a result of the meetings, the mock codes are reinstated at each site on a monthly basis. Finally, you introduce a graduated formal resuscitation curriculum in the program with specific simulation code blue scenarios and formal training in leadership of the code blue team. One year after these changes were implemented, the number of cardiac arrests per resident has not significantly changed but the proportion of residents confident that they can lead a code blue team has increased to 80 per cent. You are now continuing to search for an appropriate assessment tool to measure competency in this area, using direct observation and feedback.

# References

- <sup>1</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. Standard B4. In *General standards applicable to all residency programs. B standards*. rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. p. 6. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>2</sup> Ladhani MB, Writer H. Developing a meaningful curriculum map. Chap. 11. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>3</sup> Frank JR, Snell LS, ten Cate O, Holmboe ES, Carraccio C, Swing SR, et al. Competency-based medical education: theory to practice. *Med Teach*. 2010;32(8):638–645.
- <sup>4</sup> Harden RM. AMEE Guide No. 21: Curriculum mapping: a tool for transparent and authentic teaching and learning. *Med Teach*. 2001;23(2):127–137.
- <sup>5</sup> Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Med Teach*. 2006;28(6):497–526.
- <sup>6</sup> Royal College of Physicians and Surgeons of Canada. *General information concerning accreditation of residency programs*. rev. ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2006. p. 12–13. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/genaccred\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/genaccred_e.pdf)
- <sup>7</sup> McGaghie WC, Issenberg SB, Petrusa ER, Scalese RJ. A critical review of simulation-based medical education research: 2003–2009. *Med Educ*. 2010;44(1):50–63.
- <sup>8</sup> Professional Association of Interns and residents of Ontario, Council of Academic Hospitals of Ontario. *2008–2011 agreement between: the Professional Association of Interns and Residents of Ontario (PAIRO) and the Council of Academic Hospitals of Ontario (CAHO). Re: Terms and conditions of employment of residents in Ontario teaching hospitals July 1, 2008 to June 30, 2011*. p. 42. Available from: [\hd.##kkk"a mUc"W#GUf\]b| SFYgXybWn](#)

# Setting up a committee

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## Objectives

After reading this chapter you should be able to:

- » explain the principles of setting up a residency program or other committee
- » develop terms of reference for a committee or task force
- » effectively organize the work flow of a committee or task force
- » describe common pitfalls that can beset committees

## Case scenario

You have just been appointed program director of a large residency program. Your predecessor, who led the program for 10 years, has stepped down just two years before the next accreditation visit. The last external review report was laudatory, but an internal review done last month by your postgraduate office found a number of weaknesses in your program's conformance with the B1 standards of the Royal College of Physicians and Surgeons of Canada's General Standards of Accreditation and indicated that the residency program committee is dysfunctional. The committee is very large,

with broad and passionate engagement from many faculty and all residents. The reviewers' finding has caused outrage in the department, but you are beginning to suspect that the reviewers have a point. Despite the engagement, discussion tends to return to the same issues at each meeting, and it is not clear to you that the important work is getting done. At the meetings, you get a sinking feeling in the pit of your stomach and ask yourself, **“What is the committee supposed to be doing?”** **“How can I know if it is doing its job?”** and **“How can I make it more effective?”**

## Background and context

Committees are a part of life in medicine, particularly in academic medicine. Just about everyone in medical education will serve on a committee at some point, and most readers of this chapter have probably led at least one. Despite this, most of us don't give much thought to getting the most out of the committees we are on and we don't get any instruction on how to set them up to be effective. Most of what we know about them comes from our own experiences serving on committees, not all of which are positive. Given the amount of time we spend in them, it seems worthwhile to invest some effort in trying to make sure that time is used effectively.

Committee function is so crucial to your life as a program director that this handbook devotes two chapters to it. This chapter will explore what committees and task forces are for, how to set them up to succeed, common pitfalls you will run into in working with them and finally some

tips and tricks to make them succeed. The next chapter will focus on one committee, the residency program committee (RPC), and its specific mandate.<sup>1</sup>

## Literature scan

There is little in the medical literature on committees and how they function. In preparing this chapter, I conducted a search using “medical education” as a medical subject (MeSH) heading and “committee” and “meetings” as MeSH headings and text words. I searched Ovid MEDLINE from 1966 to the first week of July 2011. A preliminary search identified 209 citations. These were hand searched, and six publications were selected for inclusion. Only one citation related directly to committee functioning: a 1978 paper on how to chair a committee.<sup>2</sup> Three related to the history and functioning of the residency review committees of the American College of Surgeons<sup>3,4</sup> or Neurology,<sup>5</sup> one provided advice on how to prepare for residency review site visits from the Accreditation Council for Graduate Medical Education<sup>6</sup> and one is a letter describing group dynamics in a call committee.<sup>7</sup>

As these publications did not provide details on how to set up or run committees, I also searched the database of the *Harvard Business Review* ([hbr.org](http://hbr.org)), identifying one relevant publication on making meetings work.<sup>8</sup> Finally, I used Google to search the Internet, using the search phrases “effective committee,” “making committees work” and “setting up a committee.” I selected three books<sup>9-11</sup> and four websites from diverse organizations in health care,<sup>12</sup> agriculture,<sup>13</sup> business<sup>14</sup> and the charitable sector<sup>15</sup> for inclusion. These websites were in many ways the most informative of the resources I located.

Given the relative paucity of published information specific to the functioning of committees in residency education, I sought input from experienced program directors as I wrote this chapter; their contributions have been invaluable.

## Best practices

### Setting up your committee

Before you set up your committee, give some thought to the following questions:

1. What do I need the committee to do?

This is the critical question; don’t go any further until you figure out the answer.<sup>9</sup> We have all walked out of a room at the end of a meeting asking ourselves, “What was the point of that anyway?” Unless you can formulate clear objectives for the proposed committee or project, it is probably not worth setting it up. The best way to determine what you want from a committee is to develop terms of reference (see below).

2. To complete this task, do we really need yet another committee?

This is an important question and one we do not ask often enough. This is unfortunate, as the answer is frequently no. Consider the following questions: Would this task be better done by a group than an individual? Will the work be considered important and relevant to the new committee’s members? Is a new group required, or can a preexisting group take on this task?<sup>15</sup>

3. What sort of structure is needed for the new committee?

The key point to settle here is whether you need a standing committee or subcommittee that will meet in an ongoing fashion or whether the objectives can be accomplished with an ad hoc working group or task force. Wherever possible, I suggest setting up short-term groups as they are a more efficient use of members’ time and the sense of urgency that is produced when a group is given a time-limited task can be very motivating. Standing committees or subcommittees are needed to deal with issues that arise periodically or require constant monitoring. Subcommittees in common use include resident evaluation

or promotions committees, resident selection committees, supervisor evaluation committee, and resident safety or well-being committees.

4. To whom should the committee report?

The answer may be straightforward, but it needs to be stated explicitly. In most cases, you will want task forces, working groups and subcommittees to report to your RPC. Subcommittees should develop a regular reporting schedule to their parent committee (e.g., the promotions committee should report to the RPC each May).

5. Whom should I select to chair the committee?

Choose your chair carefully.<sup>12, 15</sup> Your choice of chair will often determine the success or failure of a committee or project. You, the program director, should chair the RPC. You may elect to chair other committees or projects as well, but in most cases it is better to select someone else as chair. There are many factors to consider when selecting a chair. I favour experience and influence over content expertise. It is valuable to choose someone who knows how to get things done, who understands how to organize and run meetings and who will be respected by the members of the committee and the people to whom the committee will report. Sometimes you will need to use a co-chair model, particularly if there are multiple stakeholder groups involved, but wherever possible choose one leader on whom you can rely and with whom you have a good working relationship.

6. Whom should I invite to join the committee?

There is no magic formula for membership. The key factor is to invite all major stakeholder groups to participate, to ensure diversity of perspective. For time-limited groups, the recommended number of members is three to seven,<sup>13</sup> and members are typically selected for their expertise and availability. Membership on standing committees can be more complex, as you are selecting members not only for their ability to get things done but also to represent certain

constituencies. In the case of the RPC, the B1 standards of the Royal College of Physicians and Surgeons of Canada's General Standards of Accreditation set out specific requirements, which include a requirement for elected resident representation as well as representation from each training site and major component of the program.<sup>16</sup> There is an inherent tension between keeping the committee lean enough to be efficient and making it large enough to be representative. You will never strike the perfect balance, so you should consider reevaluating the membership periodically.

Once you have considered each of the six questions above, an excellent way to document your decisions is to draft terms of reference. Terms of reference describe the purpose and structure of a project, committee or meeting and help to ensure all participants have a common goal. Drafting the terms of reference should not be an onerous task. In most cases they should be no more than one page in length. Sample terms of reference for a standing committee and an ad hoc task force are shown in appendices 7.1 and 7.2. The Psychiatry residency program of the University of Toronto has posted online a comprehensive set of terms of references for its committees and subcommittees ([http://www.uoft.ca/psychiatry/education/residency/committees/committees.html](#)), providing another useful resource. Once drafted, the terms should be reviewed and approved by the committee and referred to periodically. Some committees circulate them regularly with the agenda and meeting materials. In the case of standing committees, it is good practice to review them and make changes as necessary once every year or two.

## Running your committee

The success of a committee is critically dependent on its chair and the effort he or she puts into making it effective.

### Scheduling the meetings

Standing committees function best if they meet at fixed times and, if possible, at fixed locations (e.g., the third Tuesday of each month from 4 to 5 p.m. in the departmental conference room). Try to disrupt the

schedule as little as possible; if you are the chair, get someone else to step in as acting chair when you have a scheduling conflict. Ease of scheduling is inversely related to the size of the committee. In large committees, the ability of a prospective member to join may depend on his or her availability at the set time. In some cases, committees meeting times may be linked to the time of another meeting (e.g., the RPC will meet for 30 minutes immediately following the monthly division meeting). Although connecting a committee meeting's schedule with that of another meeting can be convenient, this way of doing business has a number of drawbacks and I do not advocate it: your committee meeting may be considered an afterthought, time may be lost in the turnover between the two meetings, and over time the identities and perspectives of the two groups tend to merge. Ad hoc working groups tend to be smaller than standing committees, and thus scheduling meetings is easier. One useful trick is to set all of the meeting times at the first meeting. If the timing or location preferred by one subset of the membership does not suit another subset, consider moving forward with one option with a plan to revisit and possibly switch the time or location in a year or two.

### **Developing the agenda**

Unfortunately, we rarely put sufficient thought into drafting meeting agendas. Do not overload the agenda: you can only accomplish so much in one hour. If you consistently put too many items on the agenda, you will frustrate the members, especially those scheduled to speak to items late in the agenda. Give some thought to the mix of items for decision versus those for information. Nothing frustrates members more than listening to reports for an hour. If you find that items for information are consuming too much time during the meetings, consider circulating information before the meeting and asking members to read it in advance or limiting the time allotted to presentations (e.g., no more than 10 minutes and five PowerPoint slides or, better yet, no PowerPoint slides). I like to set standing items on the agenda, such as the residents' report, the report from the training sites and the report from the postgraduate office, and place them at the top of the agenda (especially the report from the residents) to ensure they do not get relegated to the dying minutes of the meeting.

It is important that you send out the meeting materials far enough in advance of the meeting to allow members to review them adequately<sup>2</sup> and that you avoid sending out supplementary emails with more materials to read. Be selective about what attachments you include; the committee members should understand that they are all expected to read any attachment you felt was important enough to include.

### **Managing the meeting**

Managing meetings is an acquired skill. Preparation is critical; the chair who breezes in late and is not familiar with the agenda quickly loses credibility.<sup>2</sup> Bring a watch and use it. You have to manage the agenda to ensure that the committee gets through it. You may have to limit discussion on some items. Pay particular attention to the items for decision; you need to ensure that there is sufficient deliberation time to allow the committee members to reach an informed decision. This is an art that takes practice to perfect.

One of the most difficult tasks you will have as chair is to balance the need to provide the opportunity for all members to contribute with the need to move the agenda along. Be explicit about the time available for discussion of an item, ask committee members not to repeat points already made by other members and allow each member to speak only once on each item. Often simply refocusing the discussion on the actual issue at hand can be sufficient to move things along.

A related challenge is preventing vocal members from dominating the discussion and drawing quiet members out of their shells to contribute to the discussion. It is vital that you ensure that the committee room is a safe place to bring forward dissenting opinions or suggest off-the-wall ideas.

### **Making decisions**

From time to time, committees are called upon to make important decisions that will result in changes to the program or affect individuals significantly. Examples of these include the decision to put a resident on remediation, to remove a training site, or to eliminate or

add a mandatory rotation. It is important that decision-making in such situations be preceded by some key steps: appropriate consultation must take place before the decision is reached, stakeholders must be informed that the issue will be decided at the meeting and must be given an opportunity for input in the process, and the committee must be provided with any additional information it needs to make an informed decision. Equally important is the process by which the decision is made. Some committees have rules that govern how votes are taken: some require a quorum for a vote, some distinguish between voting and non-voting members and some use parliamentary procedures such as *Robert's Rules of Order*.<sup>17</sup> In my experience, it is rare for educational committees to use formal rules. In the case of high-stakes decisions, however, it is always advisable to be explicit about the process that will be used to reach the decision. Although it may seem bureaucratic, calling for a motion that explicitly states what is being voted on, getting it seconded and allowing further discussion before voting is a time-tested method that ensures all members know what they are deciding.

### Producing minutes

Minutes are the proof that the meeting happened, the record of who was in attendance and the documentation of the decisions that were taken. There are as many ways of taking minutes as there are committees, so you should choose a format with which you feel comfortable working. It is generally unnecessary, and may be counterproductive, to document the discussion and deliberation on each item in detail. Minutes for most one-hour meetings are usually no more than one or two pages in length. It is critically important, however, that you clearly document the decisions that were made as well as action items and that you indicate who has been assigned responsibility to complete each task.

## Tips

I asked a number of colleagues who are experienced program directors and educators to contribute tips on chairing committees. I am grateful to them for their generous response. Six of their tips appear below.

*I have seen some committees that are huge and I don't know how they get work done: work ends up being done by subcommittees or outside of the large meeting, and those big meetings become no more than communication vehicles. I would urge programs to keep the committee size small: fewer than 15 members would be my goal for a work committee. I have found that the bigger the committee, the smaller the number of people who commit to attending regularly.*

—Dr. Paul Dagg, clinical director, tertiary mental health, Interior Health Authority of British Columbia, and former assistant dean, postgraduate medicine, University of Ottawa

*Don't put things on the agenda unless you are reasonably sure they can be covered in the time allotted. If you need more time for an item, schedule it for the next meeting. Respect people's time: don't bring issues forward until they are ready to be discussed and people have the information they need to make a decision.*

—Dr. Glen Bandiera, associate dean, postgraduate medical education, University of Toronto



*Always carry forward agenda items from previous meetings to ensure that issues are dealt with; otherwise, there is the danger that important items will be forgotten in future meetings. If an item doesn't require further discussion it is important to document this and state in the minutes that the matter is now closed.*

—Dr. Catherine Moltzan, residency program director, adult Hematology, University of Manitoba

*Make it clear from the beginning what will take up the bulk of the time so people are prepared and don't feel cut off. Also, the minutes should clearly indicate the tasks and action items, who will complete them and when they will report back to the committee.*

—Dr. Shiphra Ginsburg, director of education scholarship, Department of Medicine, University of Toronto

*Get help dedicated to taking the minutes during your residency program committee meetings. It is impossible to do a good job running the meeting while trying to take minutes. I found that getting a resident or other staff person on the committee to take the minutes was not that useful; it's best to get an administrative staff member to do it.*

—Dr. Joel Fox, residency program director, Anesthesia, University of Calgary

*Keep the meeting running smoothly: make sure that controversial items are dealt with adequately before the meeting (using pre-meetings with stakeholders) so that the more difficult discussions are finished ahead of time and committee members can work on achieving consensus at the main meeting.*

—Dr. Tom Maniatis, residency program director, Internal Medicine, McGill University

## Pitfalls

Working with committees does have its pitfalls. A few that you will need to keep your eye out for are discussed below.

*A committee is an animal with four back legs.*

—John Le Carré

Left to its own devices, a committee will typically deal with individual items but not move in a particular direction. As chair, you will need to push it to think strategically.

*A committee is a cul-de-sac down which ideas are lured and then quietly strangled.*

—Barnett Cocks

Committees are not known for their creativity. In most cases, you can expect a committee to reach safe, unimaginative, middle-of-the-road decisions. You will need to push it to be bold and to take risks.

*Meetings are indispensable when you don't want to do anything.*

—John Kenneth Galbraith

Get the committee to think of itself as the means to effect change, not the alternative to making change. It is fine to put off decisions if more information is needed, but only for a defined time. Decisions should not be delayed just so that the committee can avoid making a tough call.

## Case resolution

You give the committee members some time to vent about the internal review's findings; meanwhile, you look over the minutes of the last couple of years. Although the committee is large, at most meetings several members are missing, and some members rarely if ever come. The meeting agendas are full of items for information, and many of the issues you know are contentious for the residents and faculty never seem to get discussed. Although the minutes document extensive discussion, the committee rarely seems to make decisions. When decisions are taken, they are not well documented, leading to arguments over interpretation at subsequent meetings.

After getting your departmental chair on board, you convene a small working group to review the structure of your committee and develop terms of reference. You trim the size of the RPC down to 12 members and set up subcommittees for promotions, faculty evaluation and curriculum evaluation. You establish a format for the agenda that includes standing items for focused reports from members. You institute a process to call for items from committee members one week before every meeting. All decisions and action items from the preceding meeting are clearly documented in the minutes and are reviewed during the minute approval process at the start of each meeting.

To maintain the broad engagement on which the department has prided itself, you set up an education advisory council to facilitate consultation on important issues in the program.

One year later, the new structure seems to be working well. Your site visit from the Royal College is next month, but you feel prepared and surprisingly calm.

## Take-home messages

Committees can be incredibly powerful tools, but effective committees do not happen by accident. Think about what you need the committee to do and how to make it work. If you borrow strategies you have seen work well in other committees, seek advice from colleagues and periodically reflect on what is working and not working, you will soon have a well-oiled machine. **Good luck!**

## References

- <sup>1</sup> Webber EM, Walton JM. Running your residency program committee (RPC) meetings. Chap. 8. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>2</sup> Whitfield AG. How to chair a committee. *Br Med J*. 1978;2(6142):936–937.
- <sup>3</sup> Stoll D. The residency review committee for surgery: structure and function. *Semin Vasc Surg*. 2002;15(3):147–154.
- <sup>4</sup> Britt LD. Graduate medical education and the residency review committee: history and challenges. *Am Surg*. 2007;73(2):136–139.
- <sup>5</sup> Kanner R, Johnston MV. Invited article: Residency review committee for neurology: structure and function. *Neurology*. 2008;71(6):452–456.
- <sup>6</sup> Bhatia SK, Bhatia SC. Preparing for a successful psychiatry residency review committee site visit: a guide for new training directors. *Acad Psychiatry*. 2005;29(3):249–255.

- <sup>7</sup> Sedky KW, Swanlung P, Fallon A. Interpersonal and group dynamics in running a residency call committee. *Acad Psychiatry* .2007;31(1):84–85.
- <sup>8</sup> Ashkenas R, Craumer M, Tjan AK, Trapani G, Silverman D, Heifetz J, et al. *HBR guide to making every meeting matter*. Boston (MA): Harvard Business Review Press; 2011.
- <sup>9</sup> London M, London, M. *First-time leaders of small groups: how to create high-performing committees, task forces, clubs, and boards*. 1<sup>st</sup> ed. San Francisco (CA): Jossey-Bass; 2007.
- <sup>10</sup> Pohl AN. *Committees and boards: how to be an effective participant*. 1<sup>st</sup> ed. Lincolnwood (IL): NTC Business Books; 1990.
- <sup>11</sup> Petz J. *Boring meetings suck: get more out of your meetings, or get out of more meetings*. Hoboken (NJ): John Wiley & Sons; 2011.
- <sup>12</sup> Lowy MA. *Chairing a committee*. Bethesda (MD): American Physiological Society; 2006. Available from: [www.apsarchive.org/resource.cfm?submissionID=5710](http://www.apsarchive.org/resource.cfm?submissionID=5710)
- <sup>13</sup> Alberta Agriculture and Rural Development. *Effective committees*. Available from: [www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex1333](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex1333)
- <sup>14</sup> Selinger S. *Making committees work: how to get things done — and enhance your career*. *IEEE Spectrum* 2006 June. Available from: <http://spectrum.ieee.org/at-work/tech-careers/making-committees-work>
- <sup>15</sup> McKinnon KD. *Making committees work*. Toronto (ON): Charity Village; 1995. Available from: [https://charityvillage.com/Content.aspx?topic=making\\_committees\\_work](https://charityvillage.com/Content.aspx?topic=making_committees_work)
- <sup>16</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards*. rev ed. Ottawa (ON): Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>17</sup> Robert HM. *Robert's rules of order newly revised*. 10<sup>th</sup> ed. Cambridge (MA): Perseus Publishing; 2004.

## Appendix 7.1:

# Sample terms of reference for a standing committee (reproduced with permission)

## Terms of reference and membership

### Core Internal Medicine Residency Program Committee

Department of Medicine, University of Toronto

## Mandate

The Core Internal Medicine Residency Program Committee assists the program director in the planning, organization and supervision of the University of Toronto Core Internal Medicine Residency Program.

## Terms of reference

- » to oversee the development and operation of the program such that it meets the general and specific standards of accreditation of the Royal College of Physicians and Surgeons of Canada
- » to direct selection of candidates for admission to the program
- » to oversee evaluation and promotion of residents in the program — delegated to the hospital program directors subcommittee and reported back to the core committee
- » to maintain an appeal mechanism
- » to establish and maintain a mechanism to provide career planning and counselling for residents
- » to establish mechanisms to deal with problems such as those related to stress
- » to conduct ongoing review of the quality of the educational experience and resources available
- » to oversee evaluation of teaching faculty
- » to advise on other issues as they arise

## Voting membership

- » core Internal Medicine program director (chair)
- » division director-general, Internal Medicine, or designate
- » postgraduate year 4 (PGY4) general Internal Medicine program director
- » hospital program directors from each hospital site or designates
- » director, educational scholarship
- » director, undergraduate education
- » director, Core Resident Integrated Scholarly Program (CRISP)
- » director, office of education development
- » research coordinator
- » chief medical residents from each hospital site (total five)
- » one or two elected resident representatives from each of the PGY1, PGY2 and PGY3 levels
- » one elected internationally funded resident representative
- » one elected international medical resident representative

## Frequency of meetings

The committee will meet every two months during the academic year (10 times/year).

## Appendix 7.2:

# Sample terms of reference for an ad hoc working group (reproduced with permission)

## Terms of reference

### Department of Medicine Education Executive Committee

### Working group on revising teacher evaluation

## Membership

- » vice-chair, education (co-chair)
- » director, educational scholarship (co-chair)
- » director, postgraduate programs
- » core Internal Medicine program director
- » two clinician teacher
- » two residents

## Background

Teacher assessment is critical to the operation of our postgraduate training programs. The current Department of Medicine teacher evaluation form has been largely unchanged and is perceived as having limited face validity by residents and teachers. The Faculty of Medicine Best Practices in Teacher Assessment Working Group has made recommendations for the content and design of such forms, which the Department of Medicine should consider adopting.

## Expected deliverables

Recommend a single teacher evaluation form for adoption by all Department of Medicine programs that:

- » adheres to the recommended format of the report on best practices in teacher assessment;
- » is viewed as valid by residents and teachers;
- » facilitates an increase in the number of evaluations per teacher; and
- » encourages qualitative feedback.

## Timeline

It is anticipated that the working group will require one or two meetings via conference call supplemented by work via email in April and early May 2011.

## Reporting

Draft recommendations will be presented to the education committee during a special conference call in May. Finalized recommendations will be presented to the department executive on June 4, with the intent that the new form will be implemented in July 2011.

# Running your residency program committee (RPC) meetings

**Eric M. Webber, MD, FRCSC, and J. Mark Walton, MD, FRCSC**

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## Objectives

**After reading this chapter you should be able to:**

- » describe how a fully functional residency program committee (RPC) is an essential component of a flourishing residency program
- » identify weaknesses in the current structure and function of your RPC
- » implement changes to improve the effectiveness of your RPC

## Case scenario

Your residency training program has recently undergone an internal review. In their report, the surveyors commend your program for its breadth and depth of clinical material and its productive research environment. However, they note that your residency program committee (RPC) met only three times in the past year, attendance at the meetings was poor and the

minutes were sketchy. The residents told the surveyors that they do not feel that the program is responsive to their concerns and that they do not know who their representatives are on the RPC. The faculty enjoy teaching the residents, but they feel disconnected from the program leadership. As you reflect on this report, you realize that your RPC functions poorly and does not help you to deal optimally with some challenging issues. You recognize that it is urgent that you improve your RPC to address the problems identified in the report and prepare for your program's external accreditation in three years.

## Background and context

A well-functioning residency program committee (RPC) is critical to the success of a residency program. Although it may appear that the program director (PD) is solely responsible for every detail of the program, an effective RPC is essential for sharing the work of running the program and optimizing communication between the PD and all of the faculty and residents. The PD is an important part of the RPC but must rely on engaged and active RPC members to assist with change. The RPC also functions as the key forum for residents to provide input into decisions and to contribute to program changes. A poorly functioning RPC may be a result of loss of engagement of the faculty with the program or may be the primary reason why faculty and residents feel disengaged.

# Creating an effective residency program committee

## Accreditation requirements

The B1 standards of the General Standards of Accreditation of the Royal College of Physicians and Surgeons of Canada describe the administrative structure required for all residency programs, including the central role of the RPC.<sup>1</sup> You and your RPC should review all of the B1 standards regularly. These will guide you as you set your priorities and will remind you of responsibilities you might have inadvertently forgotten (or consciously chosen to disregard). Be sure to note the requirements for ongoing review of the program, including evaluation of the rotations, the rotations' goals and objectives, and individual teachers by the residents. This section highlights some of the specific accreditation standards that relate to the RPC and demonstrates how they provide the essential framework for your RPC, rather than being mere bureaucratic hurdles for accreditation.

**Standard B1.2.1:** This committee should include a representative from **each participating site** and **each major component** of the program.

This standard supports ownership of and participation in the program by faculty members at all training sites. Because of the breadth of its membership, the RPC provides an important channel for communication between the central leadership of the program and all training sites. The site representatives are the conduits to the clinical rotations and can be strong advocates for residency education to their clinical colleagues. The site representatives must be provided with an opportunity to consider changes to the program, how these might play out at their sites and what their sites may contribute to the overall program. The broad representation in the RPC also allows the PD to distribute the responsibilities for specific portions of the program to others.

**Standard B1.2.2:** This committee **must** include representation from the residents in the program; if there is more than one resident in the program, at least one **must** be elected by his or her peers.

It is critical that the residents are also engaged in the running of the program. The RPC must be program centred and resident centred. It is particularly important that at least one of the resident representatives on the RPC be chosen by the residents, not the faculty or program leadership. In programs with only two or three residents, often all of them are members of the RPC. There is nothing wrong with this, but it is still important for the residents to designate one of themselves to speak on their behalf. It is also important to know how many "votes" the residents have collectively in RPC decision-making and to be clear who is representing the resident voice in key decisions and discussions. The requirement for an election may create some awkwardness if, for instance, there are only two residents in the program, but it is based on the principle that a resident should be accorded a position of responsibility by the resident body instead of by the program administration. In larger programs it may be necessary to elect both junior and senior residents or even to elect residents to represent each year of the program to ensure optimal resident representation on the RPC.

Participation on the RPC provides residents a chance to gain practical skills in several CanMEDS Intrinsic Roles, including Manager, Professional, Communicator and Collaborator. You should provide guidance and mentorship to the residents; for some it may be their first experience on a committee. Ensure they understand the function of the RPC and their role to represent the concerns of their fellow residents and to provide direct communication between the RPC and the residents. Given the hierarchical relationship between faculty and residents, it is critical that the residents on the RPC be made to feel that the RPC provides a safe environment in which they may raise issues of concern with the expectation that these concerns will be considered respectfully by the faculty members on the committee without fear of repercussion.

A particular challenge is the issue of dealing with sensitive matters pertaining to a specific resident, such as failure or remediation. Some programs include the resident members of the RPC in the discussions of these matters; other programs specifically exclude the resident members. There is no absolute right or wrong answer, but all committee members need to maintain strict confidentiality around such matters. It may be helpful to have the senior/chief resident participate in these discussions. Some programs may wish to allow the resident whose situation is being discussed to choose whether or not to have one (or more) of the resident members of the RPC, or another resident who does not normally attend RPC meetings, present for support during the discussion.

**Standard B1.2.3:** The residency program committee **must** meet regularly, at least quarterly, and keep minutes that reflect the activity of the committee.

The stipulation that meetings be held at least quarterly ensures that the important business of the program is overseen by the RPC. If the committee meets less frequently the RPC will not be seen by the faculty or the residents as the venue where important issues are discussed and decisions are made. In such situations too much of the program's business will be conducted informally or carried out in isolation by the PD. Meetings must have quorum. The formal definition of quorum is variable and can be decided by the committee, but usually it constitutes a majority of the members.

How the RPC functions and how frequently it meets depend on the size and distribution of the program. You must ensure that all required functions are carried out by the committee as a whole or by subcommittees as appropriate and that all tasks are completed. Some activities will occur at certain times of the year (see tables 8.1 and 8.2). For example, programs that select residents to postgraduate year 1 positions through the Canadian Resident Matching Service (CaRMS) will require meetings

in December and January/February to select and rank applicants. Resident promotion is generally done toward the end of the academic year, in May or June. Other RPC responsibilities, such as reviewing the components of the program, can be scheduled at other times during the year.

**Table 8.1: Proposed yearly schedule for tasks and meeting topics related to the work of the RPC (sample for an RPC with various subcommittees)**

Month	Task or meeting topic
<b>Full RPC</b>	
<b>July</b>	- New academic year begins - PD task: Set dates for RPC meetings for the fall or the whole year
<b>August</b>	- PD task: Distribute agenda for first RPC meeting
<b>September</b>	- PD task: Hold first RPC meeting - Meeting topic: Identify major goals and important dates for the year ahead
<b>March</b>	- Meeting topic: Review written in-training examination results
<b>April</b>	- Meeting topic: Review RPC composition for the coming academic year. You may wish to have discussions with individuals in advance about their interest in continuing to be part of the RPC
<b>June</b>	- Meeting topic: Review program achievements and shortfalls in the past year
<b>Resident selection subcommittee</b>	
<b>November</b>	PD task: Identify members of the resident selection subcommittee
<b>December/January</b>	Subcommittee task: Review resident files and offer CaRMS interviews
<b>January/February</b>	Subcommittee task: Conduct CaRMS interviews and rank candidates
<b>March</b>	CaRMS match results released



**Table 8.1** (Continued)

Month	Task or meeting topic
<b>Evaluations and promotions subcommittee</b>	
<b>September/ October</b>	- Subcommittee task: Review methods of resident evaluation currently used by the program and consider changes for this year
<b>January/ February</b>	- Subcommittee task: Review files of final-year residents to prepare final in-training evaluation reports
<b>April/May</b>	- Subcommittee task: Review all residents from the past year to determine if they have successfully completed their academic years
Note: CaRMS, Canadian Resident Matching Service; PD, program director; RPC, resident program committee.	

Given that all RPCs need to meet at least four times per year, you may wish to schedule meetings at a regular time and date every three months or to schedule five meetings in a year; in the latter case, at least four of the five meetings should have quorum. Larger programs may need to meet every two months or more frequently to cover the agenda items adequately. Planning to meet every two months with a summer hiatus also works well (i.e., five meetings a year, with no meetings in July and August).

Select a time of day that optimizes attendance, for both faculty and residents, and ensure that residents are excused from their clinical and academic duties to attend. Encourage resident members to arrange call schedules with the meetings in mind and to give their supervisors both early and just-in-time reminders of their absence from clinical duties. Every attempt should be made to schedule meetings consistently and well in advance at a time that does not systematically disadvantage faculty and residents at a given site. For programs with distributed sites you should consider connecting to these sites by video or teleconference. It is important to respect committee members' time. It is also important not to combine business/divisional meetings with RPC meetings, as the committee compositions are generally quite different and the priorities may conflict.

**Table 8.2: Proposed yearly schedule for tasks and meeting topics related to the work of the RPC (sample for an RPC without subcommittees)**

Month	Task or meeting topic
<b>July</b>	- New academic year begins - PD task: Set dates for RPC meetings for the fall or the whole year
<b>August</b>	- PD task: Distribute agenda for first RPC meeting
<b>September</b>	- PD task: Hold first RPC meeting - Meeting topic: Identify major goals and important dates for the year ahead
<b>September/ October</b>	- Meeting topic: Review methods of resident evaluation currently used by the program and consider changes for this year
<b>November</b>	- PD task: RPC preparation for CaRMS
<b>December/ January</b>	- RPC task: Review resident files and offer CaRMS interviews
<b>January/ February</b>	- RPC task: Conduct CaRMS interviews and rank candidates - RPC task: Review files of final-year residents to prepare final in-training evaluation reports
<b>March</b>	- CaRMS match results released - RPC task: Review written in-training examination results
<b>April</b>	- Meeting topic: Review RPC composition for the coming academic year
<b>April/May</b>	- RPC task: Review all residents from the past year to determine if they have successfully completed their academic years
<b>June</b>	- Meeting topic: Review program achievements and shortfalls in the past year and plan for the next academic year. Review curriculum delivery methods
Note: CaRMS, Canadian Resident Matching Service; PD, program director; RPC, resident program committee.	

**Standard B1.2.4:** The residency program committee **must** communicate regularly with members of the committee, the department or division, and residents.

This is a new accreditation standard, which highlights the importance of the work done by the RPC and the need to link it to the activities of the residents and faculty. One way to achieve this standard is to circulate the meeting minutes in a timely fashion to all faculty and residents. The minutes should be written in such a way that those not at the meeting can understand the issues discussed, how decisions were made and the actions arising. It may also be useful to formally report the educational issues discussed by the RPC to the larger divisional or departmental meetings. This can be done by including the RPC minutes as an item on the divisional or departmental meeting agenda or by providing a summary. If the minutes are lengthy the latter may be more effective. It is important that the minutes be taken accurately. In some cases the PD can minute the meetings; however, it may be preferable to have the program assistant do this job and then the PD can revise the minutes as necessary.

For sensitive issues involving specific residents or faculty, it may be appropriate to make general reference to the discussion of the subject in a way that does not identify the individuals involved in the main minutes and to record the details in a separate supplement to the minutes that is not circulated. Such a supplement can be kept in the RPC files for future reference. It should not be available to anyone outside the RPC membership (or outside a subset of the RPC membership, if certain members, such as resident members, were excluded from the discussion). Difficult issues such as resident remediation and probation are usually managed more effectively by a subcommittee of the RPC, and because they occur infrequently, they require that you reference the policies at your university and seek appropriate guidance from the postgraduate dean. In some universities the RPC may also need to be able to hear an appeal of an evaluation. See Chapter 15 in this manual for information on how to handle such cases.<sup>2</sup>

Between meetings, action items should be followed up, and actions should be communicated between committee members electronically. During scheduled RPC meetings there should be time for subcommittees and working groups to report back.

## Other recommendations

### Meeting agendas

Circulate meeting agendas to all RPC members well in advance of the meetings. Allocate time judiciously for all standing items on the agenda, including resident concerns and new business from faculty members. Junior and senior residents may have differing or conflicting opinions on issues, so make sure that residents at different levels have an opportunity to speak so that the RPC can hear and consider the conflicting perspectives. Follow up on the issues or concerns that were raised at previous meetings and document in the minutes the progress that has been made in addressing them. If you have difficulty completing the agenda in the time provided, consider whether you need to lengthen the meetings, schedule them more frequently, or delegate some activities to specific subcommittees. Meetings should be a minimum of one hour in length. However, two hours may be too lengthy a commitment for some members, so you need to run an efficient meeting, allowing enough time for open discussion and ensuring that each agenda item is allocated an appropriate amount of time.

### Subcommittees and working groups

You and your RPC should consider creating subcommittees or working groups to make recommendations when discussion of a particular issue would consume too much time during an RPC meeting or when discussions by the RPC as a whole would be ineffective. In all cases there must be clear linkage and reporting structures between the main RPC and its subcommittee(s). It is also important that the residents participate in each of the subcommittees or working groups to ensure appropriate transparency and resident buy in (with one exception: as noted earlier in this chapter, some programs choose to exclude residents from subcommittees that handle resident remediation). Larger programs frequently create subcommittees to deal with some or all of the following issues:

- » resident admission,
- » resident evaluations and promotion,
- » resident research and
- » remediation and probation.

As PD, you may choose to lead or participate in any or all subcommittees. If you are not a member of a subcommittee it is important that you and the subcommittee chair maintain clear lines of communication and understand your respective roles.

### **Making decisions at the residency program committee**

The RPC needs to be the forum where critical decisions about the residency program are made. You and your committee need to decide how decisions will be made: by formal voting, consultation or consensus. You may wish to review this each year as new members join the committee to ensure that all members are satisfied that the processes for making decisions are fair and transparent. If decisions are to be made by voting, you need to determine which of the RPC members, including residents, are allowed to vote. Different members of your committee may have conflicting opinions about various topics and so it is important that these members are present to discuss them. As the chair of the RPC, when you know that a controversial item is coming up for discussion it is worthwhile to lay some of the groundwork for these discussions. You can do this with emails containing some of the background information or by having face-to-face discussion with certain RPC members to ensure that the issues are understood. Managing an RPC involves the art of compromise, as there is often not a perfect decision. Another option is to decide that a new decision will be adopted as a pilot and then reassessed after a period of time to see its effect.

### **Other functions to explore**

Use the RPC to enhance the program's cohesiveness and the faculty's and residents' level of engagement. You can also consider using the RPC to develop longer term plans for the program in areas such as resident numbers, training sites and academic focus. To maintain the vitality of the RPC it is important to develop succession plans

for the PD position and other key positions on the committee.

### **Meeting atmosphere**

Ideally, the atmosphere at RPC meetings fosters engagement and commitment and encourages people to bring forward new ideas. As chair of the committee you must set the tone, encouraging discussion from all committee members. Make particular effort to include the opinions and ideas of residents and participants on videoconference. Ensure that the conversations are always respectful and collegial. If the meeting becomes simply an occasion for you to deliver a report to an audience, then it ceases to be a functional meeting. Having other members report on specific items will engage all in a problem-solving format. On an accreditation review the effectiveness of an RPC can be demonstrated when the committee produces action items that lead to improvements within the program.

It is valuable to formally review individual rotations as part of the RPC meetings. This ensures that the program is being regularly reviewed (Standard B1.3.8). One strategy to facilitate ongoing review of the program is to schedule a standing review of a specific component at every meeting, such as one rotation per meeting or one evaluation tool per meeting over a two-year cycle.

## **Tips and pitfalls**

- » Establish regular and clear communication both during meetings and outside of meetings. This will serve to keep people engaged and up to speed. This is particularly important with large programs or multiple distributed sites.
- » To help the RPC function effectively, keep the RPC members updated on issues and events in the department and in the faculty of medicine that may affect the running of the program.
- » Ensure that functions delegated to RPC subcommittees, such as admissions or promotions, are reported back to the RPC

committee in a manner that allows the RPC to have oversight and confidence in the process.

- » Follow up on issues related to mandated committee functions that are within the B standards and see that they are resolved. In addition, “hot button” items need to be followed and dealt with effectively. Do not let things drop.
- » Acknowledge those who have contributed to the program, verbally and in writing. Consider writing an annual note to file for resident representatives to include in a portfolio, or consider generating a reflective exercise for resident representatives around a CanMEDS Intrinsic Role such as Manager.
- » Maintain a sense of humour: try to make the RPC meetings interesting and fun.
- » Support members of the committee who are taking the lead on an initiative.
- » Recognize deadwood. Try to engage non-contributing committee members, but if your efforts are not successful then offer them a face-saving way to leave the committee. This is often best done by reviewing the committee membership on an annual basis.
- » Distribute agendas ahead of time so that committee members can come to the meetings prepared.
- » New members should be introduced to the full RPC and provided with an opportunity to explain their interest in education and motivation for participating. Recognize when new faculty members are hired who are interested in education. They may fill vacancies that arise in the committee.
- » Encourage all members to review the RPC terms of reference and the Royal College’s accreditation standards at least annually and confirm the importance of their presence on the committee. Encourage your faculty and residents to participate in the internal reviews of other residency programs.

- » Develop a work plan for the RPC for the year that reflects the variability of residency program activity (e.g., admissions, in-training examination review) and review it with the committee members at the start of the academic year. Have the RPC conduct a self-assessment at the end of each year with a roundtable discussion.
- » Make sure all RPC members know that the primary focus of the committee is the residency program and the education of the residents.
- » As PD and chair of the committee, make sure you know to whom you report and understand your dual reporting duties (i.e., to the departmental or divisional chair, and to the postgraduate dean) and their roles in providing advice and support to you.

## Case resolution

Your program has lost its way in several critical areas, and the dysfunction of the RPC is a symptom of this problem. It appears that the faculty are still committed to teaching but the RPC is not seen as effective. The function of the committee and the format of its meetings need to be reviewed. In some instances the program’s business meetings may be replacing the RPC meetings. This is a dangerous development because service issues can trump educational issues. The problems with the RPC may simply be a result of problems with the timing or location of its meetings, but they may run deeper. As PD, you realize you need assistance, and you set about obtaining it. You start by holding a combined educational retreat attended by both the residents and the faculty to see what the problem(s) seem to be. (Note that in some environments it may be desirable to hold separate retreats for residents and faculty.) You then engage the divisional head/chair of the department and the postgraduate dean and seek guidance from other, more experienced PDs.

## References

- <sup>1</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards.* rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>2</sup> Glover Takahashi S. Resident remediation. Chap. 15. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.

## Other resources

- Robert HM. *Robert's rules of order newly revised.* 10<sup>th</sup> ed. Cambridge (MA): Perseus Books Group; 2000. p. xxv.
- Transportation Research Board, National Research Council. *How to run a committee and not get lynched: a guide for committee chairs.* Ottawa: Transportation Research Board; 2001. Available from: [onlinepubs.trb.org/onlinepubs/admin/HowToRunACommittee.pdf](http://onlinepubs.trb.org/onlinepubs/admin/HowToRunACommittee.pdf)

# Working with the “A” team:

## *an effective partnership with the program administrator*

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## Objectives

**After reading this chapter you should be able to:**

- » more deliberately and thoughtfully manage your working relationship with the program administrator(s)
- » identify ways to work with a program administrator to improve the efficiency, effectiveness and managerial flow of your residency program
- » improve a program administrator’s satisfaction in the job and create opportunities for a program administrator to exercise initiative, maximize strengths and develop areas of autonomy

## Case scenario 1

Dr. L. is the new program director (PD) of a large surgical residency program. After the blur of congratulations, calls, meetings and discussions she begins to notice that the PA, Ms. D, works through her breaks and often seems tense. When Dr. L. raises the issue, Ms. D. smiles and reassures her that there is nothing out of the ordinary. Dr. L. probes further and hears a description of chronic overwork. Ms. D. can’t remember the last time she didn’t feel stressed just thinking of going to work every morning. Dr. L. assures Ms. D. that she’ll make some changes to alleviate her stress, but she feels mounting anxiety of her own. She cannot hire an additional support person to take on some of her PA’s workload and yet she has to make her PA’s job more manageable.

## Case scenario 2

Dr. G. has come to rely on his program working well. Early in his tenure as PD, he spent a year reorganizing the work of running the program. The PA, Ms. H., is now adept at solving many of the program’s managerial issues without having to consult him so he can focus on newer projects. Over the past month, however, several cracks have begun to show. The processes that he

established for certain functions have been disregarded from time to time, and some work is being done in the old, more haphazard, way. Ms. H. has not completed a few tasks until the last minute, precipitating a couple of crises. She seems to have lost her handle on her work. Dr. G. senses that there is a problem, but it's not clear to him what is going on.

## Case scenario 3

Dr. M is surprised to have been offered the program directorship so soon after starting her practice. The last PD suddenly left for a new position at a different university and had no time to ease her into the role. Having trained abroad, she knows little about what makes the program tick and nothing about the administrative processes at her school. She realizes that the PA, Ms. A., who has been in the position for 10 years, knows the program well, but she does not know how to best make use of Ms. A.'s valuable experience.

## Case scenario 4

Dr. S has been a PD for 4 years. His program was running smoothly until the new chair decided to reorganize the department's educational programs. Dr. S. has been asked to develop an interprofessional educational curriculum for his residency program. The parameters are daunting, and he now needs to reorganize his program. He recognizes that Mr. Y., the PA, will be a vital part of this process, but Dr. S. is not sure exactly how Mr. Y. can best contribute.

## Background and context

Standard B1.1 of the General Standards of Accreditation of the Royal College of Physicians and Surgeons of Canada states that "the program director must be assured of sufficient time and support to supervise and administer the program."<sup>1</sup> This is usually interpreted to mean that the program director (PD) will

have help from a program assistant (PA) in a capacity commensurate with the work required to administer the program. Residency programs are complex medical education endeavours that require PDs to work intimately with their PAs. However, most PDs have no formal training in management or supervision, which can pose a significant challenge when they assume their administrative mantles.

A PD and a PA make a great team to lead the process of medical education. As residency programs and medical education have become more complex, the two roles and the way that the two parties work together have changed. The role of the PA may range from primarily a secretarial role to one that includes more managerial duties, especially in programs that are growing or that are embracing new educational approaches. Some PAs are still called *program assistants*, but the term *program administrator* or *program coordinator* may be more accurate for those taking on expanding roles. PAs fulfill a crucial role in good residency programs and are considered by many to be the "glue" that holds a program together. In such a complex and dynamic circumstance, it would be difficult to comprehensively define the role of all PAs in a single, standardized document. All PAs share a set of basic duties, but they also take on specialized functions that are unique to their individual program and to their working relationship with their PD. In fact, PAs themselves are currently examining their place in medical education in Canada, and their deliberations will surely affect how they will carry out their duties, what qualifications will be needed for the job and how they will be perceived by others in the future.

This chapter will introduce some concepts for further thought that will affect not just your working relationship with a PA but the running of your program. It will also bring to bear the PA's perspective on the job and working relationship with the PD. To facilitate this, we gathered input from 12 PAs from different departments at McMaster University via an informal email survey and a focus group, and we interviewed a PA from the University of Ottawa.\* From this work,

\*As much as possible, we have tried to discuss the PA role in a gender-neutral way.

three important themes emerged (Textbox 9.1). First, PAs are challenged by the changes in and the complexity of their evolving roles; the need to assist multiple people including their PDs, faculty members and residents; and the volume and intensity of their work. Second, PAs need to develop and maintain a strong working relationship with their PDs with appropriate supervision, assistance, trust and support for their initiatives, and autonomy. Third, PAs care deeply about the work they do and see value in well-run programs that produce good doctors.

### **Textbox 9.1: What every PD needs to know about working with PAs**

#### **1. PAs' jobs are more challenging than they may look on the surface:**

- » PAs are expected to support many people at once (PDs, faculty members, residents and others), sometimes for multiple residency programs.
- » PAs are expected to find time to complete large, long-term tasks but they face a constant stream of emails, phone calls and visits requiring an immediate response.
- » As the complexity of residency programs has increased in recent years, so too has the complexity of PAs' roles.

#### **2. A strong working relationship with the PD is crucial to a PA's ability to support a program effectively.**

- » PAs need appropriate supervision, assistance, encouragement and autonomy.
- » PDs need to communicate openly and frequently with their PAs.

#### **3. Most PAs invest deeply in their work and are committed to seeing their programs run well.**

## **What do program administrators do?**

Under the direction of their PD and with a great deal of initiative and self-directed learning, many PAs have taken on greater responsibility for setting up teaching schedules and for organizing rotations and tailored learning experiences. It is not uncommon for experienced PAs to be given the authority to make some decisions about the routine running of the program, taking issues to the PD only in unusual or complex situations. PAs also play a significant role in facilitating the path of their program's trainees through their residency years, ensuring that residents have appropriate and relevant rotation placements and making sure that crucial documentation is completed correctly and on time. Some PAs support several small programs and must juggle the differing expectations of various departments, whereas others work in large programs and may work in teams or supervise a team of support staff.

The exponential increase in the volume and speed of communication in recent years, the expansion in many PA's responsibilities, and the lack of commensurate funding for program management mean that many PAs are faced with a daunting workload.

*"My role is significantly expanding in that I'm having more contact with residents and have additional responsibilities for scheduling and I'm making more decisions that I've been given direction to manage, but I'm struggling with the increased demands on my time. The extent of my responsibilities isn't fully understood by others."*

— Wendy Clark, Nephrology, McMaster University

*"Liaising between faculty, staff, students and everyone involved in a timely fashion is a day-to-day challenge."*

— Katie Niblock, Surgery, McMaster University



PAs may report to their PDs, but they also serve their residents and faculty. Residents, faculty and even staff of the postgraduate medical education office and others can unreasonably expect the PA to be always “on call” to answer questions and fulfill requests. It can be challenging for PAs to juggle these minute-by-minute demands on their time with the need to complete larger, longitudinal tasks (such as setting up a teaching schedule for the next academic year) that require quiet concentration.

*“You are expected to be the go-to person for your program, and go-to people are expected to be available eight hours a day to deal with issues as soon as they arise. But this leads to a very fragmented work day.”*

— Program administrator from McMaster University

In spite of the challenges they face, most PAs are strongly committed to their programs. PAs see the results of their work year after year, as “their” residents graduate and begin their practices. A PA may work with a succession of PDs in a single program over the course of her career. She quickly becomes the institutional memory for her program and perhaps the individual with the longest personal investment in the program. It is no wonder that established PAs feel a sense of ownership in the program. They assist with or run many of the important, recurrent program events such as resident selection, research days and retreats and may feel personally responsible when program shortcomings are raised in accreditation reviews, even if they haven’t been remiss in fulfilling any of their duties. Conversely, PAs take personal pride in their program’s successes, just as PDs do.

A seasoned PA can become the heart of your program.

*“In a recent internal review, residents described my role as the glue that holds the program together. With busy clinical responsibilities and significant research travel, the PD is not always immediately available. The program office is the hub that can always be reached and can provide access to myriad resources.”*

— Jan Taylor, Internal Medicine, McMaster University

A PA can be your eyes and ears in the program. Given her unique position as the one constant in the daily life of your program, she may be the first person to recognize when something is going wrong. She may also have a special rapport with your program’s residents. Both in the past and today, PAs have been (are) the confidants to whom some residents turn first when they have to discuss programmatic problems.

*“We’re the go-between between the residents and the PD. If a resident is having issues and isn’t sure if they should go to their PD, they’ll come to their PA first: ‘This is happening, and I don’t know what to do.’ For instance, they might need to have their schedule adjusted to accommodate something. Many of us have been here for so long, we’re sort of like moms in the program. My residents and I have the sort of relationship where they know they can come to me with an issue and it won’t go any further than me if it doesn’t need to. If I feel that it needs to go further, I’ll either recommend that they meet with the PD or I’ll ask their permission to bring up the issue the next time I meet with the PD.”*

— Ginette Snook, Ophthalmology, University of Ottawa

The quality of your working relationship with a PA will be one of the key factors determining the success of your tenure as PD. Best practices are suggested later in this chapter to help you to develop a collegial and effective partnership with a PA.

## Literature scan

Working relationships and supervision are topics explored in the behavioural management literature. Observing that successful leaders adapt their behaviour to address the demands of each unique situation, Paul Hersey and Kenneth Blanchard developed the situational leadership theory in the late 1960s and refined it over the ensuing years.<sup>2</sup> According to this theory, leaders must assess each situation and the “readiness” of

their follower(s) and adjust the amount of direction and socioemotional support they provide accordingly. Readiness is the extent to which followers are able and willing to accomplish a specific task: it is important to note that an individual or group is not at a particular level of readiness in a global sense. In a residency program, for example, a PA may be at a high level of readiness for answering phone calls from faculty and residents but at a low level of readiness for coordinating the interview process for prospective residents. Hersey and Blanchard classified readiness along a continuum ranging from low readiness (R1) for followers who are unable and unwilling (insecure) to high readiness (R4) for those who are able and willing (confident).

It is also important to consider that a working relationship requires something of you. As a manager, supervisor or leader, you must inspire confidence and trust, and you must earn respect from all members of the residency program, including the PA. As the PD, you are the team leader who must pay attention to the factors that will foster a sense of followership in a PA and others, such as positional power, administrative skill, professionalism and respect.

Many books published in the popular press offer insights that you might find useful as you navigate your working relationship with a PA. Time management and the organization of complex and myriad duties are a challenge for us all. PAs in particular can find themselves stressed to balance the ongoing demands of running a program with the desire to help their PDs, faculty and residents with their everyday requests. The PAs who responded to our survey and participated in our focus group reported that this balance of short and long-term tasks was often at an unsteady equilibrium, with wild swings in the volume of day-to-day requests. They wanted help from their PDs to control the workload and to develop their skills to cope with their demanding jobs. *The One Minute Manager* by Kenneth Blanchard and Spencer Johnson<sup>3</sup> and other similar books give short, actionable tips and may be useful for both you and a PA. Hema Patel and Derek Puddester wrote *The Time Management Guide* for physicians, and it includes several sections that will help you to organize your work and possibly the workload of a PA.<sup>4</sup>

Daniel Pink's 2009 book *Drive: The Surprising Truth about What Motivates Us* resonates with the message from the PAs who participated in our focus group and our survey. They go the extra mile to make their programs shine because they care about helping to train good doctors. In his book, Pink challenges the received wisdom that the best way to motivate people is with rewards such as money.<sup>5</sup> He cites a body of research in the behavioural sciences showing that incentives can be counterproductive, suggesting instead that people will perform optimally when they find some intrinsic value in their work. Pink discusses three ways that managers can put this idea into action with their employees. First, satisfy the employees' desire for autonomy in choosing what and how tasks should be completed, which "stimulates their innate capacity for self-direction." Second, give them opportunities to become adept at new things, so that they can experience mastery. Third, ensure that employees' daily duties clearly relate to a larger purpose, to satisfy their desire to improve the world.

Pink also comments that

*"one source of frustration in the workplace is the frequent mismatch between what people must do and what people can do. When what they must do exceeds their capabilities, the result is anxiety. When what they must do falls short of their capabilities, the result is boredom. But when the match is just right, the results can be glorious."*

The chapter on collaboration in this manual includes some specific insights on the PD–PA team.<sup>6</sup>

## Best practices

Your working relationship with a PA will be complex, as it involves leadership, supervision, management and shared responsibilities. It will affect everything you do as a PD and the function of the whole program. The relationship will also be dynamic, requiring you to put some effort into establishing it (either with an already-present PA when you begin your program

directorship or with a new PA whom you must find and hire) and maintaining it. As in any successful long-term collaboration, you must ensure that both of you acknowledge the benefits that will accrue from managing the relationship well and maintaining a climate of mutual respect. The working relationship between PAs and PDs was an important overarching theme when we asked seasoned PAs to tell us what affected their ability to do their jobs effectively. The sections below discuss the main factors that will colour the PD–PA interaction.

## Hire the right person to be a PA

If your program needs a new PA either when you first become the PD or at some point during your tenure, give some thought to the ways in which you'd like your program's culture to evolve, as PAs have a significant impact on the daily life of their programs. Consider your own working style, and think about the type of person with whom you collaborate well. Look for someone who has excellent interpersonal skills. Think about the administrative demands of your program, and seek out someone who can handle them.

Candidates should also have good organizational skills and will need to be able to multi-task, maintaining focus on large projects and ongoing duties while troubleshooting or responding to new or urgent requests.

*“[Make sure the new assistant can handle multiple large tasks at once. Make sure the new assistant can handle hundreds of email per day and not stress out.]”*

— Tammy Purchase, Obstetrics and Gynecology, McMaster University

*“Look for soft skills that are important. Processes can be learned, but how someone approaches working with a team is difficult to re-train.”*

— Jan Taylor, Internal Medicine, McMaster University

*“Look for someone with whom you can have open/ collaborative discussions and with whom you will be able to build a team to push the program forward. Look for a team player, someone who is passionate about education and building curriculum and someone who is highly organized.”*

— Jennifer Jenkins, Pediatric Endocrinology, McMaster University

The human resources person in your department or faculty can help you to find the right fit for your program and will navigate the bureaucracy of your institution. In the end, since you will work more closely with a PA than anyone else, ensure that you are the one to make the decision about which candidate to choose, and take time to find the best person to fill the job.

## Clearly define a PA's role

Each program needs to establish its own mix of activities for the PD, the PA and any other members of the program team (such as any assistant PDs and other support staff). You should consider a PA's skills and abilities before deciding how to allocate duties. For instance, a PD, an assistant PD and a half-time PA might do the same work in one program as a PD and a full-time, higher functioning PA in another program.

*“To avoid repetition or tasks falling through the cracks, it's important for each member to have clear roles. Someone might be responsible for all areas of contact with faculty who teach at the academic half-days, for example, and someone else responsible for resident contact for the academic half-days. To help residents and others know who to contact regarding what, similar items should be grouped together under one person.”*

— Jan Taylor, Internal Medicine, McMaster University

Early in your tenure as PD, meet with the PA to go through your program's academic calendar month by month. If she provided support for the program during your predecessor's tenure, invite her to serve as your teacher: ask her to describe how she and your predecessor completed each major task and seek her input on how each process might be improved. Discuss how you will work together to complete each activity; ask her what she expects of you for each task and tell her what you expect of her. You will be energized and excited when you start your new role, and you may want to take over tasks that the PA looked after for your predecessor; if this is the case, be sure to make it clear to the PA what you are doing, and why. For instance, let her know that you need to take the reins and do more when you start so that you get a feel for the program and understand it better. As you become familiar with each other's working styles and as you get a handle on the program, you can refine your expectations of each other.

You will need to ensure that both you and the PA are clear on who will make what decisions. Once you have sussed out the PA's skills and discussed your working relationship, establish how much autonomy the PA will have and plan for how that will change according to your expectations in the next while. Getting this right is an art and it is dynamic. When you first begin to work together, you may wish to supervise the PA more closely so that you can get a sense of how she handles various issues and how she writes (this is discussed further below). Once you have become familiar with her work, set up general operating parameters for the PA and then empower her to take action within those parameters.

Regardless of the size of the program, each PA should have an up-to-date job description that clearly defines the duties of the position and the credentials required for the role. Review previous versions of this document (if they exist) when you start your tenure. General job descriptions from the postgraduate medical education office or the departmental office should be tailored to your program's situation as much as possible (e.g., the job description should identify special skills your program's PA requires or any unique needs of the program).

## Communicate with a PA

Commit to meeting regularly with the PA: a standing appointment every week is ideal. Clinical and other duties will place stress on this commitment, so it must be in a time slot where you can give it the priority it deserves.

*“Every Wednesday morning, the first hour after grand rounds is ours. It's in both of our calendars. We discuss all of the things coming up for future meetings, and we review anything that's come out of past meetings and any burning issues. I can get documents signed and ensure that any emails are followed up appropriately. We each come to the meeting with an agenda of things we want to cover. It's an easy way to make sure we're both in the loop. I can also tell him about any issues that have come up with residents.”*

— Ginette Snook, Ophthalmology, University of Ottawa

Remember that the PA has antennae tuned to the traffic in the postgraduate medical education office, to the chatter between other PAs, to the pulse of the program and to the communication between the program and the Royal College. The more she understands about the context of your operations, and about the mission and culture of the program, the better she will detect and either act on or pass to you relevant information from these streams. Share with the PA as much as you can about your plans for the program and your way of thinking, so that she can support you more effectively and act on your behalf in your absence.

*“The more you tell me, the more I can help you.”*

— Diane Lawson, Respiriology, McMaster University

*“If the PA has developed a good enough understanding of the PD’s working style and approach on different issues to be able to respond on his/her behalf, it will build confidence among the program’s faculty and students, who will know that the PA represents the PD, the PD represents the PA and together they’re a team working in the program’s favour.”*

— Diane Lawson, Respiriology, McMaster University

*“[My primary role is as the program’s] gate keeper. I’m the person who should know everything, but sometimes finds out last.”*

— Jennifer Jenkins, Pediatric Endocrinology, McMaster University

Some PDs give the PA access to their main administrative email account or set up a special email for their PD role that they can share with the PAs. If you prefer not to do this, ensure that you copy the PA on all program-related emails and make sure that relevant correspondents know to copy the PA about program-related issues.

Be clear about the timelines you expect the PA to observe and, reciprocally, honour the deadlines you set for yourself to be respectful to her. A PA often will not be able to complete a large task without your input, and if you delay your involvement or do not follow through on your commitments it will both stymie her efforts and frustrate her. You may need to juggle or reduce your clinical workload and release yourself from other commitments if they are frequently hindering your ability to regularly communicate with a PA and run your program.

If you have an assistant for your clinical work, this person should meet with the PA to clarify their roles and ensure that they’re not duplicating effort on tasks (e.g., they should determine which of them will schedule certain kinds of activities in the PD’s calendar and who will have jurisdiction over each part of the calendar).

## Help the PA to manage her communications with others

The increasing complexity of residency programs and the increasing expectations concerning transparency and access mean that the PA will be communicating often and voluminously with residents, faculty and others outside your program. This requires a special skill set, as the PA’s communications often create the “face” of your program. When choosing a new PA, take the time to assess both her verbal and written communication skills. If a PA needs help in drafting letters or documents, help her to acquire the skills she needs by ensuring that she reads emails and letters you have written and becomes accustomed to your style of communication, and give her opportunities for formal training. She will also need to demonstrate brevity and tact in both her verbal and formal communication.

Technology presents opportunities for efficiencies as well as new challenges for you and PAs. You can reduce the burden on a PA of repeating the same information to various individuals by ensuring that your program’s website offers commonly sought information in a user-friendly layout. Make sure that your faculty, residents and others interested in the program know what information the website contains, and update the information in a scheduled fashion. If your faculty and others submit information electronically rather than in hard-copy format, the PA will not need to transcribe illegibly handwritten notes or assessment forms, reducing errors and saving the PA time.

Emails can allow for asynchrony of communication, freeing up time for a PA to schedule meetings and attend to other tasks. However, the ease of electronic communication and the expectations of transparency also mean that others may contact a PA and expect her to respond to them and to serve them in ways you could not anticipate in advance. People tend to expect an immediate response when they send an email message. Even redirecting or refusing incorrect, trivial or unreasonable requests takes time. Indicate clearly to faculty and residents that it will take time for a PA to process their requests and that she will manage her communications with them along with her other obligations.

It is important to set limitations on what tasks you expect the PA to undertake and on when and how much you expect the PA to work. When you send an email late in the evening or on the weekend it may get something off your to-do list, but you may also inadvertently send the message to the PA that you expect them to work around the clock as well or to cater to your hours. In most cases this is inappropriate. If you adopt this communication style, have a focused discussion with the PA about why you find it helpful to communicate at these times and about how and when you expect the PA to respond.

## Support a PA's relationship with your program's residents and faculty

A PA treads a fine line. She is directly responsible to you, but her function is to serve the program, which means that she serves the faculty and residents. PAs “get” this. They enjoy working with other faculty, and they take particular pleasure in the rapport they develop with their program's residents. However, there is opportunity for these relationships to look more like a servant—master relationship, and some faculty and residents may treat a PA as their own personal assistant. A PA will require your help from time to time to remind others that she is busy running the program and must protect some of her time for that crucial activity.

More commonly, faculty and staff will be glad to celebrate the help they receive from a PA. Opportunities to work together are opportunities to develop their working relationship and for a PA to become better acquainted with nuances of the program that only faculty and residents can know.

Keeping in touch with the faculty can be tough for a PA. However, she can make regular communication (or even on-site) “rounds” with the site directors to get their take on what is working, what needs work and how she can help. This will also allow her to help set the agenda for your residency program committee meetings. Other opportunities for a PA to reach out to the faculty include tracking research projects and potential supervisors for residents, liaising with faculty who manage special program content (such as simulation curricula) and developing new opportunities for faculty involvement, such as teaching the CanMEDS Intrinsic Roles.

PAs have a special rapport with the program's residents, with whom they interact from the trainees' first day in the program to graduation: they are instrumental in helping present the program to prospective residents, they assist in the matching process and they shepherd the trainees through their residency. You will have little need to foster this self-propelled relationship, but you may need to set limits on it from time to time. You and the PA will need to invest much time and effort in dealing with individuals who are in difficulty or are difficult (see chapters 14 and 15 in this book<sup>7,8</sup>); although this is unavoidable, you should track and manage this time and effort to ensure that other tasks do not fall by the wayside.

Residents, especially juniors, are not savvy about how the program runs and may expect that a PA can respond to their needs often and immediately. If you and a PA set up a PA “resident clinic” so that residents can book access to a PA (e.g., in the hours before and after protected teaching blocks), you will be able to convert many “crises” into more routine issues, set a standard for good practice and reduce the calls for immediate help.

It is through these formal and informal discussions that PAs come to know the concerns of residents in the program. Residents may feel more comfortable approaching a PA than you about a sensitive matter because of the rapport she has fostered with them and because they realize that a PA does not assess their performance. A PA is often privy to information and confidences that require discretion and tact. It is important to stress that a good PA will know how to respect confidentiality in both directions: she will not disclose private information that a resident has confided to her, and she will not disclose sensitive information to residents and faculty. It takes only a single breach of trust to upset a smoothly running program.

## Give a PA feedback on her performance

Work to develop a collegial relationship with a PA in which you both feel comfortable discussing any problems that arise. If you stay in close communication with a PA you will be to identify and address any areas of underperformance before they cause problems for

your program, you will be able to quickly reorient her to task when necessary, and you will see when her workload has increased to the point that she needs additional help. The communication and management literatures identify delays in addressing shortcomings as one of the most pervasive problems that supervisors have and one of the most detrimental to the proper function of any system. In addressing shortcomings, describe your observations and give concrete examples to separate performance from attitude or personality (which require you to interpret others' intentions). Ask for input on your observations and reach agreement on your assessment. Next, ask a PA for her suggestions of how these shortcomings can be overcome, make sure that she addresses the issues directly and add any corrective action that you feel must be included. Finally, ensure that there is a way for the two of you to assess the outcome of the process together. This review can become a quick, non-confrontational, relationship-building exercise when done well. Regular attention to this process builds a culture of ongoing improvement and reduces the emotive, debilitating effect of shame and blame.

Set aside time to conduct an annual performance review with the PA(s). Be sure to discuss both strengths and any areas of underperformance. Work together with the PA to set goals for the coming year. Invite her to offer her perspective on the challenges she has faced and the successes she has achieved.

Should there be concerns about major or persistent performance issues, it is important that previous feedback and performance reviews be consistent with these impressions. If improvement is not occurring and/or the demands of the job have grown to require a skill set that the PA has not been able to master (after being provided with detailed feedback coaching and resources, of course) the time may come to consider options to maintain the integrity of the program. These decisions are always difficult, but the PA role is critical to the success of the program and it does nobody any favours to keep an individual in a position for which they are not well suited and in which they are floundering. In these cases it is important to solicit help early, from either more experienced administrators or your human resources professional. It will be important to give the PA every chance to succeed and also to validate

your perceptions through sensitive and confidential conversations with others with whom the PA works. Consult early if you feel that there may be a significant mismatch between your PA's skill set and the job.

## Work to retain PAs

If you have inherited a seasoned PA, or if you have invested significant effort in developing an effective working relationship with a new PA, you will not want your program to lose her. Fostering a PA's internal motivation to remain engaged with your program is key.<sup>5</sup>

Acknowledge the stresses of a PA's job, and ask her about the challenges she's facing. Responding to the constant barrage of emails, phone calls and drop-in visitors to the program office can easily consume PA's entire day, and yet she is also expected to find time to plan and attend program meetings and other events and to carry out a variety of larger tasks over the course of the academic year. Protect a PA from the comments and complaints that may come from staff and residents who don't get immediate replies from the PA. Sometimes the need for an immediate response resulted from their own delays, and the PA must be protected from shouldering inappropriate burdens or responsibilities in these circumstances. To this end, it may be important to temper the "open door, anything at any time" ethic that comes with the PA's position by instituting some scheduled time for resident and staff issues so that most of these issues can be dealt with in a more measured way. If this is possible, then ensure that the staff and residents know when are good times to access the PA's time.

Embrace the ideas and creativity of a PA. She has her finger on the pulse of the program and can provide a fresh perspective. Giving a PA the freedom to contribute to the improvement of the program is a good way to empower her, build autonomy and foster her pride in her work. As you do this, ensure that you are a good partner, providing the appropriate input, supervision, encouragement and environment for success. Communicate her initiative and your support of her endeavours to your faculty and residents and give them opportunities to work with her, support her and celebrate her success.

The job of retaining and rewarding is not just up to you: your entire program should contribute. Develop opportunities for your faculty and residents to recognize the contributions of the PA. For instance, ensure that the PA is an integral part of the social functions in your program, such as residency appreciation dinners and golf days. Publicly acknowledge her contributions at program gatherings and make sure that she knows that you, specifically, value all that she does for the program and for you.

Finally, advocate for a PA. Add your weight to any efforts by PAs in your institution to standardize their job descriptions across departments. Work to ensure that a PA is adequately remunerated for her level of responsibility: the pay scale for PAs has not always kept pace with the evolution of their duties in recent years.

## Support professional development

Encourage PAs to connect with their peers. Experienced PAs in other departments at your institution may be able to provide advice on negotiating the bureaucratic idiosyncrasies of your university, whereas the PAs of programs in your discipline at other institutions may be able to share specialty-specific tips.

The Royal College now runs a conference for program administrators in conjunction with its annual International Conference on Residency Education. The PA conference offers a series of workshops and plenary sessions for both new and experienced PAs and gives PAs an opportunity to network with their peers at other institutions. As you prepare your program's budget, consider allocating funds to support PAs to attend events like this or collaborating with other PDs to share support for PAs to attend professional development opportunities on a rotating basis.

Finally, Canadian Administrators in Medical Education Operations (CAMEO) is a national association for people who support accredited undergraduate and postgraduate medical education programs in Canada. It offers a mentorship program for its members, and its website ([www.cameo-inc.ca/](http://www.cameo-inc.ca/)) provides links to a number of career resources for program administrators.

Committed PAs may need support in time, funds and recognition as they become involved in organizations, and such support will require planning and dialogue.

## Summary

Working effectively with a PA is a skill that you will develop over time. You will need to employ supervisory and communication skills to develop a trusting relationship with her and to empower her. There is no formula for the process of developing a good working relationship, but good practices and relevant advice, well applied, will help. You can use the information in this chapter and in the literature as a starting point and then seek the advice of your colleagues and other administrative leaders. Establishing an effective working relationship will require effort from both you and a PA, so it also makes sense for you to pay attention to her needs, opinions and ideas. It is worth the effort: a good working relationship between a PD and a PA is crucial to the smooth functioning of a residency program and facilitates the training of a program's residents.

## Tips

- » Establish trust.
- » Communicate clearly with the PA and follow through on your commitments to her.
- » Delegate. Give a PA autonomy for tasks that are clearly within her domain and that she can successfully accomplish with her skill set.
- » Listen to a PA's ideas and seek her advice. She has a unique perspective on the program and may come up with suggestions that you won't hear from anyone else.
- » Acknowledge that a PA will experience wild fluctuations in her workload over the course of the year. A PA's job can be stressful. Help her to get through the hard times.



- » Listen to a PA's silent cues. Subtle changes in how she communicates with you may be signals that you should change what you are doing or that you need to open your eyes to conditions in your program that will require a response.
- » A PA is a vital sensory organ in the complex feedback system of your program. PAs often provide a window into the functioning of the department and to challenges on the horizon. She may be able to tell you how other divisions and departments established solutions to similar problems and may be able to probe for you what is possible, what is allowed, what is routine and what is expected.
- » Communicate clearly with your faculty and your residents about what they can and cannot expect from a PA.
- » Protect PAs from unreasonable requests that come from faculty and residents. There is a fine balance between having a PA serve their needs and having her become their personal assistant.

## Pitfalls

- » Do not assume that a PA is equipped to do all aspects of her job. Provide her with training opportunities to develop the skills she is lacking, or help her to find an experienced PA to mentor her. A long-serving PA in another program can be particularly helpful in modeling the tone that you'd like a PA to set in her work and the culture to which you'd like her to contribute.
- » When you assess a PA's performance, do not turn a blind eye to any shortcomings. You are the PA's manager, and it is important that you point out any areas in which a PA is not meeting expectations even if you find it difficult to do so. Before you meet with a PA for her performance review, you should carefully consider which performance or outcome issues need to be discussed and which ones do not.

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## Case resolution 1

Dr. L. recognizes that the first step in alleviating Ms. D's work stress is to identify the source of the stress. He meets with her to conduct an informal needs assessment, asking her about the various tasks that she performs and her thoughts on them. He learns that the program has expanded significantly and now admits 25% more residents than it did five years ago, but the administrative support resources have not expanded accordingly. Ms. D. likes to interact with the trainees and enjoys the challenge of organizing all of the program's activities, but she is frustrated by the abundance of calls she receives about logistical issues. She tells Dr. L., for instance, that many faculty call her about scheduling issues, and it is time consuming to respond to each enquiry individually. Dr. L. also learns that faculty and residents are using Ms. D. for non-program issues, such as scheduling meetings unrelated to the program and editing abstracts for submission. In addition, Ms. D. mentions that she is constantly getting surprised with last-minute tasks.

Dr. L. implements several changes to decrease Ms. D's workload. First, he invests resources in technical support to maintain an accurate, up-to-date and comprehensive website for the program and tells Ms. D. to redirect callers to the site whenever possible. Second, he reviews with her what is and isn't in her job description, and he empowers her

to not feel obligated to be everybody's personal assistant. Third, he sets up an annual work plan for Ms. D. that lists all core activities and details the lead time for each preparatory step. Together they set priorities for her work. Finally, Dr. L. works to change the culture of the program with respect to Ms. D., ensuring that faculty and residents understand the parameters of the PA's role.

## Case resolution 2

Dr. G. recognizes that Ms. H., the PA, was previously functioning at an R4 level on Hersey and Blanchard's continuum of readiness: she had been very able and willing to complete the tasks of her position and had been confident in her abilities. After doing some reading, he learns that when a worker who had been at the R4 level slips to a lower level of function, it is usually a sign of trouble outside the work environment. In a private meeting, Dr. G. mentions to Ms. H. that he has noticed she hasn't been working at her usual high level lately, giving her some concrete examples and explaining how these have affected the running of the program. He is careful to present work issues, not behavioural issues, and he states his observations, not his interpretations of those observations. He gives her the opportunity to respond. She discloses that a family issue is consuming her thoughts and affecting her work. Dr. G. offers his support. He takes on some of her managerial responsibilities temporarily and gets some help from other PAs in the department until Ms. H.'s personal issue is resolved. Together they re-establish the level of expectations for her position.

## Case resolution 3

Dr. M. asks some successful PDs at her institution for advice on how to best make use of the PA's experience. They advise her to acknowledge Ms. A's expertise and experience, to ally herself with Ms. A., to establish trust and to give Ms. A. autonomy where she is clearly able to run things. Dr. M. does this by documenting what roles Ms. A. plays in the running of the program and how they split the responsibilities for these roles. She makes it clear that she (Dr. M.) is the one who needs training from Ms. A. and her senior colleagues and that she will start out being very involved to get a handle on what it takes to run the program well. She and Ms. A. agree on a method of communication and cooperation and set a series of expectations and timelines, and they decide on a process to document her (Dr. M.'s) learning along the way so that she can step back and allow Ms. A. greater autonomy. The other PDs also advise Dr. M. to establish from the start the leadership role that she plans to take and to carefully set out her vision for the program, which she should communicate clearly to Ms. A. Dr. M. should ensure that she is not yoking herself to old ways and should communicate her intention to review what she learns about the program and to introduce new ideas and activities that may be future looking.

## Case resolution 4

As a first step, Dr. S. briefs Mr. Y. (the PA) on the new requirements that the chair has set for their program. Dr. S. engages Mr. Y.'s support, telling him that he wants to leverage his strengths as they develop a strategy to meet these requirements. At the outset of the process Dr. S. and Mr. Y. review Mr. Y.'s job description, and they agree on new duties and timelines, considering Mr. Y.'s strengths and internal motivating factors as they decide on

his new responsibilities. They list the changes that they have to make and agree about which of these can be achieved by Mr. Y. independently, which ones can be made by Mr. Y. with some supervision, and which ones must be made by Dr. S. They also agree on a mechanism for assessing their progress and the need for additional help. In this process of change, they carefully consider and protect the time that Dr. S and Mr. Y. will need devote to the creation and institution of the new curriculum.

## References

- <sup>1</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards.* rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>2</sup> Hersey P, Blanchard KH. *Management of organization behavior: utilizing human resources.* Englewood Cliffs (NJ): Prentice-Hall; 1988.
- <sup>3</sup> Blanchard K, Johnson S. *One minute manager.* New York: William Morrow; 1982.
- <sup>4</sup> Patel H, Puddester D. *The time management guide: a practical handbook for physicians by physicians.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2012.
- <sup>5</sup> Pink DH. *Drive: the surprising truth about what motivates us.* New York (NY): Riverhead Books; 2009.
- <sup>6</sup> Dath D, Roy R. Collaborating for success. Chap. 3. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>7</sup> LeBlanc C, Beatty L. A resident in difficulty, or a difficult resident? Chap. 14. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>8</sup> Glover Takahashi S. Remediation. Chap. 15. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.

## Appendix 9.1:

# Job description for program assistants at McMaster University

**Job title: Education program associate**

## General description

Responsible for coordinating resident rotation schedules and a variety of educational events and other learning and research initiatives. Creates positive partnerships with preceptors, teaching units, clinics, sites, campuses, practices and other support staff.

## Representative duties and responsibilities

- » Develops, plans and coordinates rotation schedules for qualified residents at multiple sites.
- » Coordinates the Canadian Residency Matching System with the objective to match all available learner spots to ensure the viability of the program.
- » Facilitates the evaluation process for preceptors and students. Compiles evaluation results and brings negative evaluations forward for review.
- » Plans and coordinates education events, tutorials, academic half-days and other learning and research initiatives.
- » Ensures that the appropriate venues and catering are provided and books transportation and audio-visual equipment as required.
- » Writes a variety of documents including, but not limited to, correspondence and minutes.

- » Develops budgets for various events and submits to manager for approval.
- » Monitors budgets and reconciles accounts, completes financial forms including travel expense reports, advances and electronic cheque requisitions, purchase orders and journal entries.
- » Contributes to the design and development of banners, presentations and other promotional materials for use at various events.
- » Attends and participates in meetings.
- » Responds to inquiries that are specific in nature and require a thorough knowledge of established policies and procedures.
- » Maintains confidentiality of information.
- » Sets up and maintains filing systems, both electronic and hard copy.
- » Updates and maintains information in databases.
- » Acts as liaison between faculty, staff and students to ensure the timely communication of information.
- » Sets up, uses and troubleshoots teleconferencing and videoconferencing equipment.

## Supervision

- » Ensures adherence to quality standards and procedures for short-term staff.
- » Provides direction and assigns work to program assistants.

## Qualifications

1. Two-year community college diploma in office administration or related field.
2. Requires three years of relevant experience.

# Selecting residents for your program

## Glen Bandiera, MD, FRCPC, and David Chan, MD, FRCPC

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## Objectives

**After reading this chapter you should be able to:**

- » describe three evidence-based principles for designing a selection process
- » outline five steps in designing a selection process
- » list common pitfalls related to resident selection and actions to avoid each of them

## Case scenario

You have been the program director for a medium-sized residency program (a five-year program with four residents per year) in General Surgery for the last two years. You have continued to use the selection process that was in place when you started in this role: the same small group of volunteers annually review applications, conduct individual unstructured interviews with selected applicants and then have an informal discussion before rank day to decide the final rankings.

These discussions often involve heated debate, reveal polarized opinions and favour the preferences of participants with strong debating skills. You have just heard from another program director that his program has received a freedom of information request related to an unsuccessful applicant. You wonder if there is a better, more consistent and fairer way to select residents for your program.

## Background and context

Although Canadian residency programs typically enjoy a deep pool of exceptional candidates from which to choose, some programs find themselves with significantly more candidates than they have room for (“selectors,” who can choose the best matches from among many applicants) and others struggle to fill their allotted positions each year (“acceptors,” who accept all applicants who meet a minimum set of criteria set by the program). It is expected that all programs, whether they are selectors or acceptors, will use a defined, reliable process for selecting residents fairly.

The selection process should incorporate a number of considerations. First, the criteria used for selecting residents should reflect characteristics that are expected of future doctors as well as characteristics specific to each program and university. Future doctors must be able to demonstrate a comprehensive set of cognitive and non-cognitive behaviours that meet all real and

perceived needs of patients.<sup>1-6</sup> Resident selection committees may seek to assess both applicants' currently demonstrable abilities (cognitive skills, as measured by examination scores, or non-cognitive attributes, such as communication skills demonstrated during an interview or social responsibility demonstrated through volunteer activities on the curriculum vitae) and their future potential (as predicted by past accomplishments and applicants' stated plans for the future). Second, many medical schools have re-emphasized their social accountability mandate; schools can demonstrate their responsiveness to societal needs through selection processes that ensure that residency cohorts are representative of the population they will serve or through curriculum, research and service activities that are community focused.<sup>7-8</sup> Third, in accordance with standard B2 of the General Standards of Accreditation of the Royal College of Physicians and Surgeons of Canada, all postgraduate programs are expected to establish overall program goals; resident selection should align with the aims of the program.<sup>9</sup> Fourth, universities and sponsoring departments may each have specific goals, strategic priorities or directions that may have an impact on how a program sets selection criteria. The program director and residency program committee should strive to establish a system of selection that addresses all four of these considerations.

There are three evidence-based principles of selection process design. First, a good selection process needs to be **reliable**. A reliable system is one that would produce the same or similar results time after time, given the same input data. Any variation in a candidate's ranking on repeated measures would be due to variation in the candidate's attributes or performance and not to irrelevant, extraneous factors such as the membership of the selection committee.

Second, a good selection process needs to be **valid**, meaning that it must select whom it is intended to select, having assessed the variables deemed important. A system intended to select residents on the basis of their interpersonal skills but that is heavily weighted toward assessments of prior academic performance (marks in clerkship examinations, for example) is not valid because it is selecting residents on the basis of something

other than the intended criterion. This is particularly important in the context of social accountability and competency-based education (as articulated by the Royal College's CanMEDS framework<sup>10</sup>). Committees must select residents who are highly likely to master a wide range of competencies. Undue focus on one attribute can result in the selection of candidates who may struggle to become the well-rounded specialists they will be required to be (the definition of **well-rounded** will vary by specialty).

Finally, a good selection process needs to be **fair and equitable**. Candidates with similar skills and attributes should have an equal chance of being selected or ranked highly. Selection criteria can inadvertently contain systematic biases for or against certain groups of candidates that do not relate to the selection criteria established by the program. Residency program committees must be attentive to this and monitor the outcomes of their processes regularly.

In summary, each residency program is expected to establish a selection process that reflects the program's overall goals, the strategic directions of the local institution, local resources and expertise, and local and national societal needs. Selector programs should focus on establishing criteria that define the best match for their program whereas acceptor programs should focus on realistic minimum criteria for program entry. In addition, the process needs to be reliable, valid and fair. The selection process in the case scenario at the beginning of this chapter, which uses the same small group of (non-representative) volunteers for all aspects of the process, unstructured interviews, poorly defined selection criteria and informal consensus-type ranking, is very unlikely to be reliable, valid or fair. Although it may seem like a tall order to rectify this situation, the following sections will provide an evidence-based approach to accomplish this important task.

## Literature scan

The literature on selection processes provides some insights into maximizing reliability and validity and avoiding unfair biases but limited definitive evidence

on the ability of processes to accurately select for future performance. The limited number of small outcome studies that have been published to date demonstrate that recent academic performance as measured by examination marks is predictive of future academic performance as measured by similar examinations.<sup>11</sup> Retrospective studies demonstrate that when formal complaints against individuals later in their career are investigated, evidence is found of problematic behaviour early in their training.<sup>12,13</sup> The ability of selection processes to predict strong performance across the breadth of physician competencies has not otherwise been thoroughly studied. Evidence is lacking for a number of reasons, including the lack of a strong measure of overall resident performance (few residents fail to successfully complete their programs, for example, and few fail to successfully complete certification examinations or obtain licensure or specialty practice positions). Data arising from certification examinations are not generally available for research purposes, and the number of residents selected to individual programs is small, making research into the predictive validity of a program's selection process impractical owing to small sample size. In the face of gaps in the evidence, it is generally believed that the best predictors of future performance are recent and past performance in similar areas. Programs should thus work to determine what candidates have done in the past that provides evidence of future potential rather than rely on plans or promises.

There is good evidence that simple steps can be taken to maximize the reliability of both application review and interview assessments.<sup>14,15</sup> For example, structured interviews, in which the questions, the response evaluation process and the method of combining ratings are standardized, have been shown to yield better inter-rater reliability than unstructured interviews.<sup>16</sup> In addition, sampling a larger number of academic and non-academic attributes for each candidate will increase reliability more substantially than increasing the number of raters.<sup>17</sup>

To construct a sound selection process, programs should first establish which criteria they will consider and what constitutes evidence of proficiency in that

criterion. Ideally, the criteria will be objective, and detailed descriptions of each criterion and eligible evidence will be provided to each assessor. A rating system (such as numeric scores or a visual analog scale in which raters make a mark along a line from poor to excellent) should then be designed. The rating system should ideally have five or seven objective anchor statements for each criterion, a middle option, a clearly defined threshold for an "unacceptable" rating, and feasible extremes.<sup>18</sup> Reliability is generally increased when a number of independent observations are averaged to produce an overall mean or aggregate score. Observations can be increased by increasing the number of assessors (e.g., having more people observe each interview) or by increasing the number of discrete attributes assessed (e.g., by having more theme-based interview rooms). Finally, it has been shown that humans tend to base assessments on two or three dominant pieces of information.<sup>19</sup> Thus, it is problematic to require a single individual to assess multiple criteria for a single applicant because the assessor is unlikely to be able to make independent assessments of each criterion: their impression of one attribute will probably colour their impression of others. For example, if an assessor feels strongly that a candidate has excellent communication skills, she may allow that impression to influence her assessment of the candidate's professionalism ("he has a very polished presentation style — he must also be professional"). To avoid this potential bias, the selection process should be designed so that various criteria and attributes are assessed by different assessors or in different aspects of the process.

In summary, examination scores seem to predict examination scores, and future problematic behaviour seems often to be preceded by similar issues in training. Although the literature does not provide evidence of what will lead to accurate prediction of the full scope of future competency, steps can be taken to maximize the reliability, validity and fairness of selection processes. A lack of evidence does not mean that good processes do not exist.

## Best practices

### From the University of Toronto Emergency Medicine residency program

Faculty from the University of Toronto Emergency Medicine residency program undertook a comprehensive series of investigations (Textbox 10.1) to design the important steps of the resident selection process.<sup>14,15</sup>

Although we encourage program committees to go through all of these steps to some degree, local issues and perspectives will influence how they implement each step. Programs should also consider enlisting the help of educators or psychometricians to review their tools and processes to ensure the integrity of the final product. Program committees may decide to incorporate any or all of the steps in this process to suit their needs.

To maximize efficiency and provide multiple assessments of each candidate, each application package is reviewed by two independent assessors. If the assessors agree on whether the applicant has achieved the minimum score for an interview, this decision is carried forward. If they do not agree, a third assessor reviews the application. There are three teams of two interviewers; each team interviews each candidate in a separate interview (thus each candidate has a total of three interviews). To increase objectivity and avoid unrealistic expectations of interviewers' ability to independently assess various candidate attributes, each interviewer is asked to focus on a specific characteristic and provide a global assessment of the candidate only in relation to that characteristic. The interviewers are given standardized questions for each interviewee, and each team of interviewers asks separate questions from the other teams. Anchored visual analog scales are used to record their impressions. Final interview scores are determined by the average of the global assessments from all six interviewers. Thus, eight independent data points are collected for each candidate, which contribute to the candidate's final score. Finally, the interviewers are able to submit the names of applicants about whom they have concerns. In the ensuing discussion, the assessment team gives some candidates a "no rank"

#### **Textbox 10.1: Steps in developing the selection process for the University of Toronto's Emergency Medicine residency program**

The program's residency program committee and faculty:

1. Established agreement that the program had a mandate to produce leaders in the field of emergency medicine (EM), whether in clinical care, research or administration (overall program goal)
2. Defined the important characteristics of future EM physicians that support this mandate (from the application package: insight into the specialty; interest in the specialty; personal characteristics such as self-insight, breadth of experiences, previous positions of responsibility, leadership and teamwork; from the interviews: suitability for EM, match with the local program mandate, responsibility and professionalism, self-awareness, trainability)
3. Determined where in the application process the characteristics defined in step 2 are best demonstrated (e.g., academic performance can be assessed through grades from transcripts and clerkship summaries; leadership experiences can be assessed through personal letters and interviews)
4. Defined what constitutes measurable evidence of each characteristic (calculating the number of failing grades or repeated courses, categorizing and assessing the impact of the candidate's leadership activities, asking assessors for their global impressions of the candidate's grasp of his or her own teamwork abilities, etc.)
5. Developed appropriate tools to measure each characteristic (categorical numeric scores based on concrete anchors for the application packages, and visual analog scales for assessors' global assessments of the candidate based on interviews)
6. Established thresholds for selecting candidates for an interview or a "no rank" status minimum
7. Determined how to combine all of the data into a final rank (it decided that one third of the final score would be based on the application and the other two thirds on the interview and that the candidates would be ranked according to their final score)



status regardless of their scores. Scores are otherwise not adjusted, and the candidates are ranked on the basis of their final score (see step 7). Reliability for this process is excellent (0.88 to 0.92).<sup>15</sup>

## From the McMaster University undergraduate medical program

An innovative selection method called the multiple mini-interview (MMI) was pioneered by the McMaster University undergraduate medical program.<sup>20</sup> This method is predicated on the belief that non-cognitive attributes can be adequately assessed by an interview.<sup>21</sup> It involves multiple observations of actual performance in real time. Candidates are selected for the MMI on the basis of their application packages and then participate in several brief (10 minute) simulated encounters. Each encounter is designed to give candidates an opportunity to demonstrate their abilities in relation to a characteristic of interest relevant to the program. Scores are obtained from single observers of each interaction and then a final aggregate score is used to determine each candidate's relative position in the pool. The threshold for acceptance into the program is determined not by a minimum criterion reference but by the number of positions available in the class. Eva and colleagues have shown this method to be fairly reliable (0.73) over time, with high face validity (although candidates must be fully aware of the process before the MMI day to ensure adequate preparation and alleviate anxiety related to this new method).<sup>22</sup> However, these authors caution that the ability of this method of assessing discrete traits to predict the entire scope of future performance remains unproven.<sup>22</sup>

## Tips

- » The whole process works best when selection criteria are in alignment with program, departmental and institutional goals and everybody on the training and selection committees understands these.
- » Selection criteria should reflect a broad consensus of what is desirable in a candidate for the specialty.
- » All participants in the selection process should be familiar with how the process works, why it is designed the way it is, and what their specific role in the process is.
- » Participants should be asked to assess specific, objective elements of each candidate and be provided with objective descriptions for each level of accomplishment.
- » An average or aggregate score comprised of multiple independent observations of each candidate will maximize the reliability of the process.
- » Participants should not be asked to independently assess more than two or three elements of each candidate.
- » Previous performance and accomplishments are the best indicators of future performance. Focus on these during the assessment process.
- » The use of standardized questions for interviews will ensure that all applicants are treated fairly and that interviewers do not inadvertently ask inappropriate questions (this continues to be reported by candidates to be a problem during the Canadian Resident Matching Service [CaRMS] process each year).

## Pitfalls

- » It is easy to bias a selection process toward academic achievement because of the easy availability of objective measures such as examination scores.
- » It can be difficult to get busy people to prepare for and engage in training about the selection process, but do not enter the process with an unprepared team. Appropriate assessor training is essential.
- » What candidates **say** they will do or **plan** to do is a poor indicator of what they **will** do. Base decisions on what they **have** done.
- » The decisions that arise from consensus meetings and measurements of assessors' overall impressions, while reliable, may not be valid: they can be driven by one or two major characteristics of a candidate and thus may not accurately reflect the breadth of a candidate. A charismatic individual, for example, can come across as a strong candidate despite mediocre academic accomplishments or professional lapses.
- » It is problematic to ask assessors to assess multiple candidate attributes because these assessments are highly likely to be influenced by one or two strong impressions the assessor develops (see the preceding point).
- » Applicants are in the process of selecting a program when they come for an interview. Programs (particularly acceptor programs) are vulnerable if they do not see interviews as an opportunity to show off the positive aspects of their program. Even selector programs may lose a good candidate if they are complacent and assume every candidate wants to rank them first.

## Case resolution

You bring your concerns to the residency program committee, along with some key references and examples of approaches used in other programs. The committee agrees that, because your program is popular and fills every year, you can design a process that is selective and will give you those residents whose cognitive and non-cognitive profile is most suited to the objective of your program. This process has caused your committee to firmly articulate the program's objective, which is to train highly competent surgeons who are able to serve the needs of a diverse patient population. You decide that minimum criteria for acceptance into the program and an objective selection tool will help your program to choose interviewees from among the applicants and that a panel of six experienced and representative interviewees will conduct structured interviews with the selected candidates. You will base your final rank on average scores from the interviews.

## Take-home messages

- » The overall program goals, the criteria used for selection of residents, the tools used to assess how well candidates meet these criteria, and participants' understanding of the process must all be in alignment.
- » The most reliable systems of selection involve several independent observations and assessments, which are then combined to form an aggregate score.
- » If the selection process is to be reliable and fair, the assessors must be well prepared: they must have a good understanding of the program's goals, the characteristics they are to seek in potential residents, and the tools they will use to evaluate these characteristics.

## References

- <sup>1</sup> Waugh D. US medical schools failing social responsibility test, MD says. *CMAJ*. 1990;143(11):1238–1239.
- <sup>2</sup> Butler WT. Academic medicine's season of accountability and social responsibility. *Acad Med*. 1992;67(2):68–73.
- <sup>3</sup> Foreman S. Social responsibility and the academic medical center: building community-based systems for the nation's health. *Acad Med*. 1994;69(2):97–102.
- <sup>4</sup> McCurdy L, Goode LD, Inui T, Daugherty RM, Wilson DE, Wallace AG, et al. Fulfilling the social contract between medical schools and the public. *Acad Med*. 1997;72(12):1063–1070.
- <sup>5</sup> Peabody JW. Measuring the social responsiveness of medical schools: setting the standards. *Acad Med*. 1999;74(8 Suppl):S59–S68.
- <sup>6</sup> Faulkner LR, McCurdy L. Teaching medical students social responsibility: the right thing to do. *Acad Med*. 2000;75(4):346–350.
- <sup>7</sup> Wollard RF. Caring for a common future: medical schools' social accountability. *Med Educ*. 2006;40:301–313.
- <sup>8</sup> Rourke J. Social accountability in theory and practice. *Ann Fam Med*. 2006;4(Suppl 1):545–548.
- <sup>9</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards*. rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>10</sup> Royal College of Physicians and Surgeons of Canada. *CanMEDS 2005 framework*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2005. Available from: [www.royalcollege.ca/portal/page/portal/rc/canmeds/framework](http://www.royalcollege.ca/portal/page/portal/rc/canmeds/framework)
- <sup>11</sup> Julian E. Validity of the medical college admission test for predicting medical school performance. *Acad Med*. 2005;80(10):910–917.
- <sup>12</sup> Papadakis MA, Teherani A, Banach MA, Knettlér TR, Rattner SL, Stern DT, et al. Disciplinary action by medical boards and prior behavior in medical school. *New Engl J Med*. 2005;353(25):2673–2682.
- <sup>13</sup> Papadakis MA, Arnold GK, Blank LL, Holmboe ES, Lipner RS. Performance during internal medicine residency training and subsequent disciplinary action by state licensing boards. *Ann Intern Med*. 2008;148(11):869–876.
- <sup>14</sup> Bandiera GW, Regehr G. Reliability of a structured interview scoring instrument for a Canadian postgraduate Emergency Medicine training program. *Acad Emerg Med*. 2004;11(1):27–32.
- <sup>15</sup> Bandiera G, Regehr G. A structured application assessment instrument is a reliable tool for assessing applications to Canadian postgraduate training programs in Emergency Medicine. *Acad Emerg Med*. 2003;10:594–598.
- <sup>16</sup> Conway JM, Jako RA. A meta-analysis of interrater and internal consistency reliability of selection interviews. *J Appl Psychol*. 1995;80(5):565–579.
- <sup>17</sup> Chan DK, Rothman AI, Freedman M. A generalizability study of an interview rating scale for candidates applying to postgraduate medical training [abstract]. 42<sup>nd</sup> Annual Conference on Research in Medical Education (RIME); 2003 Nov 9–12; Washington, DC.
- <sup>18</sup> Streiner DL. Global rating scales. In: Norman G, Neufeld VR, editors. *Assessing clinical competence*. New York: Springer-Verlag; 1985. p. 119–141.
- <sup>19</sup> Bandiera GW, Regehr G, Morrison L. Predictive validity of the Global Assessment Form used in an undergraduate rotation in emergency medicine. *Acad Emerg Med*. 2002;9(9):889–895.
- <sup>20</sup> Eva KW, Rosenfield J, Reiter HI, Norman GR. An admissions OSCE: the multiple mini-interview. *Med Educ*. 2004;38:314–326.
- <sup>21</sup> Albanese MA, Snow MH, Skochelak SE, Huggett KN, Farrell PM. Assessing personal qualities in medical school admissions. *Acad Med*. 2003;78:313–321.
- <sup>22</sup> Eva KW, Reiter HI, Trinh K, Wasi P, Rosenfield J, Norman GR. Predictive validity of the multiple mini-interview for selecting medical trainees. *Med Educ*. 2009;43:767–775.

## Other resources

Albanese MA, Snow MH, Skochelak SE, Huggett KN, Farrell PM. Assessing personal qualities in medical school admissions. *Acad Med*. 2003;78:313–321.

Davila L, Kursmark L. *How to choose the right person for the right job every time*. New York: McGraw-Hill; 2005.

Streiner DL. Global rating scales. In: Norman G, Neufeld VR, editors. *Assessing clinical competence*. New York: Springer-Verlag; 1985. pp. 119–141.

The Future of Medical Education in Canada report and synthesis documents provide extensive reviews of admissions in the Canadian context:

» Association of Faculties of Medicine of Canada. *The future of medical education in Canada: a collective vision for MD education*. Ottawa: The Association; 2009.

» Hodges BD, Albert M, Arweiler D, Akseer S, Bandiera G, Byrne N, et al. The future of medical education: a Canadian environmental scan. *Med Educ*. 2011;45(1):95–106.

# Developing a meaningful curriculum map

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## Objectives

**After reading this chapter you should be able to:**

- » explain the importance of considering the learner's needs and characteristics when developing a curriculum
- » use appropriate national and/or international standards in curriculum design
- » create a curriculum map that links competencies and objectives with educational strategies and assessment tools
- » locate curriculum management resources
- » explain the need for ongoing program evaluation and renewal

## Case scenario

You are a new program director. At your program's last accreditation survey, it was suggested that the program should improve its teaching and assessment of professionalism. You have therefore decided to review how your program teaches professionalism and make changes to improve trainees' preparation in this CanMEDS Role. You have a number of questions: **"How do I determine content?" "How will that content best be taught?" "What is the best way to assess residents' mastery of the content?" "How can I communicate the curriculum changes to residents and faculty?" "How will I know whether or not the revised curriculum is achieving its objectives?"**

## Background and literature scan

Answers to the questions posed in the case scenario can be achieved by systematic mapping of the curriculum. According to current thinking in medical education, optimal curriculum design has the following characteristics: it focuses on student learning rather than the teacher's teaching, it requires that teachers learn how to do their job well, it includes both horizontal

(between different subject areas) and vertical (basic sciences and clinical care) integration, it pays attention to outcomes, it recognizes the profession's responsibility to respond to societal need, and it prepares the student for professional practice.<sup>1</sup>

In 1949 Tyler published *Basic Principles of Curriculum and Instruction*, which focused on the administrative aspects of curricula and advised educators developing any curricular project to apply the following four basic principles<sup>2</sup>:

1. Define appropriate learning objectives.
2. Establish useful learning experiences.
3. Organize learning experiences for maximum cumulative effect.
4. Evaluate the curriculum and revise those aspects not proven effective.

The development of any curriculum using the Tyler method requires that hypotheses be established in direct relation to expected learning outcomes. As the curriculum is implemented, teachers become observers, determining whether or not their curricular hypotheses are in fact supported by student behaviour. After the curriculum has been delivered, educators adjust it as required to ensure that it produces the desired outcomes. In the Tyler method, students do not participate in the planning or implementation of their education; their sole role is as learner. It would be more than a quarter of a century after Tyler introduced his method before any significant criticism was made against it.

In 1975 Mager coined the term **instructional objectives**.<sup>3</sup> He recommended that objectives be expressed in measurable terms. He changed the focus of curriculum development to emphasize student achievement over teacher activity, stressing that these achievements should be described in behavioural, observable terms amenable to assessment. This marked the beginning of our modern view of the curriculum as a foundation for assessment. The teacher's role in shaping behaviour became less central in curriculum development, as the student's responsibility for his or her own learning was increasingly emphasized.

In recent years, competence-based curricula have become increasingly popular. In this type of curriculum, educators first define the competencies they expect their residents to demonstrate by the end of the curriculum and then conduct relevant assessments to ensure that the learners have in fact acquired these competencies.

A curriculum is more than a list of topics or objectives for a course of study. With new teaching, learning and assessment methodologies emerging, a comprehensive method for curriculum implementation is now advocated in medical education. An optimal curriculum lists all the objectives for the learners and itemizes all the experiences that will enable the learners to achieve those objectives. A curriculum map (also known as a curriculum blueprint) is a planning and communication tool that can be thought of as a road map to the curriculum: it guides learners, teachers and educational managers through the elements of the curriculum and indicates how the elements are related. It links each learning objective to one or more instructional methods and assessment tools. It renders transparent for learners, teachers, appraisers and administrators the learner's educational journey. Curriculum maps should be flexible enough that the curriculum can be modified to suit the individual preferences of the teacher and student; of course, such modifications should only take place if both parties are fully aware of what is to be achieved.

## Best practices

Curriculum mapping can seem overwhelming at first, but it becomes more manageable when you realize that a common set of principles and practices can be universally applied. This section outlines best practices in systematic map design for all types and sizes of residency program.

The task is analogous to planning a trip with the educational planner as the travel agent designing the learner's educational journey. The journey should meet certain **standards**. The agent may exploit other resources to assist with planning (**curriculum management resources**). The focus must be on the learner and their needs (**learner-focused**). You should answer the following questions about the learner's "journey" through your residency program:

- » Who is the learner? (**trainee characteristics**)
- » Where is the learner going and why? (**mission and rationale**)
- » How will the learner know when the final destination is reached and his or her journey completed? (**learning objectives and outcomes**)
- » By what variety of means will the learner get to the final destination? (**learning and training process**)
- » How will the learner know the journey is unfolding smoothly and on schedule? (**assessment processes**)
- » Who will guide the learner along their way, and what are their training needs and requirements? (**faculty characteristics and development**)
- » How much time and money will the journey cost? (**resources**)

- » What mechanisms are available to the learner to provide feedback to educators on the quality of the journey? (**training process evaluation, revision and renewal**)

Once you have answered these questions, you will have all of the information you need to assemble a curriculum map. In creating the map, think about all of the groups who may use it (including students, teachers and administrators) and consider why they may use it (Table 11.1): what questions will they want answered about the curriculum?<sup>4</sup>

When designing a curriculum map for postgraduate medical education, be mindful that residents have significant clinical responsibilities and most of their learning must occur during their clinical work: there is limited opportunity to fill the days of the postgraduate trainee with formal learning sessions. The curriculum map must be designed to maximize the learning value of clinical experiences and must incorporate opportunities for learners to acquire knowledge and skills independently, according to their individual needs and learning style.

**Table 11.1: Users of the curriculum map and their needs and questions<sup>4</sup>**

Users	Needs	Sample questions
<b>Curriculum planners</b>	<ul style="list-style-type: none"> <li>- Overall picture of present curriculum</li> <li>- Working draft of future changes to the curriculum</li> </ul>	<ul style="list-style-type: none"> <li>- What learning outcomes are covered in year 1?</li> <li>- How does course X contribute to the learning outcomes?</li> <li>- What will the curriculum look like if Y is changed?</li> </ul>
<b>Teachers</b>	<ul style="list-style-type: none"> <li>- Ease of access and simplicity of use</li> <li>- General overview of the curriculum with more details relating to the area for which they are responsible</li> <li>- Ability to expand the sections of the map relating to their personal input</li> </ul>	<ul style="list-style-type: none"> <li>- How does my teaching session fit into the curriculum?</li> <li>- What have the students learned before they start my unit?</li> <li>- What should they learn by the end of the unit for which I am responsible?</li> <li>- How is my subject or professional discipline addressed in the curriculum?</li> </ul>
<b>Students</b>	<ul style="list-style-type: none"> <li>- Integration with study guides</li> <li>- A learning tool (e.g., as an advance organizer*)</li> <li>- Self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>- How will a particular learning experience help me?</li> <li>- What is expected of me in a particular course?</li> <li>- Where can I get help if I have a problem?</li> </ul>
<b>Examiners</b>	<ul style="list-style-type: none"> <li>- Identification of learning outcomes to be assessed</li> <li>- Basis for portfolio assessment</li> <li>- Security and selected limited access</li> </ul>	<ul style="list-style-type: none"> <li>- How can we be sure that the assessment reflects the curriculum?</li> <li>- How does this assessment relate to other assessments of the student?</li> </ul>

**Table 11.1** (Continued)

Users	Needs	Sample questions
<b>Administrators</b>	- Management tool - Teaching activity data - Confidentiality	- What contribution does a particular department make to the curriculum? - Who is responsible for this part of the course?
<b>Accrediting body</b>	- Provision of information at the required level of detail and emphasis	- Does the curriculum meet the requirements?
<b>Potential students and public</b>	- Simple to access - Main features presented with no jargon	- Does this program of studies appeal to me?
<b>Educational researchers</b>	- Detailed information on areas of interest	- What is the role of an intervention in the curriculum? - Who are the stakeholders?

\*An advance organizer is a learning tool that helps a student to organize new incoming information (e.g., a case scenario about a child with scarlet fever, with attached references, that is distributed to students before a teaching session on pediatric infectious disease).

## Four strategies for success

### 1. Base your curriculum on relevant standards

Develop your curriculum map around the needs of your learners, using the curriculum standards required for your program. Several international educational bodies have developed standards. All Canadian accredited residency programs must adhere to the Royal College of Physicians and Surgeons of Canada's General Standards of Accreditation (Textbox 11.1).<sup>5,6</sup> The CanMEDS 2005 framework describes the qualities that specialist physicians must possess and that every educational program should inculcate in its trainees.<sup>7</sup> In the United Kingdom, the General Medical Council has established standards that medical curricula must meet.<sup>8</sup> Similar standards exist in the United States.<sup>9</sup>

The *Global Standards for Quality Improvement* document published by the World Federation for Medical Education provides a set of international standards organized around nine themes, or elements, which are briefly outlined below.<sup>10</sup> As you develop the content and style of your curriculum, these elements will help you to organize your thinking.

#### Textbox 11.1: Summary of general standards for programs accredited by the Royal College of Physicians and Surgeons of Canada<sup>5,6</sup>

##### A1. University structure

- » There must be in place within the university a structure suitable for the conduct of postgraduate residency programs.

##### A2. Sites for postgraduate education

- » All sites must demonstrate a major commitment to education and quality of patient care.

##### A3. Liaison between the university and sites

- » There must be appropriate arrangements between the university and all sites involved.

##### B1. Administrative structure

- » There must be an appropriate administrative structure for each residency program.

##### B2. Goals and objectives

- » There must be a clearly worded statement outlining the goals of the residency program and its educational objectives.

### **B3. Structure and organization of the program**

- » There must be an organized program of rotations and other educational experiences, both mandatory and elective, designed to provide each resident with the opportunity to fulfill the educational requirements and achieve competence in the specialty or subspecialty.

### **B4. Resources**

- » There must be sufficient resources including teaching faculty, the number and variety of patients, physical and technical resources, as well as the supporting facilities and services necessary to provide all residents the opportunity to achieve the educational objectives and receive full training as defined by the specialty training requirements of the Royal College or the College of Family Physicians of Canada.

### **B5. Clinical, academic and scholarly content of the program**

- » The clinical, academic and scholarly content of the program must be appropriate for university postgraduate medical education and adequately prepare residents to fulfill all of the CanMEDS or CandMEDS-FM Roles.
- » The quality of scholarship in the program will, in part, be demonstrated by a spirit of enquiry during all educational and patient encounters.
- » Scholarship implies an in-depth understanding of basic mechanisms of normal and abnormal states and the application of current knowledge to practice.

### **B6. Evaluation of resident performance**

- » Mechanisms must be in place to ensure the systematic collection and interpretation of assessment data on each resident enrolled in the program.

### **Mission and outcomes**

State the overarching purpose in a mission statement that will guide the program as well as the objectives and outcomes for the learner. This mission statement can serve as a header for the curriculum map. The objectives should then outline the knowledge, skills and attitudes that the learner must demonstrate at the completion of the curriculum. Programs accredited by the Royal College should set up their objectives according to the CanMEDS competencies, although the precise list of required competencies will vary by specialty or subspecialty.

### **Training process (program content)**

For the enabling competencies of each CanMEDS key competency, list the areas in which learners must acquire expertise and write a corresponding learning objective. Each specialty and subspecialty society in Canada has developed discipline-specific objectives of training.<sup>11</sup>

Plan to deliver content in an integrated fashion, both horizontally (between subject areas) and vertically (between basic and clinical sciences). The sequence of learning should afford increasing independence and responsibility to the progressing learner.

Provide a diversity of learning experiences and locations that includes learning in practice, technical skills learning, interprofessional and peer-associated learning, formal learning activities, and self-study and reflective study.

### **Assessment of trainees**

Determine which assessment tool you will use for each learning objective. Ensure that you employ a diversity of tools, such as written and oral examinations, objective structured clinical examinations and in-training evaluations. Constructive, ongoing feedback is mandatory, as is a well-articulated, easily accessible appeal mechanism.

### **Trainee characteristics and needs**

Establish criteria and processes to determine how many trainees the program should enroll and which ones it should select. Ensure fair working conditions, identify centralized institutional resources for all residents, and develop program-specific resources to address any



residual needs. Chapter 13 in this manual addresses issues associated with international medical graduates.<sup>12</sup>

### Staffing

Determine the number of administrative, technical and professional staff needed to deliver the curriculum. Provide opportunities for their continuing professional development and recognize excellent contributions.

### Training settings and educational resources

Ensure that the program's learners have a sufficient number of patient encounters in community, ambulatory and in-patient settings. Include experiences with interprofessional teamwork. Ensure that the program has adequate physical and technical resources. Create an environment that fosters scientific inquiry.

### Evaluation of training process

Plan recurrent monitoring and evaluation of the program on the basis of trainee feedback and performance and in light of advances in medical education and accreditation standards. Regular monitoring and evaluation processes should be overseen by the residency program committee. In addition, regular reviews of the program by the university PGME office as mandated by accreditation standards should be seen as formative opportunities for improvement.

### Governance and administration

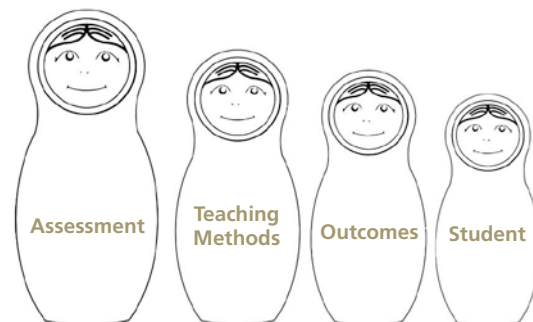
Determine the governing body responsible for final documentation and completion of training (e.g., the Royal College). The final in-training evaluation report for each learner completing a residency program in Canada will need to be signed off by the program director on behalf of the residency program committee and also by the postgraduate dean, who must ensure that all necessary processes and procedures have been applied to the resident's training experience.

### Continuous renewal

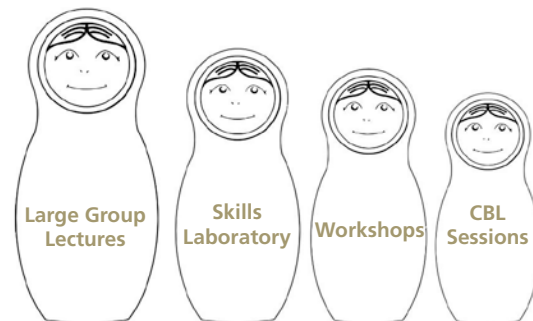
Using data obtained in program evaluations (discussed earlier), update the structure, function and quality of the program as necessary to correct any deficiencies and ensure that the program is addressing societal needs.

## 2. Represent the elements of the curriculum spatially to show their connections

Once you have decided what your residents need to learn, who will teach them, how and when they will be taught, how they will be assessed, and what resources will be needed, it's time to display the components of the curriculum spatially so that their relationships and connections are clear and the user can get a whole picture of the curriculum. Consider each element as a curriculum "window," and fill each window with specific, nested subcomponents in a Russian-doll type model (Figs. 11.1 and 11.2).<sup>4</sup> It may not be relevant or necessary to map all of the elements discussed in the first strategy. The map can be represented in various ways, from a grid (Table 11.2) to a highly complex and extensive web as described by Harden[4] with the learner at its centre (Fig. 11.3). Popular software offers an electronic grid blueprint that can be installed on a computer or accessed online; it includes convenient drop-down boxes that open new windows (Fig. 11.4).<sup>13</sup>



**Fig. 11.1: A graphic demonstration of how curriculum components might be stacked, with the student at centre, in the style of Russian matryoshka dolls.**



**Fig. 11.2: A graphic example of how the curriculum component teaching methods might be subdivided. The methods outlined above can then be applied variably across different years of the curriculum.**

**Table 11.2: A grid-style curriculum map for the palliative and end-of-life care experience in the Family Medicine Residency Program at the Schulich School of Medicine and Dentistry, University of Western Ontario, created by Dr. Eric Wong and the Postgraduate Education Committee (2008). Reproduced with permission.**

1.6 Palliative and end-of-life care			Core rotation	Elective rotation	Academic program
<b>The family physician is a skilled clinician.</b>					
<b>The resident will be able to:</b>					
1.6.1	K/S	Manage common palliative symptoms including pain, nausea and vomiting, dyspnea, skin care, constipation, delirium, terminal agitation, depression and anxiety, feeding and nutrition.	FM, AEM, IM, GM, PC	UC, FMH, ICU	X
1.6.2	K	Describe psychological and spiritual needs of terminally ill patients and their families.	FM, AEM, IM, GM, PC	UC, FMH, ICU	X
1.6.3	K/S	Assist terminally ill patients in decision-making around end-of-life issues (e.g., resuscitation).	FM, AEM, IM, GM, PC	UC, FMH, ICU	
1.6.4	K	Describe an approach to common legal issues in palliative care (e.g., competency, advance directives, pronouncement and certification of death).	FM, AEM, IM, GM, PC	UC, FMH, ICU	X
<b>Family medicine is a community-based discipline.</b>					
<b>The resident will be able to:</b>					
1.6.5	K/A	Describe and appreciate the role of family physicians and palliative care consultants in palliative care.	FM, AEM, IM, GM, PC	UC, FMH, ICU	
<b>The family physician is a resource to a defined practice population.</b>					
<b>The resident will be able to:</b>					
1.6.6	K/S	Identify local resources that can assist in the provision of care to terminally ill patients in various care settings: home, hospital, etc.	FM, AEM, IM, GM, PC	UC, FMH, ICU	
<b>The patient–physician relationship is central to the role of the family physician.</b>					
<b>The resident will be able to:</b>					
1.6.7	K/A	Describe the common physical, psychological, social and spiritual issues of dying patients and their families.	FM, AEM, IM, GM, PC	UC, FMH, ICU	X
1.6.8	S	Communicate effectively with terminally ill patients and their families.	FM, AEM, IM, GM, PC	UC, FMH, ICU	
1.6.9	S	Communicate bad news to terminally ill patients and their families.	FM, AEM, IM, GM, PC	UC, FMH, ICU	
<p>Note: Specific objectives and knowledge/skills/attitudes domains are mapped to different types of learning experiences. Ideally, the map would also include the methods by which each competency is assessed.<sup>11</sup></p> <p><b>K</b> = knowledge, <b>S</b> = skills, <b>A</b> = attitude, <b>FM</b> = family medicine, <b>AEM</b> = adult emergency medicine, <b>IM</b> = internal medicine, <b>GM</b> = geriatric medicine, <b>PC</b> = palliative care, <b>UC</b> = urgent care, <b>FMH</b> = family medicine hospitalist.</p>					

Fig. 11.3: A detailed overview of a curriculum map with 10 major windows identified.<sup>4</sup> For clarity the links between the windows are not shown.

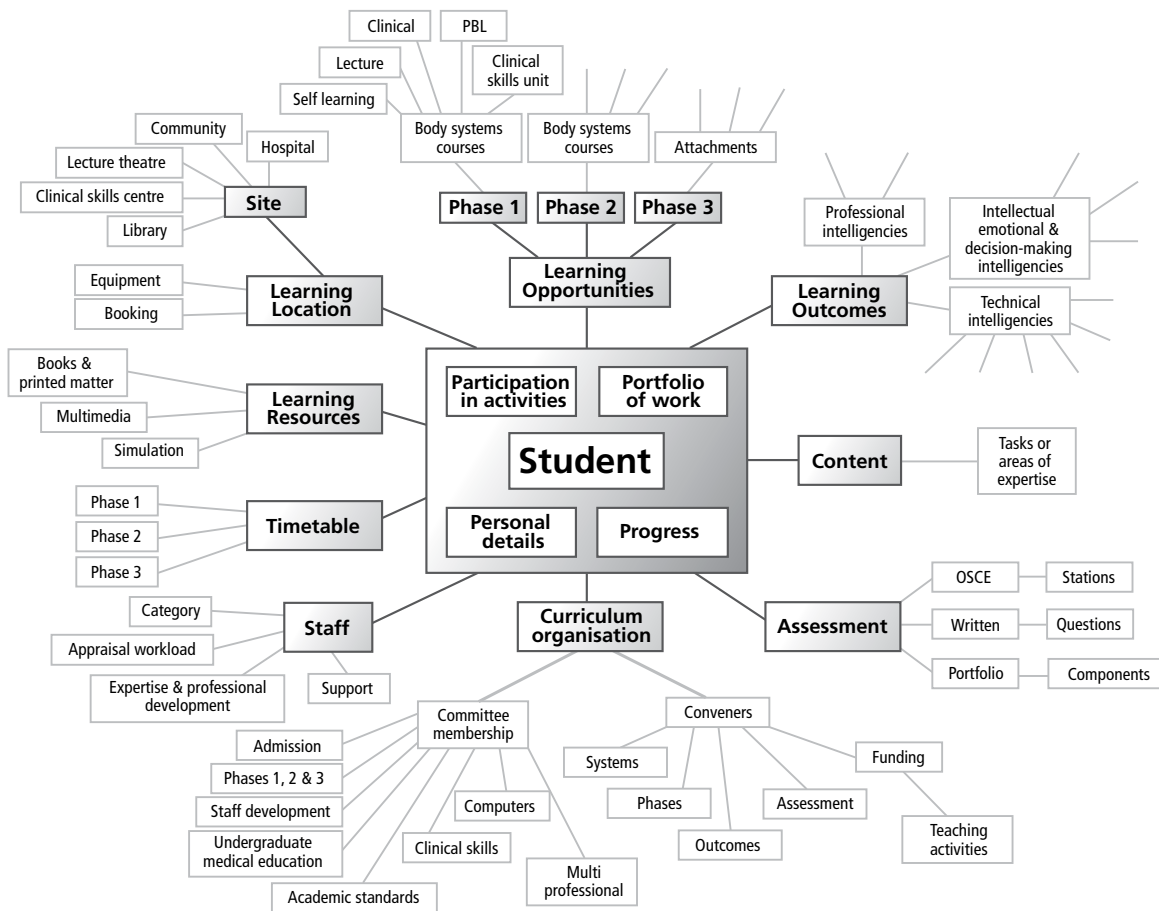
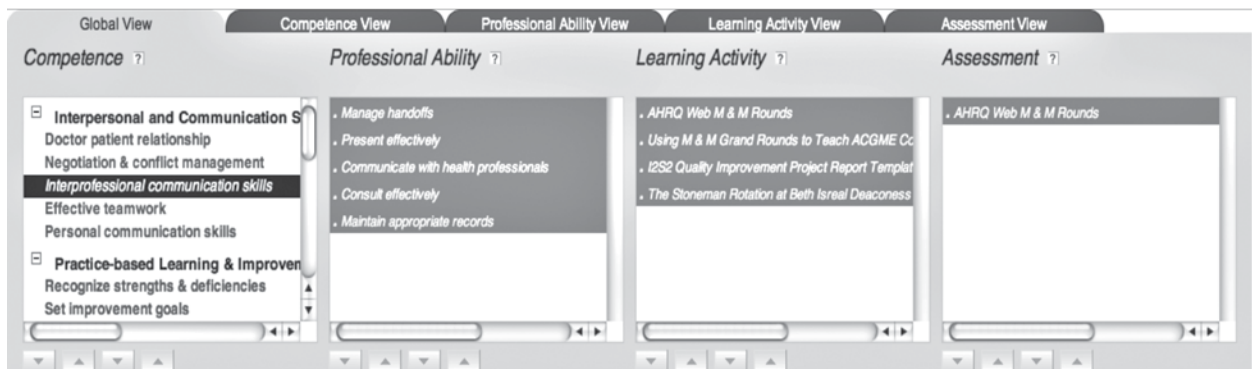


Fig. 11.4: An example of a drop-down curriculum map for the interprofessional communication skills competence at the University of Virginia School of Medicine.<sup>13</sup>



### 3. Do not reinvent the wheel

Several content management resources available online facilitate curriculum map creation, including open-source (Moodle, Zope) and commercial (Rubicon Atlas, Blackboard, Thinking Cap, Sage ACT!) (Textbox 11.2) options; it should be noted that use of these resources may require registration or fee payment or both. Two of the most popular curriculum management systems among medical educators are one45 (also known as Webeval) and CurrMIT (from the Association of American Medical Colleges). The Medbiquitous Consortium ([www.medbiq.org](http://www.medbiq.org)) hosts an annual conference on learning technologies.

#### Textbox 11.2: Websites for commercial products that may be useful in curriculum mapping

- » [www.aamc.org/currmit](http://www.aamc.org/currmit)
- » [www.moodle.org/](http://www.moodle.org/)
- » [www.zope.org/](http://www.zope.org/)
- » [www.rubicon.com](http://www.rubicon.com)
- » [www.blackboard.com/](http://www.blackboard.com/)
- » [www.thinkingcap.com](http://www.thinkingcap.com)
- » [www.actcurriculum.org/](http://www.actcurriculum.org/)

### 4. Regard the curriculum map as a fluid document

The curriculum map is a statement of the curriculum only at one point in time, and it can and must evolve in response to changes in the health needs of society and medical education theory.

## Case resolution

After seeking input from all involved stakeholders through your residency program committee, you create a grid-style curriculum map, which targets key and enabling competencies of the CanMEDS Professional Role that pertain to trainees in your program. This map is in part illustrated in Table 11.3. You also create a curriculum subcommittee charged with evaluating and renewing this new curriculum annually. You plan a process for implementing the curricular change and develop learner assessment to match the map.

## Tips

- » Ensure that your curriculum map is learner centred.
- » Involve learners, teachers and educational planners in the planning process.
- » Match the curriculum to your program's objectives and societal needs.
- » Ensure that your curriculum is flexible enough to address the needs of individual learners.
- » Link each competency to a variety of teaching and assessment methods, making use of the unique resources available to your program.
- » Consider adopting or adapting strategies used by other programs at your university or within your specialty across Canada.
- » Make sure that you pay adequate attention to educating and assessing the individuals who teach the curriculum.
- » Your curriculum map should continuously evolve and must be reviewed on an ongoing basis. Include curriculum map review as a standing item on a rotating basis on the agenda for meetings of the residency program committee.

**Table 11.3: Part of a curriculum map for the professionalism competency for the first postgraduate year.**

Competence	Objective	Teaching methods	Resources required	Assessment methods	Faculty development
<b>PGY1</b>					
Commitment to patients	Deliver high-quality patient care	<ul style="list-style-type: none"> <li>- Clinical experiences</li> <li>- Experiences with simulated patients</li> <li>- Portfolio for reflection</li> </ul>	<ul style="list-style-type: none"> <li>- Sufficient number of patients</li> <li>- Simulated patients</li> </ul>	<ul style="list-style-type: none"> <li>- In-training evaluation report</li> <li>- Multi-source feedback</li> <li>- Objective structured clinical examination</li> <li>- Portfolio</li> </ul>	<ul style="list-style-type: none"> <li>- Grand rounds</li> <li>- Faculty Development Day</li> </ul>
Commitment to profession	Demonstrate maintenance of competence	<ul style="list-style-type: none"> <li>- Attendance at conferences</li> <li>- Retreat</li> <li>- Web-based modules</li> <li>- Self-study</li> </ul>	<ul style="list-style-type: none"> <li>- Financial resources</li> <li>- Web module developer</li> </ul>	<ul style="list-style-type: none"> <li>- Portfolio for log of mandatory group learning activities</li> <li>- Scores from web-based modules</li> <li>- In-training evaluation report</li> <li>- MCQ/SAQ exams</li> </ul>	<ul style="list-style-type: none"> <li>- Workshop on maintenance of competence</li> <li>- Workshop on web-based learning</li> </ul>

## Key messages

- » It is possible to design an effective curriculum map for any aspect of a program or any size of program by systematically following a common set of curriculum standards.
- » Do not do this alone. Seek input from faculty, learners and administrators and access web-based software when possible for curriculum development and management.
- » Curriculum mapping is a fluid process. Your curriculum needs to be in a constant state of evolution, reflecting changes in educational theory and societal needs.

## References

*\*indicates key resources*

- <sup>1</sup> \*Grant J. Principles of curriculum design. In: Swanwick T, editor. *Understanding medical education: evidence, theory and practice*. Oxford (UK): Wiley-Blackwell; 2010. p. 1–15.
- <sup>2</sup> Tyler RW. *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press; 1949.
- <sup>3</sup> Mager R. *Preparing instructional objectives*. 2nd ed. Belmont (CA): Fearon-Pitman Publishers; 1975.
- <sup>4</sup> \*Harden RM. The AMEE medical education guide number 21. Curriculum mapping: a tool for transparent and authentic teaching and learning. *Med Teach*. 2001;23(2):123–137.
- <sup>5</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to the university and affiliated sites. A standards*. rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_purple\\_book\\_a\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_purple_book_a_standards_e.pdf)

- <sup>6</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. *General standards applicable to all residency programs. B standards.* rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>7</sup> Frank JR, editor. *The CanMEDS 2005 physician competency framework: better standards, better physicians, better care.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2005. Available from: [www.royalcollege.ca/canmeds](http://www.royalcollege.ca/canmeds)
- <sup>8</sup> General Medical Council. *Standards for curricula and assessment systems.* London (UK): General Medical Council; 2008. Available from: [www.gmc-uk.org/Standards\\_for\\_curricula\\_and\\_assessment\\_systems\\_0410.pdf\\_48904896.pdf](http://www.gmc-uk.org/Standards_for_curricula_and_assessment_systems_0410.pdf_48904896.pdf)
- <sup>9</sup> *Liaison Committee on Medical Education.* Functions and structure of a medical school. Standards for accreditation of medical education programs leading to the M.D. degree. Washington (DC): The Committee; 2012. Available from: <http://www.lcme.org/publications/functions2013june.pdf>
- <sup>10</sup> \*World Federation for Medical Education. *WFME global standards for quality improvement.* Copenhagen (Denmark): The Federation; 2003.
- <sup>11</sup> Royal College of Physicians and Surgeons of Canada. Information by discipline. Available from: [www.royalcollege.ca/portal/page/portal/rc/credentials/specialty\\_information](http://www.royalcollege.ca/portal/page/portal/rc/credentials/specialty_information)
- <sup>12</sup> Tannenbaum D, Walsh A. International medical graduates: working with a diversity of learners. Chap. 13. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>13</sup> ACGME common program competency map PBLI SBP focus. Available from: [https://act.med.virginia.edu/blocks/pla/educator/pla\\_edu\\_map.php?tid=5&mode=browse](https://act.med.virginia.edu/blocks/pla/educator/pla_edu_map.php?tid=5&mode=browse)

## Other resources

- McLean M, Gibbs T. Twelve tips to designing and implementing a learner-centred curriculum: prevention is better than cure. *Med Teach.* 2010;32:225–230.
- Prideaux D. ABC of learning and teaching in medicine, curriculum design. *BMJ.* 2003;326:268–270.
- Sherbino J, Frank JR, editors. *Educational design: a CanMEDS guide for the health professions.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2011.

# Designing and selecting assessment instruments: *focusing on competencies*

## Stanley J. Hamstra, PhD

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## Objectives

**After reading this chapter you should be able to:**

- » describe different criteria used to select assessment instruments
- » selectively identify assessment instruments for summative and formative purposes
- » use a standard approach to assist in the drafting of a new assessment instrument

to comprehensively measure competence in all the CanMEDs Roles. You decide to form a working group of members of your residency training committee to survey other schools to see what tools they are using and to adapt these to your local context.

A few weeks later, the working group reports that there are some instruments that have evidence for validity and reliability, but these cannot be readily applied to your program. You realize that you will have to create your own. You decide to start by developing a tool to assess the Communicator Role, and you hope that you will be able to “copy and paste” this tool for the other competencies. However, as you are reading the literature in medical education, you realize this task will be more complicated than you had imagined. Your chair is interested in supporting your efforts but has limited resources to offer and sees you as the departmental expert in the education field.

Among the issues that you still need to address are the following:

- » how to demonstrate validity of the instrument,
- » feasibility issues, including who exactly will do the rating of performance and in what context,
- » faculty development (you realize as you work through the steps of developing the instruments that your colleagues will require some training to use this instrument effectively) and

## Case scenario

You are the residency program director for a large subspecialty in a mid-sized academic health centre. Your program was cited during the recent accreditation review by the Royal College of Physicians and Surgeons of Canada. The reviewers’ main concern was that your program lacks comprehensive assessment tools. The only CanMEDs Roles that are being assessed in a valid and reliable way are Medical Expert and Scholar. It is your job to develop and put into place assessment tools

- » reporting issues (Where will the assessment data be stored? How exactly will the data be reported? To whom and when will the data be reported?).

Although some of these questions appear to be logistical in nature, your reading of the recent literature suggests something you've never heard from your colleagues: all of these issues are important contributors to the instrument's validity and hence can be critical in determining whether or not it provides accurate scores for each trainee. The risk of providing invalid scores is reflected in the rising number of challenges that are being brought to the Postgraduate Medical Education Appeals Committee. You want to avoid these headaches and build an assessment toolbox that meets the highest standards for validity and reliability.

## Background and context

### The basics

Assessment is a very important part of medical education. It is also a complex topic. In the world of education, the terms **assessment** and **evaluation** mean different things. **Assessment** refers to judging an individual learner's progress, whereas **evaluation** refers to judging the effectiveness of a program or curriculum.

Almost all assessment instruments are made up of a series of individual items. The quality of the assessment instrument depends on the quality of the individual items that comprise it, and the process of developing (or editing) items should not be taken lightly. Two common forms of items are statements, such as "the candidate maintained appropriate eye contact while communicating sensitive information" anchored by a five-point Likert scale, or simple checklist items, such as "keeps edges of the wound everted while closing the skin — done/not done." There is an extensive literature on the process of writing items to test for knowledge or for application of knowledge to a clinical problem. One of the best guides to this process is a manual published by the National Board of Medical Examiners.<sup>1</sup> Item writing is a learned skill, and with practice it can be done efficiently and effectively.

For knowledge tests, one of the key concerns is to ensure that the test takers do not perform well because they are using highly developed test-taking strategies. Although this is less of an issue for tests of performance or skill, it is helpful to realize that any test has a powerful motivational influence on the student, and it is human nature to use any means possible to perform well in a high-stakes test. Given this tendency, it is your responsibility to ensure that the test measures what you intend it to measure, not irrelevant test-taking skills. This concept forms the core of validity.

### What construct are you trying to measure?

Another term that is of central importance in this field is **construct**. This term is widely used in some of the social and behavioural sciences, such as psychology. When you are developing an assessment instrument, you start with the construct of interest. That is, what are you trying to measure? In medicine, some constructs of interest are communication skills, technical skills and professionalism. For our purposes, the construct of interest is something that can be measured and that varies between individuals based on experience or training. (This is often called "construct-relevant variance.")

When you decide to develop or revise an assessment instrument for a particular construct, it is important that you first gather stakeholders to discuss the definition and the boundaries of the construct at length and that some consensus be achieved before you move on. If members of your stakeholder groups are not in agreement as to the definition of the construct, this will probably cause uncertainty, and possibly criticism, lack of acceptance and lack of uptake of your instrument in the future. For example, in a palliative care environment, one aspect of the construct "communication skill" could be defined as the ability to effectively and compassionately convey important end-of-life information to a patient and their family. Note that in this example, it would be useful to engage content experts to discuss what exactly is meant by the terms "effectively" and "compassionately," according to some behavioural criteria. If your expert panel does not agree on what is meant by one or both of the terms, it will be difficult to move on productively.



In an ideal assessment instrument, all of the variance in test results will be construct-relevant variance. In other words, the test will only measure qualities related to the construct of interest. As mentioned above, test performance can be influenced also by irrelevant constructs, such as test-taking skills, or other factors such as age, gender or genetic makeup, producing construct-irrelevant variance.

## Are you interested in formative or summative assessment?

After you achieve a common understanding among your stakeholders on the construct of interest for assessment, you will need to determine the purpose of the assessment:

- » Formative assessment is designed to give feedback to assist the learner to improve.
- » Summative assessment entails pass/fail decisions to determine whether a minimum criterion has been achieved and the individual is ready for a next step.

In instrument design, this distinction matters because it determines where you will focus your energy with the individual items that make up the assessment instrument. For example, do you want to be able to simply tell the learner that they have passed a test (as with certification examinations)? Or are you genuinely interested in giving them specific and comprehensive feedback on a variety of domains that they can use to improve? There's a funny paradox here, because as administrators, we always say that we want to give learners feedback for improvement, but we typically don't follow through: we find the task of creating, managing and administering an assessment so onerous and time consuming that we usually don't bother giving comprehensive feedback after an event. On the rare occasions when learners actually undergo formative assessment, they typically treat it as summative – they tend to believe that someone whose opinion they value will be looking at the results and judging them, no matter what they are told. In terms of professional risk assessment, learners are safer to assume that someone will be looking at their results than not. In

fact some authors argue that all formative assessment is also summative, in that formative assessment makes use of judgmental terms.<sup>2</sup>

To focus matters slightly more, there are also two special cases of summative assessment that we often use:

- » We may discriminate among the highest achievers for awards or reference letters (this can also be thought of as a type of formative assessment, in the sense that it provides the individual with more nuanced feedback than a simple pass/fail decision).
- » We may discriminate among the lowest achievers to help in tailoring specific remedial programs (this goes beyond the regular form of summative assessment in that it provides specific feedback for use beyond the current rotation or curriculum).

All of this is important because when we are designing a summative assessment instrument, we need to know whether we are concerned with discriminating between individuals who pass or fail (a relatively simple task), or whether we want to be able to rank the individuals in terms of their performance on the test. Commonly, we start off with the assertion that we are only interested in the pass/fail decision but end up trying to use the instrument for making finer distinctions.

## The importance of variance

Variance is your friend. Or to put it more accurately, construct-relevant variance is your friend. Quite simply, when you are assessing performance in any domain, you need to see variation in scores. This is a simple but critical assertion. If there was no variance in the scores produced by an assessment exercise, all individuals would be deemed to be identical in the domain of interest and there would therefore be no need to have used an assessment instrument. Stated another way, the reason one uses an assessment instrument is to discriminate between individuals with differing levels of skills or performance. It is important to determine what level or aspect of the variance between individuals is of most interest to you, because this will help you to

determine how to spend your energy in writing items and developing the overall assessment instrument. For example, if the purpose of the instrument is solely to inform pass/fail decisions, then most of the focus in developing the individual test items should be on distinguishing between borderline performances (i.e., those just above and just below the criterion reference). In this case, there is no need to spend energy developing items that discriminate among the few individuals at the top of the class, because we are only concerned with whether each student has passed or not. Similarly, we would not concern ourselves with fine distinctions between individuals at the very bottom of the class, as long as we were confident that none of them met the standard. If the purpose of our instrument is for formative assessment or discriminating among the highest achievers or among the lowest achievers, then our ideal instrument would discriminate between individuals at every level of performance.

Note that many measures of competence used in resident assessment, such as end-of-rotation evaluations, produce results with relatively little variance.<sup>3-5</sup> Fortunately, many standardized tests of aptitude and skill (e.g., medical knowledge, psychomotor ability, visuo-spatial ability) show good variation across a wide spectrum of performance and have demonstrated evidence of reliability and validity.

## Determining the desired pattern of variance among individuals: hitting the target construct

Ideally, the performance scores among your learners should vary in a meaningful way. If you have selected a construct that can be defined with clear consensus among your stakeholders, you should be able to determine the variables to which this construct relates without too much difficulty. Let us consider again the construct “communication skill in a palliative care environment.” This construct might be expected to relate to level of maturity, amount of experience in that clinical setting, or level of training. These variables would all contribute to construct-relevant variance. If you see that cultural and language issues are affecting the learners’

performance on your assessment instrument, then the assessment results are exhibiting construct-irrelevant variance (i.e., variance, unrelated to the construct of interest). In this case, you would be advised to try to modify your assessment instrument to more directly assess your target construct. This is essentially a question of a full treatment of validity which is beyond the scope of this chapter but is available elsewhere.<sup>6-8</sup>

In addition to creating conditions for valid assessments — in other words, to obtain the desired pattern of variance in its scores — you also need to examine your instrument’s reliability (the reproductibility of the test scores) and feasibility. A test can be reliable and valid but fail because of feasibility constraints. Issues related to data collection, logistics of testing, subject fatigue, motivation, rater training, cost and time all are feasibility concerns. All of these feasibility issues can easily be addressed during pilot testing.

Together, validity, reliability and feasibility determine the quality of your assessment instrument. You can and should measure these elements while you are developing your assessment instrument and you should continuously monitor them once you have implemented it. These elements can also be used as criteria in the selection of pre-existing assessment instruments.

## Literature scan

Numerous papers have been written on the topic of assessment in medical education. Early papers focused on larger descriptions of frameworks for assessment and provide excellent introductions to the nature and uses of assessment instruments in medical education.<sup>9,10</sup> Cook and Beckman<sup>6</sup> built on this and described the more recent framework for understanding validity.<sup>7,8</sup> In the last few years, the field has turned its attention to competency-based medical education and assessment of the roles and competencies outlined by the CanMEDs framework and the Accreditation Council for Graduate Medical Education (ACGME). This shift has led to many reviews and survey papers in specialty journals designed to help program directors understand the principles and practices of assessment in a variety

of specialties, including Anesthesia,<sup>11</sup> Surgery,<sup>12-14</sup> Emergency Medicine<sup>15</sup> and Psychiatry.<sup>16</sup> Finally, Cook and colleagues recently reviewed assessment in simulation-based education.<sup>17</sup>

Individual assessment has long been a subject of study in psychology and education. Medical education has embraced developments in these disciplines to refine specific procedures to select candidates for admission to medical schools and residency programs and to create examinations for certification and licensing. In the latter half of the 20th century, advances in the field of psychometric assessment were implemented more widely in medical education, for the purposes of curriculum evaluation, summative assessment of learners at the end of courses and rotations, and formative assessment during training. With the introduction of the CanMEDs and ACGME frameworks and the move toward maintenance of certification and competency-based education, the need for an understanding of the basic principles of testing (psychometrics) has increased in our field. While the competencies associated with the Medical Expert Role have a long history of reliable and valid assessments, there needs to be more research on how to assess some of the more intrinsic competencies, such as communication skills, professionalism and systems-based practice.

## Tips and pitfalls

- » **Don't try to do this by yourself.** Many novices to psychometric assessment develop instruments on their own. An assessment tool is not a simple questionnaire. You will need help from content experts and possibly psychometricians (yes, psychometrics is an occupation).
- » **Give yourself enough time to develop your instrument properly.** You should typically budget about a year to produce a good-quality instrument. You will need this time to review the content of the instrument with your expert panel, write and revise the items, pilot test the instrument and revise the final draft. If you are revising an existing instrument rather than creating a new one, you might be able to shorten the time to six months.
- » **Familiarize yourself with the literature.** Too often, program directors are so busy managing the operational aspects of their program that they spend little (or no) time reading up on best practices in medical education. There are many journals dedicated to this field, and there is a thriving sub-field on psychometric assessment in medical education. An assessment instrument relevant to your needs may have been published in the literature. You don't want to "reinvent the wheel."
- » **Consult Textbox 12.1**, which is based on a recently published checklist that you can follow when designing your own assessment instrument.<sup>18</sup>
- » **Don't start with too narrow a definition of your construct.** It is harder to open up the discussion once you are in the process of developing the instrument than it is to narrow it down. If you start with too narrow a definition, some members of your expert panel will feel like they aren't being heard and their annoyance will colour the rest of the deliberations.

- » **Develop test items that reflect the competencies you choose to assess** and carefully consider the levels of performance of your target population. (Consider this question: What does borderline performance look like for this competency?)
- » **Review the nationally recommended objectives for your (sub)specialty** (the documents from your specialty committee containing the objectives of training requirements and specialty training requirements) to find relevant language for creating and refining items.
- » **Use a representative sample when developing the instrument.** If you only consult content experts or residents from your own institution, you will probably miss some of the variables that are important to your construct. Ensure you get others from outside your geographic area to review the content. An instrument that is highly specific to your location will have limitations that will be obvious to the accreditation review committee.
- » **Don't use the instrument for high-stakes assessment before you have done the pilot test.** Pilot testing often reveals a need for critical revisions for feasibility: the content may be solid, but the instrument may prove to be impractical because it is too costly or time-consuming to implement. A pilot test involving trainees with a similar background to that of the target group should allow for an adequate assessment of feasibility.
- » **Each time you administer your assessment instrument, collect data for continuous quality assurance** on student performance, individual item statistics, reliability and validity.
- » **Don't be afraid to revise the items on your assessment instrument** if the results they generate are not telling you anything useful.

### **Textbox 12.1: Seven-step checklist for developing a good assessment instrument**

#### **1. Determine the purpose of your assessment.**

- » Will the instrument be used for formative or summative (standard setting/criteria) assessment or research?
- » Do you want to assess knowledge, skills or attitudes (e.g., performance, teamwork, anxiety)?

#### **2. Identify the main construct of interest and stakeholders to help establish content validity.**

#### **3. Review the construct with content experts using a consensus method such as focus groups.**

- » Obtain a representative sample from different institutions and disciplines.
- » Work toward thematic saturation and address political issues.
- » Set preliminary standards: What does perfect/ borderline performance look like?

#### **4. Develop and write the items, drawing on related existing tests if applicable.**

#### **5. If necessary, train the raters (and assess inter-rater reliability).**

#### **6. Pilot test the instrument (with a representative sample) for validity.**

- » Check the feasibility of the instrument (length, clarity, cost).
- » If necessary, go back to step 4 (modify the items) and then pilot test again.

#### **7. Implement the modified test and measure its reliability and validity with a larger sample.**

- » Assess construct validity.

**Final note:** We can never achieve perfect validity, so consider this to be an ongoing process whereby you are constantly checking performance statistics for reliability and validity.

Adapted from Hamstra SJ. Keynote address: the focus on competencies and individual learner assessment as emerging themes in medical education research. *Acad Emerg Med.* 2012;19(12):1336–1343.

## Case resolution

After reviewing the checklist in Textbox 12.1, you feel empowered to move forward and create a new assessment instrument or adapt an existing one for your purposes. You enlist the help of a psychometrician from your faculty of education or department of psychology. You decide your instrument should be used for summative assessment of residents in your program, to inform pass/fail and remediation decisions. While assembling your expert panel, you begin work on achieving consensus on the definition of the construct of interest. You decide that you will focus on communication skills. You enlist the help of the research librarian at your institution and find that very little has been published on the assessment of communication skills in your field. You work with your expert panel and the psychometrician to write and revise items that will allow you to assess your specialty's objectives. You then decide on a grading method on the basis of how your expert panel views progressive levels of expertise. Following a pilot test, you revise the items and begin regular administration of the assessment instrument. You gain confidence that your new assessment instrument will meet national standards for best practices in competency assessment in your field. You submit the new instrument and your initial results to the accreditation team and they grant you full approval.

## Take-home messages

- » Review the purpose of your proposed assessment instrument: Will you use it for a summative or formative purpose?
- » Make liberal use of content experts in developing items for your assessment instrument. It is important that the definition and the boundaries of the construct be discussed at length and that some degree of consensus be achieved before moving on.
- » Put some effort into pilot testing. You will learn a lot about the construct and the particular CanMEDS Role you are trying to assess from doing this.
- » Keep an eye on reliability, validity and feasibility as you develop and work with your assessment instrument. Collect data for continuous quality improvement.

## References

- <sup>1</sup> Case SM, Swanson DB. *Constructing written test questions for the basic and clinical sciences*. 3rd ed. Philadelphia (PA): National Board of Medical Examiners; 2002.
- <sup>2</sup> Brown SA, Glasner A. *Assessment matters in higher education: choosing and using diverse approaches*. Buckingham (UK) and Philadelphia (PA): Society for Research into Higher Education and Open University Press; 1999.
- <sup>3</sup> Dauphinee WD. Assessing clinical performance: Where do we stand and what might we expect? *JAMA*. 1995;274:741–743.
- <sup>4</sup> Maxim BR, Dielman TE. Dimensionality, internal consistency and interrater reliability of clinical performance ratings. *Med Educ*. 1987;21:130–137.
- <sup>5</sup> Streiner DL. Global rating scales. In: Neufeld VR, Norman GR, eds. *Assessing clinical competence*. New York (NY): Springer; 1985. p. 119–141.
- <sup>6</sup> Cook DA, Beckman TJ. Current concepts in validity and reliability for psychometric instruments: theory and application. *Am J Med*. 2006;119(2):166.e7–16.

- <sup>7</sup> American Educational Research Association, American Psychological Association and National Council of Measurement in Education. *Standards for educational and psychological testing*. Washington (DC): American Educational Research Association; 1999.
- <sup>8</sup> Messick S. Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *Am Psychol*. 1995;50:741–749.
- <sup>9</sup> Wass V, Van der Vleuten C, Shatzer J, Jones R. Assessment of clinical competence. *Lancet*. 2001;357(9260):945–949.
- <sup>10</sup> Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA*. 2002;287:226–235.
- <sup>11</sup> Boulet JR, Murray D. Review article: assessment in anesthesiology education. *Can J Anaesth*. 2012;59(2):182–192.
- <sup>12</sup> Hamstra SJ, Dubrowski A. Effective training and assessment of surgical skills, and the correlates of performance. *Surg Innov*. 2005;12(1):71–77.
- <sup>13</sup> Sidhu RS, Grober ED, Musselman LJ, Reznick RK. Assessing competency in surgery: Where to begin? *Surgery*. 2004;135:6–20.
- <sup>14</sup> Fried GM, Feldman LS. Objective assessment of technical performance. *World J Surg*. 2008;32(2):156–160.
- <sup>15</sup> Farrell SE. Evaluation of student performance: clinical and professional performance. *Acad Emerg Med*. 2005;12(4):302e6–10.
- <sup>16</sup> Manning J, Beitman BD, Dewan MJ. Evaluating competence in psychotherapy. *Acad Psychiatry*. 2003;27(3):136–144.
- <sup>17</sup> Cook DA, Brydges R, Zendejas B, Hamstra SJ, Hatala R. Technology-enhanced simulation to assess health professionals: a systematic review of validity evidence, research methods, and reporting quality. *Acad Med*. 2013;88(6):872–883.
- <sup>18</sup> Hamstra SJ. Keynote address: the focus on competencies and individual learner assessment as emerging themes in medical education research. *Acad Emerg Med*. 2012;19(12):1336–1343.

## Other resources

Many medical schools in Canada now have medical education research units, typically with an expert in assessment (i.e., a psychometrician). Textbox 12.1 provides a checklist for developing a good assessment instrument.

# International medical graduates:

## *working with a diversity of learners*

### David Tannenbaum, MD, CCFP, FCFP, and Allyn Walsh, MD, CCFP, FCFP

Dr. Tannenbaum is an associate professor in the Department of Family and Community Medicine at the University of Toronto. He served as the director of postgraduate education in the Faculty of Medicine from 1998 to 2007, during which time he oversaw a rapid expansion of the number of international medical graduates admitted into residency training in Family Medicine. He chaired the Working Group on Curriculum Review at the College of Family Physicians of Canada, which developed the recently released Triple C Competency-based Curriculum in Family Medicine residency.

Dr. Walsh is a professor in the Department of Family Medicine at McMaster University. She is the chair of student affairs for the Michael G. DeGroot School of Medicine and divides her time between her clinical family practice and university administration and teaching. She has held a number of educational portfolios at McMaster, including that of Family Medicine postgraduate program director and assistant dean, program for faculty development. She co-edited the Association of Faculties of Medicine of Canada's Faculty Development Program for Teachers of International Medical Graduates, released in 2006.

## Objectives

**After reading this chapter you should be able to:**

- » understand the unique challenges facing international medical graduates (IMGs)
- » develop programs or initiatives that will promote positive training outcomes for IMGs
- » manage common difficulties encountered by IMGs

## Case scenario

Dr. G. is a resident in the first postgraduate year of your program, a stage of training that she completed previously. She grew up, attended medical school and participated in seven years of postgraduate training in medicine and surgery in her home country overseas. She immigrated to Canada with her husband and three young children four years ago, and with diligent effort she passed all required examinations and was selected for residency in your program. It became apparent early on that she was having difficulty adapting to the pace and expectations of the program. Her clinical performance is borderline. She seems overconfident in some areas of practice, has difficulty taking direction and proceeds with patient care decisions without informing her supervisors. In other areas of practice she is very tentative and seems to avoid participation, which puts additional strain on her colleagues. She provides very useful help to other members of the health care team in understanding

the needs of patients from her own culture, and her expertise in carrying out certain clinical procedures is of great value when she is on call. She is reluctant to accept feedback, consistently viewing it as negative despite efforts by her teachers to make it constructive. When you recently asked her to provide a self-assessment after some of her teachers raised concerns, she stated that her performance and progress were very good and thanked you for taking the time to provide teaching. Frustrations are growing among her teachers and fellow residents as lately she has repeatedly arrived late for morning rounds and she failed to show up for an on-call shift on one occasion. In addition, concerns are being expressed about patient safety. Dr. G.'s site supervisor approaches you, unsure of how to handle this situation.

## Background and context

International medical graduates (IMGs) represent approximately one-quarter of the physician workforce in Canada, and a large number of new IMGs enter residency programs each year. In the 2010 match of the Canadian Resident Matching Service (CaRMS), 380 IMGs were matched to positions, representing approximately 13.5% of all residents entering the first postgraduate year of training. Some are sponsored by their home countries and will return there after training; others have immigrated to Canada and will join the Canadian physician workforce upon completion of training. A growing number of internationally trained physicians are Canadian by birth and received their initial education in Canada before going to the United Kingdom, Australia, Europe, the Caribbean or other parts of the world for their undergraduate medical education; they are now returning to Canada for residency training.

Among IMGs there is great diversity — in age, background, education, clinical training and experience, culture, family makeup, financial security, language proficiency, communication skills, understanding of the patient-centred approach and familiarity with medical training and practice in Canada — considerably greater diversity than that typically seen among a cohort of Canadian medical graduates (CMGs). This enormous

diversity can be a strength in a number of ways, but it can also be the source of considerable difficulty for IMG trainees and the programs that accept them. Awareness of, and sensitivity to, the potential difficulties that IMGs may face should lead to more careful planning, monitoring and support of these learners, so that successful outcomes of training can be achieved.

The Association of Faculties of Medicine of Canada (AFMC) released its Faculty Development Program for Teachers of International Medical Graduates in 2006 (available at [www.afmc.ca/img/default\\_en.htm](http://www.afmc.ca/img/default_en.htm)).<sup>1</sup> This extensive, multi-faceted, modular program, edited by Yvonne Steinert and Allyn Walsh, is designed to help teachers work effectively and collaboratively with IMGs. It includes descriptions of the unique challenges facing IMGs, particularly those who are not familiar with the Canadian cultural context, and offers approaches that teachers can use to facilitate the professional development and progress of IMGs through their training.

The authors of the program elaborate seven key principles:

1. The challenges teachers face in supporting IMG learners are not fundamentally different from those they face in encounters with other learners.
2. An approach to understanding learner differences that highlights IMGs' deficits must be avoided. Instead, educators should "encourage a spirit of 'appreciative inquiry' that acknowledges what is going well."
3. Opportunities for training IMGs should be used to benefit all learners. (This principle recognizes value added to the learning environment by learners with diverse cultural backgrounds and experiences.)
4. All educators must recognize — and acknowledge — that each IMG is a unique individual.
5. All educators must recognize — and acknowledge — that each teacher is a unique individual, different from his or her colleagues. (This principle implies that certain teachers may be better suited to working with IMGs than others and may be selected for their skills in this regard.)



6. Principles of effective faculty development must be applied to initiatives for teachers of IMGs in the same way as they are to any other faculty development initiative.
7. Faculty development can include teacher training, faculty orientation and faculty support. Faculty support may include providing teachers with extra time to work with IMG learners and offering teachers mentoring and expert consultation.

The program consists of a series of modules that includes background material, slide sets, videos and other content that will help faculty members enhance their skills in teaching and working with IMGs. There are four main sections to the program:

1. Orienting teachers and IMGs
2. Educating for cultural awareness
3. Working with IMGs — a faculty development “toolbox”
  - » Assessing learner needs and designing individually tailored programs
  - » Delivering effective feedback
  - » Promoting patient-centred care and effective communication with patients
  - » Untangling the web of clinical skills assessment
4. Guidelines for site-specific activities: faculty development principles and strategies

We encourage program directors to refer to these modules to better understand the issues faced by teachers working with IMGs and to consider what resources may be helpful for their own programs. These modules were designed to help build programming for teachers of IMGs, and there are sections in each module that provide context and a deeper understanding of relevant issues.

## Literature scan

As noted in the introduction to the AFMC’s faculty development program (discussed above), the literature is replete with descriptions of difficulties encountered by IMGs in residency training. Although the message in such reports is pejorative, it is understandable why the literature is biased in this way. Educators are unlikely to write about the clear majority of IMG learners who are progressing well and at the expected rate; they are more likely to describe situations in the learning environment that are seen as problematic for learners, their teachers, their peers and perhaps their patients. We have witnessed the perplexed reaction of teachers who are faced with a new experience involving an IMG in academic difficulty and do not know how to approach the problem or make the necessary adjustments to maintain a stable educational and clinical environment. Training programs in Canada have largely been built on the expectation that learners will enter training after a standard undergraduate education that enables them to take on progressively greater responsibilities in a predictable manner. We also expect that learners can adequately assess their weaknesses and seek assistance appropriately. Finally, and very importantly, we expect that they will communicate effectively and sensitively with their patients, their colleagues, other health professionals and administrative staff. When learners do not meet these professional expectations and exhibit professional behaviours per the norm, teachers may be understandably thrown off and may question their competence as educators.

The difficulties encountered by some IMGs can be grouped into the following categories:

- » difficulties with language,
- » difficulties with communication,
- » difficulties with clinical skills,
- » difficulties with procedural skills,
- » difficulties understanding the local medical culture and patient–physician roles,

- » difficulties understanding the medical education culture and resident–teacher roles and
- » issues of hierarchy.

Pilotto and colleagues published a systematic review of 234 evidence-based articles regarding issues for teachers who participate in the training of IMGs.<sup>2</sup> The focus of the review was on the 18 articles that were relevant to issues of communication, but cultural issues were discussed as well. Several themes emerged from the review:

1. It may be difficult for some IMGs to adjust to a change in environment, that is, from one in which they hold a position of considerable power in a community as a respected professional, to one in which the doctor–patient relationship is more equitable, with physicians being perceived as collaborative decision-makers, and where consumerism is prevalent. This change in status, coupled with the requirement to reassume the role of a student who must prove himself or herself, may pose problems with regard to IMGs' self-image.
2. Inadequacies in an IMG's language proficiency may pose problems. It is important for programs and their faculty and staff to recognize that although an IMG may appear to converse effectively he or she may be applying fairly intense mental effort to do so and may be missing subtleties in colloquial communication. The IMG's accent, speech inflections, word choices and phrasing may interfere with the patient's comprehension of what he or she is saying and may have a negative impact on the establishment of rapport. Learners may benefit from special communication training programs focusing on the use of language and idioms, empathy, reflective listening, strategies to deal with difficult (or culturally unfamiliar) situations, open-ended questioning, explorations of psychosocial issues and rapport building. Attention to boundary issues and non-verbal communication also may be important for some IMGs.
3. Teacher-centred hierarchical systems of learning are common in many parts of the world; IMGs trained in such systems may have difficulty adapting to the expectations in Canada that they will participate readily, show self-direction and even challenge the teacher. Their reluctance to offer their opinions can be misinterpreted as a lack of knowledge. Medical education and clinical settings have many unwritten rules and expectations: IMGs will have absorbed these by osmosis, but IMGs may be unaware of them. It is critically important for programs to articulate their expectations clearly.
4. Some IMGs may not be receptive to feedback. They may perceive constructive feedback as criticism and may become defensive, as a form of protection for their self-esteem and a reaction to prospects of failure. In some cases this reaction can lead to anxiety or depression, which "can present as uncommunicative and unresponsive behavior, which could be interpreted as lack of knowledge, diffidence about the program or arrogance."<sup>3</sup>
5. IMGs may have more difficulty than Canadian-trained students in adapting to the range of people encountered day to day in the practice of medicine (patients, families, other health professionals, community service providers, etc.). With regard to patients and families, IMGs may require specific help during their training to ensure that the tone they use, the information they convey, their word choice, their empathy and their use of jargon are appropriate and effective. It will also be important to ensure that IMGs are aware of the roles of allied health professionals and protocols within institutions and ambulatory environments.

Bates and Andrew point out many of the communication issues noted above and add that IMGs may perceive gender roles differently than do their North American counterparts and may never have examined a patient of the opposite sex while they were in medical school.<sup>3</sup> These authors also indicate that some IMGs

may have had difficult experiences as members of a persecuted minority and/or as refugee claimants, leading them to be suspicious of authority and unable to admit lack of knowledge. These characteristics may show as aggressive behaviour if such IMGs are challenged.

Bates and Andrew also offer the example of a 40-year-old female IMG whose academic performance deteriorated and who appeared disinterested.<sup>3</sup> Careful discussion revealed that she was dealing with considerable stress related to her responsibilities for her two young children, financial strain, feelings of isolation, exhaustion and ongoing anxiety. Admitting to depression was a cultural taboo for this individual. Appropriate and successful interventions included time away from training and medical attention. The authors state that “unless faculty and administrators fully explore the circumstances leading to performance difficulties of IMGs, any remediation they devise may be inappropriate and may in fact lead to eventual frustration and failure.” It is not an easy task to identify the multiple contributing issues that require attention for an IMG’s performance to improve, and the program director may need to enlist the help of other faculty or administrative staff to work with the IMG.

Andrew recently compared the clinical and certification examination performance of IMGs and CMGs.<sup>4</sup> On the whole, in-training evaluation reports (ITERs) regarding the clinical performance of IMGs and CMGs were similar. However IMGs performed considerably less well than CMGs on standardized certification examinations, a finding also reported by MacLellan and colleagues.<sup>5</sup> This implies that programs should consider offering specific training in examination preparation to assist (some) IMGs with potentially unfamiliar expectations.

Hall and colleagues conducted a qualitative study of externally funded IMGs who had come to Canada for training but would be returning to their home countries, the majority to the Middle East.<sup>6</sup> In addition to the language, communication and cultural issues mentioned above, they found that this cohort of IMGs had experienced discriminatory comments, that they had difficulties with feedback and that they had problems negotiating treatment plans and discussing “do not resuscitate” orders. Importantly, program

directors and various health professionals found that the written communication skills of these IMGs, including completing charts, orders and other documentation, were suboptimal. Furthermore, the IMGs’ understanding of the multiculturalism of Canadian society, the design and operation of the health care system and the patient-centred model of care was of concern.

In our own experiences we have had additional concerns about the clinical performance of a minority of IMGs. It should be noted that these concerns have been identified for CMGs as well, and thus they are not unique to IMGs. We have encountered overconfidence, inappropriate referral patterns, under- or over-investigation, incomplete clinical assessments, significant knowledge gaps, premature convergence on a diagnosis (failure to consider a broad differential diagnosis), boundary issues and inappropriate self-disclosure. Some IMGs have met feedback on such issues with resistance: it has been difficult for them to admit their errors and they have viewed constructive feedback as criticism. In some instances it has been particularly challenging for female program directors to establish trusting and productive professional relationships with male IMGs for whom they are responsible.

## Best practices

Our primary recommendation is that teachers of IMGs develop a cultural awareness that helps them understand the roots of the difficulties that some IMGs will encounter. Faculty orientation to these issues is important. In addition, specific orientation and skill development programs should be made available to IMGs to assist them with their communication skills; to help them adapt to patient-centred approaches, cross-cultural care and the Canadian and regional systems of care; to help them work collaboratively with their health professional colleagues; and to prepare them to address difficult clinical situations and specific clinical problems they may not have previously encountered.

Clinical teachers should be particularly sensitive to, and acutely aware of, the human tendency toward the fundamental attribution error, a phenomenon described in social psychology in which we ascribe what we

view as poor professional behaviour or performance (e.g., repeated tardiness, lack of preparation, failure to complete tasks) to characterological defects. A careful assessment of the stressors and personal issues facing the IMG in perceived difficulty will often reveal a substantial personal, family, financial or other stressor that clearly explains the observed behaviours and offers an opportunity to implement appropriate interventions. This is discussed in more detail in the feedback module of the AFMC's Faculty Development Program for Teachers of International Medical Graduates ([www.afmc.ca/img/EFB\\_3a\\_en.htm](http://www.afmc.ca/img/EFB_3a_en.htm)).

## Tips

- » Offer a program of orientation that effectively prepares IMGs for residency training in the Canadian educational and clinical environment and for professional practice in Canada. Well-established programs exist, such as those provided by the Centre for the Evaluation of Health Professionals Educated Abroad in Ontario and the AFMC's Faculty Development Program for Teachers of International Medical Graduates, which offers online materials to help both IMGs and teachers better understand cultural awareness ([www.afmc.ca/img/ECA\\_en.htm](http://www.afmc.ca/img/ECA_en.htm)).
- » Assess IMG learners early on in training by assigning experienced teachers to directly observe their clinical interactions with patients.
- » Encourage IMG residents to identify and communicate their performance gaps: create a supportive environment in which the goal is to assist the learner. Being explicit about expectations is extremely important.
- » Avoid placing learners with known weaknesses into a clinical environment in which they are not likely to succeed. A demoralized learner loses confidence and further underperforms. Similarly, some clinical teachers may not be as

well equipped as others to deal with some of the challenges experienced by IMGs. A careful matching of teacher and learner may be of considerable value.

- » Identify senior IMG residents or recent graduates who are prepared to offer support and mentorship to junior IMG trainees.
- » Early intervention for struggling learners through special programs of mentorship, one-on-one teaching, simulations, language and communication training, and targeted skill acquisition will likely be beneficial.
- » Ensure prompt access to counseling and mental health support when needed.
- » Support teachers working with IMGs. Identify or develop experts who can serve as mentors and offer educational supports.

## Pitfalls

- » Do not assume that all residents have similar backgrounds nor that they have had equivalent training. Conduct individual reviews.
- » Problems can arise if expectations for common tasks (e.g., handover, on call, charting) are not clearly articulated and written down.
- » Do not attribute IMG difficulties to a characterologic flaw. Closer examination will often reveal that situational factors are responsible for the difficulties.

## Case resolution

When Dr. G.'s site supervisor approaches you for help, you immediately intervene. You meet with Dr. G. and discover that she has a number of new family responsibilities to manage because her husband has had to return to his home country to assist an ailing parent. She had been in the emergency department with her three-year-old son at the time of the missed on-call shift and had left a message that was not received by the vacationing program assistant. You put into place a program of support designed to reduce her clinical load and on-call responsibilities for a three-month period, which includes a mentor who will work with her one-on-one twice weekly to identify clinical gaps and help her to better understand her role in certain patient situations, to develop an appreciation for the patient-centred approach to care and to acquire self-assessment skills through review of videotaped interviews she has conducted with standardized patients. You are lucky to have access to certain centralized services, such as standardized patients, and to a pool of funds set aside for special programming for learners in difficulty. The resident is initially very reluctant to enter the special program, fearing that it is a step toward inevitable dismissal. However, with encouragement and reassurance that this does not constitute probation, she recognizes that the interventions are being offered in her best interest and she participates actively.

## Take-home messages

- » The overall program goals, the criteria used for selection of residents, the tools used to assess how well candidates meet these criteria, and participants' understanding of the process must all be in alignment.
- » The most reliable systems of selection involve several independent observations and assessments, which are then combined to form an aggregate score.
- » If the selection process is to be reliable and fair, the assessors must be well prepared: they must have a good understanding of the program's goals, the characteristics they are to seek in potential residents, and the tools they will use to evaluate these characteristics.

## References

*\*indicates key resources*

- <sup>1</sup> \*Steinert Y, Walsh A, editors. *A faculty development program for teachers of international medical graduates*. Ottawa: Association of Faculties of Medicine of Canada; 2006. Available from: [www.afmc.ca/img/default\\_en.htm](http://www.afmc.ca/img/default_en.htm)
- <sup>2</sup> Pilotto LS, Duncan GF, Anderson-Wurf J. Issues for clinicians training international medical graduates: a systematic review. *Med J Aust*. 2007;187(4):225–228.
- <sup>3</sup> Bates J, Andrew R. Untangling the roots of some IMGs' poor academic performance. *Acad Med*. 2001;76:43–46.
- <sup>4</sup> Andrew R. How do IMGs compare with Canadian medical school graduates in a family medicine residency program? *Can Fam Physician*. 2010;56:e318–322.
- <sup>5</sup> MacLellan A, Brailovsky C, Rainsberry P, Bowmer I, Desrochers M. Examination outcomes for international medical graduates pursuing or completing family medicine residency training in Quebec. *Can Fam Physician*. 2010;56(9):912–918.
- <sup>6</sup> Hall P, Keely E, Dojeiji S, Byszewski A, Marks M. Communication skills, cultural challenges and individual support: challenges of international medical graduates in a Canadian healthcare environment. *Med Teach*. 2004;26(2):120–125.

# A resident in difficulty, or a difficult resident?

## Constance LeBlanc, MD, CCFP(EM), MAEd, and Lorri Beatty, MD, FRCPC

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Dr. Beatty was a resident when she contributed to this chapter, providing valuable insight into the perspective of the learner.

## Objectives

### After reading this chapter you should be able to:

- » recognize the subtle signs of resident difficulty
- » recognize that observation is a critical component of teaching, particularly for residents not meeting expectations or requirements
- » collect objective data when you suspect a resident to be in difficulty
- » use a resident-centred approach
- » explain the value of using the CanMEDs competencies as a framework to delineate the problem and to plan for remediation with longitudinal follow-up
- » provide clear direction to the resident in difficulty and set outcome targets explaining the consequences should no change occur within the delineated time frame

## Case scenario

You are the director of a Royal College of Physicians and Surgeons of Canada Emergency Medicine (EM) training program. Dr. X is an EM resident in his third postgraduate year. He is bright and sociable and performed well in the first two years of the program; however, you and your colleagues have noted some problems in his clinical work in his most recent rotation in the emergency department. Dr. X's clinical assessments are brief and he closes his differential diagnoses prematurely, sometimes omitting important elements of patient assessment. Missing important cues because of inadequate information gathering, he is unable to defend his decisions during case discussions. When faculty members probe for further details, he blames nurses, patients or their families for his inability to supply additional data, and he becomes defensive and irritable; faculty members now refrain from giving him honest feedback because of his "attitude." After a recent patient handover, he described some faculty members as neurotic, claiming that they unnecessarily performed complete assessments and ordered excessive ancillary testing on patients, slowing down flow.

Dr. X's recent off-service evaluations also document deteriorations in both his attitude and his performance. However, he has not been missing time and is a hard worker. The comments in these evaluations echo what you have been hearing from your EM colleagues and you are concerned. You wonder if this is a transient phase or something that requires your attention.

## Background and context

All clinical teachers and program directors will eventually encounter residents who are having problems, sometimes in several areas. We use the term *resident in difficulty* to describe a resident who is unable to perform at or beyond their level of training. When these learners are in situations that challenge their ability to perform well, their discomfort may be perceived as obstinacy or defensiveness, complicating efforts to help them. Studies have not been able to isolate reliable factors we can use to screen residency applicants for the likelihood of encountering difficulty during residency.<sup>1,2</sup>

Learners generally enter residency with a track record of high-level performance, and thus they are unprepared to cope with any difficulty they encounter in residency. They may not perceive the difference between failing at a task (or test) and being a failure.<sup>3</sup>

Residents encounter difficulty for wide-ranging and complex reasons: for example, they may be overwhelmed or exhausted, they may have an addiction, they may be ill, they may be dealing with family or personal issues or they may be feeling challenged academically.<sup>4</sup> Because of the multi-factorial nature of these problems, each resident's situation will be unique. With exploration, observation and time, educators will be able to apprehend the nature of each circumstance. Providing guidance to a resident in difficulty is an investment in the future of our profession, and the time taken to collect sufficient data to make a correct "diagnosis" about a learner is time well spent. A resident's training difficulties can adversely affect patient care and teamwork, resulting in frustration and discouragement for the clinical faculty who are attempting to teach the resident. Emergency department staff may avoid residents who are in difficulty, reducing the residents' clinical exposure and further compounding the problem. In addition to the potential clinical implications, a resident's difficulties can have a significant negative impact on his or her peer group.

Evans and colleagues highlight the similarities between the processes of helping a resident in difficulty and of caring for patients. Our training as clinicians provides us with the skills to recognize signs, make diagnoses and solve problems. These align well with the approach outlined in this chapter for the resident in difficulty.<sup>5</sup>

## Helping the resident in difficulty

### Overview

Before taking any action, you must first observe the resident and then gather data from all sources; observation and data collection are paramount if your efforts to help the resident are to be successful. Have a discussion with the resident's supervisor and document it in your personal notes related to this resident. Keep an open mind while observing the resident, collecting data and discussing the situation with the resident.<sup>6</sup> Have a forthright discussion with the resident to share your observations, gain the resident's perspective, and provide advice and guidance. Strive to set a supportive rather than confrontational tone for the discussion with the resident in difficulty, but recognize that unfortunately this will not always be possible. Finally, monitor the resident's performance longitudinally. Follow-up meetings with clearly delineated goals for progress are a must. It is paramount to document meetings and discussions from the outset, as this information will be required to provide evidence of due process and will equip you to document the resident's progress (or lack thereof). Each of these steps will be discussed in further detail later in this chapter.

Rarely, you may find that progress is elusive despite your best efforts. We use the term *difficult resident* for a small subgroup of residents who are unable or unwilling to change some behaviours despite assertive efforts by their teachers over time. Diagnosing the difficult resident requires time. When directed educational interventions are unsuccessful despite ongoing effort and conscientious follow-up, you will have to consider the possibility that you are dealing with a difficult resident. Although rare, these residents consume considerable time and resources with minimal gain. Only with rigorous effort, after due process and with ample documentation can you confirm a resident to be difficult. Such residents are best handled through more formal means, such as formal remediation and institutional educational oversight (involving departmental or decanal committees and formalized evaluation policies).

Program directors strive to guide each resident to achieve his or her full potential. It would perhaps serve us well to treat all learners' difficulties, no matter how trivial, like more significant challenges. This would ensure that we give attention to the entire resident group and incite us to collect data and provide learning plans for all.

## Suspect the resident to be in difficulty

Residency training is a stressful process, and you must be vigilant for potential problems. Learners must not only master the formally stated academic outcomes of residency curricula; they are also expected to grow in maturity and self-awareness and to achieve work-life balance. We expect a lot of them.

When medical educators encounter a resident who may be (or who definitely is) in difficulty, they often avoid considering that something is amiss, even though they recognize that avoiding such problems is a disservice to all involved. Evans and colleagues argue that "early identification and early support, *before* the trainee or student runs into major difficulties, should be regarded as the gold standard for educational supervision."<sup>5</sup> Most educators have encountered senior residents with significant knowledge or professionalism deficits not addressed earlier in their training. We fail this group by not failing them — or, at a minimum, providing them with feedback, guidance and a plan.

Dunning and Kruger demonstrated that most individuals perceive their ability to be above average; sadly, this perception is false for half of any group.<sup>7</sup> Residents require feedback to situate their performance amid that of their peers. An educator who defers or avoids discussing subpar performance with a resident or who is dishonest in addressing the issue is being educationally neglectful, depriving the resident of opportunities for support or referral. Patient care may also be compromised.

## Observe the resident

In patient care, we gather information before making a diagnosis; failure to do this has been demonstrated to pose a significant risk to patient safety.<sup>8</sup> Resident care is similar. Too often, educators assume that when a resident

performs poorly he or she is simply having a bad day, or they feel they are too busy to explore the issue and they defer it until it can no longer be ignored. When a resident exhibits what is perceived as a "poor attitude," investigation will often reveal that another problem is at the root. Steinert developed a framework for analyzing learners' problems that can help you to describe a resident's difficulty and identify the problem (Table 14.1).<sup>9</sup> A direct approach to fact finding and a frank discussion are keys to delineating the issue.<sup>10</sup> Residents will be more receptive to feedback and remediation when sufficient objective data have been sought and the problem has been clearly articulated. You should personally observe the behaviour of concern and define the problem as precisely and promptly as possible.

Discuss the issue with the resident's supervisor. Additional third parties, including other faculty members, nursing and support staff and possibly other residents, can provide helpful information as well. You should guard the privacy of the resident in question when obtaining feedback from the health care team. Ideally, similar information should be collected from the team for the entire resident group to prevent any additional tension for the resident in question. When data are collected from multiple sources, patterns will emerge that help to define the issue. The greater the depth and breadth of the data collected, the more appropriate the conclusions will be.<sup>11</sup>

You will also need to decide if the behaviour is having a significant impact on the resident's professional performance or if it is merely an irritant. Some problems may be of little consequence and require no intervention. Indiscreet gum chewing by a resident may be irritating, but it is probably not having untoward effects on the quality of the resident's work or interactions, and if the resident maintains his or her professionalism an intervention may not be required.

It is useful to frame the problem within the seven CanMEDS Roles (Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional). These competencies, now widely adopted within and outside Canada, identify the key facets of the physician's role and can be used to further describe



issues that arise in training. The CanMEDS competencies include areas that are sometimes neglected but should not be ignored because their neglect can have significant repercussions.<sup>12</sup>

## Meet with the resident to discuss the problem

The resident must be active in this process. Before you meet formally with the resident, determine the optimal outcome but be prepared for the fact that additional information that comes out during the meeting may warrant an adjustment to your plan. Considering the best approach for reaching the optimal outcome provides several benefits: you will gain important insights that you can use to direct the conversation, you are less likely to get sidetracked in the meeting and you will aim for a realistic outcome. Complete this statement: “Ideally, by the end of this meeting we will. . . .” On occasion, you will encounter more resistance and the meeting will become confrontational. In this situation, your careful preparation for the meeting will serve you very well.

A private meeting with the resident in the workplace, but outside the immediate clinical setting, enables you to have an open discussion. Ideally, the meeting should be scheduled during office hours. One of the main purposes of the meeting is fact finding: allow time for the resident to communicate his or her perspective on the problem and for you to provide your perspective. At the beginning of the discussion, encourage the resident to provide more information; this may alter the course of the ensuing conversation and perhaps cause you to adjust your initial view of the optimal outcome. Next, clearly articulate the problem and its impact, giving examples (preferably from your direct observations) whenever possible. Take time to understand the resident’s perspective, as this will help you to determine his or her degree of insight and will provide information regarding contributing factors. It is important that you inquire about the resident’s wellbeing both at work and outside the clinical setting. Exploring relevant past experiences and addressing the impact of the performance issues on the resident, the team and the patient is essential.<sup>10</sup> This discussion with the resident will provide a context for the provision of feedback.

It is also helpful to get the resident’s perspective on learning and feedback. There is greater receptiveness to feedback among students who view intelligence as something that is incrementally developed rather than as a fundamental personal characteristic.<sup>13</sup> Put another way, people who believe that intelligence is developed through a series of incremental steps that collectively make a whole receive feedback more easily than those who believe it is a fixed entity that is unchangeable. The latter group may perceive feedback as a comment on their intellect, whereas the former group is more likely to view it as an opportunity to promote useful change. Teunissen and colleagues described the impact of feedback-seeking behaviour among residents as a reflection of their fundamental approach to residency, characterized as a “goal orientation” or “performance orientation.” The orientation of the residents was found to influence their perceptions of the benefits and costs of feedback, which had an impact on their appetite for honest appraisal.<sup>14</sup>

Discussing the problem and its impact on the resident and on others as soon as possible will avoid any sense of surprise for the resident and allow more time to address the problem.

## Plan for intervention and follow-up longitudinally

It is essential that you develop a stepwise approach to rectifying the problem, with clear goals and a timeline. You can minimize the chance of conflict by discussing with the resident what achievements you both want. During this, or subsequent, discussions, work collaboratively with the resident to develop a plan to resolve the problem.

In some situations, an increase in clinical supervision will be necessary. Entrustment, defined by Jones as “the granting of independence to trainees to perform the clinical responsibility without direct supervision,” may need to be limited or more slowly implemented for some learners, or for a remedial period. Such limits may need to be put in place when a resident lacks insight or when direct observation is necessary to document progress.<sup>15</sup> Ideally, the resident will elect to be an active

participant in this rather than having it categorically imposed, to avoid any sense of social embarrassment within the team.

Set up follow-up meetings to ensure the situation is monitored and to provide assurance to the resident that you are fully engaged in resolving the matter. By holding pre-arranged meetings with the resident rather than calling him or her in to see you with little notice, you can help to prevent the resident from feeling that he or she is continually in trouble. For complex problems, several follow-up meetings will be necessary. On occasion, a problem will be sufficiently challenging to require ongoing feedback and monitoring for the duration of the resident's time in the program. In such cases, your task will be more manageable if you initiate a routine with regular meetings for feedback and adjustment of the plan. The cycle of gathering data, setting a course and then reevaluating it should continue until realignment is complete. At this point, the plan should be scaled back gradually rather than terminated immediately, to ensure that the desired changes in the resident's behaviour or attitudes or both persist in the long term.

## Document everything

Whenever you discuss a resident's performance, either with the resident or with third parties, it is absolutely necessary that you make notes in the resident's file, at least briefly. You should provide the resident with a copy of the notes you make on your discussion(s) with him or her. It is a good idea to have the resident sign the note to acknowledge the discussion. Have the resident sign a statement indicating "this was discussed with me" rather than "I agree with this." It is important that even seemingly minor problems be documented, as they may prove to be formidable once exposed (thankfully, it is sometimes also true that seemingly major problems prove to be easily rectified). Poor or late documentation can be a source of great difficulty. In addition to making the resident aware of what is being documented in his or her training file, you should explain the impact on his or her in-training evaluation reports (ITERs). In the ITERs, document the progress and challenges you observe during the improvement process. These data need only

be included in formal reference letters if the issue has not been resolved at the time of letter writing or if you feel that the issue is likely to resurface; if it has been resolved, the data need only be part of residency training reports.

## Involve the residency program committee if necessary

There is always some concern about the appropriate time to involve the residency program committee (RPC). For isolated, minor problems, a documented discussion with the resident's supervisor and meeting with the resident will generally suffice. Should the problem recur or be serious enough to call into question the resident's success on a rotation or experience, the RPC should be made aware that the issue exists and that you are addressing it. This notification can be made in general terms, such as "we have a resident who has problem x, we have put in place plan y and I will update the RPC should further action be necessary." Certainly if you anticipate that a formal remediation plan, curriculum adjustment or repetition of an experience may be necessary, the RPC will need to know details and actively participate in the development and oversight of the response (see Chapter 15 for further information<sup>16</sup>).

## Consider seeking external support if necessary

In very rare cases, you and the resident will not be able to agree on a course of action. If he or she exhibits denial, disrespect or lack of professionalism during the aforementioned process, or when no improvement is observed, you will have to consider the possibility that the learner is a difficult resident. Occasionally, you will be able to uncover the true nature of the problem by asking the resident direct questions about the lack of progress. Unaddressed substance abuse, domestic violence or mental illness, for example, may render improvement impossible without specific management. You will need to get external support to help to resolve such complex issues. It is important that you familiarize yourself with the available resources before you discuss the lack of progress with the resident (see Chapter 15 for additional information<sup>16</sup>).

Difficult residents may attempt to reinforce their position by intimidating or harassing faculty or other residents. You can reduce wasted time by clearly communicating to the resident that unprofessional behaviours will not be tolerated and by setting well-delineated boundaries. If there continues to be a lack of evidence of any improvement, you may need to discuss and document the possibility of dismissal of this individual from the training program, but this should only be done after you have documented the efforts that have been made to follow a formal remediation plan; the RPC must be fully involved at this stage, and decanal oversight is also necessary (see Chapter 15 for further information<sup>16</sup>). If you need to have a discussion with the resident about possible dismissal, try to ensure that the meeting is also attended by someone who will support the resident, such as a union representative or a friend, and by someone who can help you, such as the associate program director or another faculty member.

When the requirements of a program or course of study are incongruent with the beliefs or personal characteristics of a resident, change may not be possible. This may be true for those who require, but refuse, specialized help. In this situation, change may be undesirable to the resident and dismissal equally unacceptable.<sup>17</sup> A resident with a well-documented failure to demonstrate appropriate work ethic, clinical competence or professionalism despite remediation and due process should be dismissed.

## Literature scan

Our scan of the medical education literature revealed a paucity of high-quality data in this area. This may reflect the reticence of medical educators to address and examine the issues associated with problem trainees. There is very little direct observation of learners during their medical training, and this may be the root of this reticence. A broader search provided some interesting articles from the business, psychology and general education literature. We also drew on our personal experience and advice from experienced colleagues in writing this chapter.

## Medical education and other education literature

In the medical education literature, a landmark article by Steinert on working with the problem resident stresses the importance of pursuing suspicions of resident distress or difficulty through data collection and conversations with the resident.<sup>9</sup> In another article, Steinert and Levitt recommend that the next step should include defining the type of problem (skills, attitudes or behaviours) and determining the level of the issue (learner, teacher or system).<sup>10</sup>

Residents' receptiveness to feedback continues to be identified by educators as an issue. In reviewing the challenges associated with the provision of, and residents' receptiveness to, feedback, we found one article to guide our approach. Receptiveness to feedback is enhanced when the individual has been directly observed and the noted behaviours are very specific.<sup>13</sup> Unfortunately, observation of learners is critically infrequent in medical training despite its importance, in part because educators lack a validated approach, funding and time.<sup>18</sup> Higgins and colleagues have stressed the importance of learner centredness and recommended including the learner's perspective when giving feedback, by using an inside-out rather than an outside-in approach.<sup>19</sup> LeBlanc and Sherbino advocate replacing traditional bedside teaching with coaching, a resident-centred process that involves observation, feedback and plan modulation with ongoing data collection until the desired modification in the resident's performance is stable.<sup>20</sup> Coaching provides a nurturing environment that fosters the resident's will to do what is necessary to improve his or her performance. Coaching requires that medical educators have sufficient time to observe residents and to provide them with feedback.

Other pertinent articles deal with remediation and the follow-up process.<sup>15</sup> Without this, the intervention and discussion become a program director's duty or a checklist, rather than a process for improvement.

## Psychology literature

Two interesting articles from the psychology literature provide insight into the psychological factors that affect the remediation process. Nussbaum and Dweck published the key report on feedback receptiveness.<sup>13</sup> In their psychological study, they found that people who seek feedback believe that intelligence is incremental rather than fixed, whereas people who are resistant to feedback believe that intelligence is innate and immutable. The latter group perceives feedback as criticism of this fixed entity. Interestingly, the authors also found that the incremental believers compare themselves to those more skilled than themselves and those who adhere to the fixed perspective compare themselves to those who perform at a lower level.<sup>13</sup> Kruger and Dunning showed that most individuals inaccurately estimate their performance to be above average, demonstrating the importance of feedback.<sup>7</sup>

## Business literature

A meta-analysis of research on feedback interventions by Kluger and DeNisi found that feedback resulted in improvement in some individuals, whereas in others it had a detrimental effect on subsequent performance. Overall, feedback on task-oriented issues was more likely to promote change than feedback in other spheres.<sup>21</sup>

Bates reviewed evaluative studies of competency-based training and found that such training produced no improvement in motivation, performance or outcomes. Of note is the fact that there was significant increase in administrative workload.<sup>22</sup>

## Best practices

The most important part of dealing with resident difficulties is just that: dealing with the problem. Observing residents is key to detecting problems and a must in any medical field. When a problem is observed, the next step is to gather data from multiple sources; direct observation should be part of this process. After the data have been gathered, a private meeting should be scheduled with the resident at a mutually convenient time during working hours and in an academic space, to

gain his or her perspective and to discuss performance. In preparation for the meeting, consideration should be given to all of the data and the implications of this problem. Consideration should also be given to the ideal resolution of this issue and the steps to be taken if it is not resolved adequately. The approach set forth by Steinert (Table 14.1) is useful to articulate the problem and may highlight considerations otherwise not addressed.

At this time, the program director must decide on a plan of action. Typically, the discussion will be well received and a plan to rectify the deficiency can be agreed upon rapidly. The meeting should be documented with a note to file, copied to the resident. Rarely, a resident will become defensive or feel persecuted in the meeting or may even blame the program director. In these situations a committee will be required to provide additional viewpoints and defuse the situation. If the first meeting does not go well, an additional meeting should be held, which would ideally include the resident, a supporter for the resident, the program director and either an education director, department or division head or a member of the RPC. At this meeting the group may decide to bring the issue to the entire RPC or to outline and implement a plan to rectify the problem and then reconvene to monitor progress in an agreed upon timeframe. This meeting should also be documented with a note to file and copied to all present.

One pitfall in this process is that the resident becomes labeled as being in difficulty. All residents are likely to encounter difficulty at some point in their training. In fact, if residents in a program are never seen to be in difficulty, this would suggest either that their preceptors have not provided the necessary level of supervision or that they have elected to overlook certain shortfalls in residents' performance.

When an impasse is reached and the resident is not interested in improving or behaves unprofessionally, external support (i.e., beyond the RPC) should be sought to develop a formal plan for remediation. Any intervention must be documented from the outset of any intervention, as often it is only possible to distinguish the *difficult resident* from the *resident in difficulty* after several unsuccessful attempts at remediation have been made.

**Table 14.1: Steinert's framework for analyzing learners' problems<sup>9</sup>**

	Example(s)	Comment
<b>Type of problem</b>		
<b>Knowledge</b>	- Gaps in knowledge of basic or clinical sciences	- Be sure to identify not only challenges but also strengths
<b>Attitudes</b>	- Difficulties with motivation, insight, self-assessment, doctor–patient relationships	- Attitudinal problems, which usually manifest themselves in behaviours, are often easy to identify but challenging to resolve
<b>Skill</b>	- Difficulties with interpreting information, interpersonal skills, technical skills, clinical judgment or organization of work	- Skill deficits often overlap with gaps in knowledge. Strengths must also be identified
<b>Source of problem</b>		
<b>Teacher</b>	- Teachers' perceptions, expectations or feelings - Personal experiences or stresses - Colleagues' perceptions, expectations or stresses	
<b>Learner</b>	- Relevant life history or personal problems, including acute life stresses, learning disabilities, psychiatric illness or substance misuse - Learner expectations and assumptions - Learner reactions to identified problems	
<b>System</b>	- Unclear standards or responsibilities - Overwhelming workload - Inconsistent teaching or supervision - Lack of ongoing feedback or performance appraisal	

## Tips and pitfalls

- » Suspect the resident to be in difficulty and intervene early. Do not avoid or ignore the problem: it will probably not go away on its own.
- » Explore and define the issues: observe the resident and use the CanMEDS competencies as a framework to delineate the problem. Do not act until you have collected sufficient data.
- » Meet with the resident to discuss the problem.
- » Do not tolerate defensiveness or denial on the part of the resident.
- » Do not tolerate intimidation or harassment by the resident.
- » Plan for intervention and follow-up longitudinally. It is important that you plan for follow-up from the outset.
- » Document all meetings and observations from the beginning of the process; copy the resident on this documentation.

- » Have the resident sign the document(s) to indicate “this was discussed with me” rather than “I agree.”
- » If the intervention is unsuccessful, be willing to consider that you may be dealing with a difficult resident rather than a resident in difficulty. Reexamine the issue and consider obtaining external support and initiating remediation.
- » Do not back down when things get tough.

## Key resources

- » Visit the program directors’ page on the website of the Royal College of Physicians and Surgeons of Canada to network with colleagues from across Canada and share approaches and resources.
- » The Canadian Healthcare Education Commons on the Association of Faculties of Medicine of Canada website also has a shared space for similar information. (<http://chec-cesc.afmc.ca/>)
- » Weeks H. How to disarm combative conversations [Harvard Business Review blog post]. 2009 May 22. Available: <http://blogs.hbr.org/hmu/2009/05/how-to-disarm-combative-conver.html>
- » The MedEdPORTAL of the American Association of Medical Colleges (<https://www.mededportal.org/>) offers an extensive menu of publications and tools. Resources on this website provide strategies for dealing with anything from gossip to diversity.

## Case resolution

As problems with Dr. X’s performance and attitude have been in evidence throughout his two months in the emergency department, you decide to explore the concerns in more depth and address them with Dr. X. You begin by reviewing Dr. X’s file. He is in his mid twenties and is married, with a four-month-old son. He is well like by the other team members. His ITERs indicate that the problems have arisen in the last three months.

You decide to observe one of his clinical encounters. You note that Dr. X lacks focus, is unable to manage flow effectively during history taking and is adversely affected by interruptions. He closes the interview prematurely to save time and views this as an efficiency. He closes his differential diagnosis before he has collected adequate information.

At the end of the shift, you ask him if he has time for a brief chat. He seems alarmed, asking if he is in trouble. You simply state that he doesn’t seem to be himself and that you would like to discuss things with him. When you tell him that you are concerned and would like to see what can be done to get things back on track, he agrees to discuss the issue with you. You set up a mutually convenient time to meet in the next few days to determine how best to approach this challenge.

Although you do not expect a confrontation, you prepare carefully for the meeting. When you meet, Dr. X provides some additional information that supports your suspicions. As a new dad he is low on sleep, and he feels stressed. He believes that everyone is stressed and that he should “suck it up”; he is, after all, not the first doctor in history whose wife has had a baby. In his clinical work, he has been directed to see a greater volume of patients now that he is a senior resident and to trim his testing.

As your discussion continues, Dr. X begins to see that you genuinely want to help him to succeed.

As he starts to relax, you are able to candidly tell him what other faculty members have been seeing, and he comes to recognize that he is not performing the way he did earlier in his residency. Dr. X decides to take a week off, get some help at home and seek more direct observation until the problem is resolved. You set up a series of three meetings at one-month intervals to discuss his progress and invite him to contact you at any time. You document this meeting in Dr. X's file, along with all plans for follow-up with him. You make Dr. X aware of both the note in his file and the plan.

## Take-home messages

- » Ensure that all residents are routinely observed.
- » Pursue all suspicions of difficulty in a resident.
- » Collect objective data from all sources when a problem is suspected.
- » Use the CanMEDs competencies to frame the problem and the remediation process.
- » Document all discussions of a resident's performance and all steps taken to address residents' difficulties.
- » Remember that residents in difficulty need to be coached and supported if their problems are to be resolved.
- » Be prepared to dismiss a resident when required; this will benefit everyone.
- » As doctors and as people, residents in difficulty will be well served by your investment in them. For educators the rewards of this investment are evident; for the profession the return on it is undeniable.

## References

- <sup>1</sup> Brenner AM, Mathai S, Jain S, Mohl PC. Can we predict "problem residents"? *Acad Med.* 2010;85(7):1147–1151.
- <sup>2</sup> Prager JD, Myer CM, Hayes KM, Myer CM, III, Pensak ML. Improving methods of resident selection. *Laryngoscope.* 2010;120(12):2391–2398.
- <sup>3</sup> Brandt ML. Using failure as motivation for medical residents [blog post]. 2011 Jan 14. Available from: [www.kevinmd.com/blog/2011/01/medical-residents-deal-failure.html](http://www.kevinmd.com/blog/2011/01/medical-residents-deal-failure.html)
- <sup>4</sup> Evans DE, Brown J. Supporting students in difficulty. In: Cantillon P, Wood D, editors. *ABC of learning and teaching in medicine.* Chichester (UK): Wiley-Blackwell; 2010. p. 78–82.
- <sup>5</sup> Evans DE, Alstead EM, Brown J. Applying your clinical skills to students and trainees in academic difficulty. *Clin Teach.* 2010;7(4):230–235.
- <sup>6</sup> Yao DC, Wright SM. National survey of internal medicine residency program directors regarding problem residents. *JAMA.* 2000;284(9):1099–1104.
- <sup>7</sup> Kruger J, Dunning D. Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *J Pers Soc Psychol.* 1999;77(6):1121–1134.
- <sup>8</sup> Graber ML, Franklin N, Gordon R. Diagnostic error in internal medicine. *Arch Intern Med.* 2005;165(13):1493–1499.
- <sup>9</sup> Steinert Y. The "problem" junior: whose problem is it? *BMJ.* 2008;336(7636):150–153.
- <sup>10</sup> Steinert Y, Levitt C. Working with the "problem" resident: guidelines for definition and intervention. *Fam Med.* 1993;25(10):627–632.
- <sup>11</sup> Accreditation Council for Graduate Medical Education. Resident evaluation, formative evaluation. Chicago (IL): Accreditation Council for Graduate Medical Education.
- <sup>12</sup> Frank JR, editor. Royal College of Physicians and Surgeons of Canada. *The CanMEDS 2005 physician competency framework: better standards, better physicians, better care.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2005. Available from: [www.royalcollege.ca/canmeds](http://www.royalcollege.ca/canmeds)
- <sup>13</sup> Nussbaum AD, Dweck CS. Defensiveness versus remediation: self-theories and modes of self-esteem maintenance. *Pers Soc Psychol Bull.* 2008;34(5):599–612.

- <sup>14</sup> Teunissen PWM, Stapel DAM, van der Vleuten CMP, Scherpbier AM, Boor KM, Scheele FM. Who wants feedback? An investigation of the variables influencing residents' feedback-seeking behavior in relation to night shifts. *Acad Med.* 2009;84(7):910–917.
- <sup>15</sup> Jones MD Jr, Rosenberg AA, Gilhooly JT, Carraccio CL. Perspective: Competencies, outcomes, and controversy — linking professional activities to competencies to improve resident education and practice. *Acad Med.* 2011;86(2):161–165.
- <sup>16</sup> Glover Takahashi S. Resident remediation. Chap. 15. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program.* Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>17</sup> Wrosch C, Scheier MF, Miller GE, Schulz R, Carver CS. Adaptive self-regulation of unattainable goals: goal disengagement, goal reengagement, and subjective well-being. *Pers Soc Psychol Bull.* 2003;29(12):1494–1508.
- <sup>18</sup> Fromme HB, Karani R, Downing SM. Direct observation in medical education: a review of the literature and evidence for validity. *Mt Sinai J Med.* 2009;76(4):365–371.
- <sup>19</sup> Higgins R, Hartley P, Skelton A. Getting the message across: the problem of communicating assessment feedback. *Teach High Educ.* 2001;6(2):269–274.
- <sup>20</sup> LeBlanc C, Sherbino J. Coaching in emergency medicine. *CJEM.* 2010;12(6):520–524.
- <sup>21</sup> Kluger AN, DeNisi A. Effects of feedback intervention on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychol Bull.* 1996;119(2):254–284.
- <sup>22</sup> Bates I. The competence and outcomes movement. In: Flude M, Sieminski S, editors. *Education, training and the future of work II.* London (UK): Routledge; 1999. p. 98–123.



# Resident remediation

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## Objectives

**After reading this chapter you should be able to:**

- » appreciate the need for due process and transparency when managing residents in need of remediation
- » recognize key signs that a resident may need remediation
- » employ a team-based and resident-centred approach to remediation
- » construct remediation plans within a CanMEDs framework that (a) delineate the learner's needs, (b) describe targeted learning, teaching and assessment to address those needs and (c) regularly monitor progress and outcomes
- » provide clear direction to the resident and the team, providing remedial support, interim and outcome targets, and possible consequences of success or failure in the remedial period

## Case scenario 1

You are the program director (PD) of an Internal Medicine residency program. Dr. M., a resident in her first postgraduate year (PGY1), had a good start and her six-month review indicated that she passed her first few rotations. It was noted, however, that she needed to read around cases more and that she struggled with procedures (e.g., sutures) on her Emergency Medicine rotation. Her first rotation in Internal Medicine went well, but it was noted that she missed a few days for a family wedding and another couple of days because of illness. She missed the annual written examination and was scheduled to attend the makeup examination last week. You receive an email from her site coordinator indicating that Dr. M. is not passing her current Critical Care rotation because of significant knowledge and skills gaps in areas including advanced cardiac life support, pharmacology, physical examinations and the interpretation of diagnostic reports. Additionally, Dr. M. has been late several times and on occasion has not responded when paged by nurses. There have been some near misses as Dr. M. did not call for help when she was unsure how to proceed, and she twice initiated treatment even when instructed not to do so.

## Case scenario 2

You are the new PD of a Surgery residency program. Dr. T., a PGY5 surgical resident, failed both a PGY2 rotation and a PGY5 rotation. A couple of days ago you

were notified via email that Dr. T. has failed another senior rotation. You immediately reviewed his file. Notes from the previous PD indicate that Dr. T. is a very hard worker but has weak surgical skills. That PD also noted that Dr. T. cannot manage a team effectively and often has trouble integrating skills and anticipating trouble in complex cases. In addition, there are a few notes that describe Dr. T.'s tendency to get irritable and rude with nurses and junior residents when things don't go well clinically. Today you received a telephone call from one of his supervisors, who indicated that while she (the supervisor) passed Dr. T. on his oral examination, she feels Dr. T. is not ready for independent practice.

## Background and context

Remediation is a formal period of focused education designed to improve the performance of a learner in difficulty. There are a variety of approaches in postgraduate medicine to support residents in difficulty, which can be categorized as either formal or informal remediation. Formal remediation, sometimes known as a **big R Remediation**, involves a structured and customized educational plan approved by an authority outside the residency program, such as a faculty committee. Informal remediation, or **little r remediation**, involves less structured interventions or plans developed and approved within the program to help the resident progress and move past areas of difficulty.

This chapter is intended to help educators to deal with residents in difficulty regardless of the structural systems or processes at their institution. The term **resident in difficulty** describes a resident who is unable to perform at their current level of training (also see chapter 14 in this manual!). Residents are generally defined as having difficulty when they do not meet the training expectations of the program, most often manifested by an inability to meet the goals and objectives of rotations. Residents may encounter difficulty in a number of areas. A recent 10-year review at one institution noted that residents most often had difficulty with performance related to the CanMEDS Roles of Medical Expert (85%), Communicator (48%) and Professional (51%).<sup>2</sup> The General Standards of Accreditation of the Royal College of Physicians and Surgeons of Canada, which

set out the standards for Canadian residency programs, stipulate that “residents must be informed when serious concerns exist and must be given the opportunity to correct their performance.”<sup>3</sup>

## Literature scan

Remediation takes a large toll on the resident, the program and the postgraduate medical education system as a whole. Some authors suggest that a resident's future performance can be predicted early on in his or her medical training and that programs can filter out learners who will develop problems in the future if they do a better job of screening candidates.<sup>4-7</sup> Programs can probably optimize their selection efforts by ensuring that the methods they use are sensitive to identifying candidates who have the capacity to function as effective physicians. A better understanding by educators of effective approaches to prevent resident difficulties or identify them early would benefit both residents and the postgraduate medical education system.

Recent papers suggest that performance expectations for residents are becoming increasingly complex, and thus careful consideration needs to be given to articulating the performance expectations in remediation.<sup>2</sup> Effective remediation plans should include explicitly articulated educational purposes; therefore, PDs and experts involved in remediation must keep abreast of the latest assessment, educational and evaluation techniques and how they can be properly applied to remediation. The management of resident stress and wellness is now also increasingly being considered in remediation plans and thus PDs should make sure that their team includes people who are knowledgeable about the issues related to resident wellness and stress management so that they can ensure the best outcomes for their residents.

There is good news about the outcomes of formal remediation. A recently completed longitudinal study of 100 residents in difficulty revealed that the majority (66 per cent) completed their original residency programs; 15 residents were still completing their residency programs at the time the study was completed, and three residents transferred to another residency program.<sup>2</sup> Of the 17 residents who did not complete their programs, 13 withdrew and four were dismissed.<sup>2</sup>

It has been noted that more targeted central support for PDs and residents would assist PDs to meet the needs of residents requiring remediation. PDs require formal training on how to identify residents in need of remediation, how to determine whether an informal or formal remediation plan is required and how to access resources to help them move the remediation process forward. Ongoing and longitudinal evaluation of processes and experiences is needed to guide best practices.

## Key steps

I have identified several key steps in effective remediation or remedial planning from the literature, from my involvement in planning and carrying out resident remediation, from my knowledge of due process and existing policy, and from broad consultation within the medical education community. Before you start planning for remediation and undertake these steps, you should have one or more meetings with the resident to hear his or her story and gather information about extenuating circumstances to help you make decisions about the plan. The steps are listed in Textbox 15.1 and discussed in the sections that follow.

### Textbox 15.1: Key steps in remediation and remedial planning

1. Identify residents in need
2. Set time frames and identify any urgent matters
3. Ensure that policies on due process are followed
4. Gather documents
5. Draft the remediation plan (with the help of advisors if available)
6. Review the remediation plan
7. Revise the remediation plan with input of team members
8. Attend meeting of oversight committee to answer questions (this step may not be required in all universities)

### Textbox 15.1 (Continued)

9. Implement the approved plan, which should include holding regular, structured meetings with the resident
10. Document and communicate progress and outcomes to the residency program committee and/or oversight committee

## First, do no harm

A well-intentioned PD or faculty member who initiates action in an incorrect manner or sequence can engender distrust, suspicion and upset. It is important to know the “rules of the road” for your institution: you must know what needs to be done by whom, when and how. You should check whether your institution has specific guidelines and processes concerning remediation. If it does, make sure that you read them carefully, as it is important that you understand local policy and involve third parties as necessary at the various stages of the remedial process (e.g., a board of examiners, a faculty postgraduate medical education committee). These third-party committees are familiar with the expectations of postgraduate medical education training and will typically have a mandate from the affiliated academic institution or faculty of medicine that is documented in approved guidelines and terms of reference. The postgraduate dean’s office is often a good place to learn about current procedures, local best practices and any available assistance or resources. The maxim “first, do no harm” applies as much to addressing the needs of residents in difficulty as to other aspects of medical practice, and you will be better equipped to follow the maxim if you prepare yourself thoroughly to handle potential remediation cases.

It is often helpful to identify an experienced faculty member or educator who can serve as a remediation advisor (e.g., postgraduate dean, past PD or medical educational consultant with experience in remediation). The advisor can help you to confidentially explore the case, issues and possible solutions before the case is formalized for presentation at standing committees or oversight bodies. This exploration may generate alternate views of the situation or may reveal extenuating

circumstances (e.g., personal wellness, family illness) that may have contributed to the resident's difficulties. In a formal remediation case, any new factors that are identified should generally be documented and shared with appropriate individuals (locally defined resources for resident support).

Regardless of whether a resident is headed toward formal remediation (in which case the decision-makers are most likely the members of an outside committee) or informal, internal remediation (in which case the decision-makers are probably the members of the residency program committee [RPC]) it is key that all information and processes be transparent. This means that all parties who will be overseeing or participating in the remedial process, including the resident, need to be aware of, and have access to, all information that is being used to make decisions about the remediation. No information obtained off the record should form part of the rationale for remediation. Every relevant piece of correspondence, including emails, should be available to inform both informal and formal remediation plans and shared with the resident and any others involved in making decisions or plans. Remember to hold a structured (and documented) meeting with the resident well in advance of finalizing the plan to review all the information that is being considered in the remediation process.

Your institution's formal guidelines will have been designed to ensure that the remediation process is transparent, and it is important that you follow them. The RPC can offer insights into the development and oversight of remediation plans. Additionally, this consultation can protect both the resident and the PD from the situation being, or becoming, "personal." Information should be shared at RPC meetings in a sensitive, confidential, but transparent manner and the discussion should be documented.

Best practices in remediation afford residents the opportunity to speak with the RPC before any decisions are made. The General Standards of Accreditation stipulate that all RPCs must include at least one elected resident representative,<sup>8</sup> but this individual (or these individuals) may be excused from the proceedings at the request of the involved resident. If invited to speak, the resident is generally given a specific amount of time to provide his or her description of the situation (e.g., 15–20 minutes)

and may also be invited to provide a written submission. Following this presentation the resident is generally asked to leave the room so that the RPC can consider all the available information and make a decision (i.e., to proceed with formal or informal remediation).

The PD and the advisor guiding the formal or informal remediation plan should ensure that the resident in difficulty thoroughly understands how the institution's evaluation and remediation policies are to be applied. They should also ensure that the resident understands his or her rights and privileges with respect to fair treatment and due process.

## Using a problem-based approach to "diagnose" difficulties

A small number of residents do not develop the requisite competencies within the established program structure and/or time frames. Competency difficulties that a resident may experience can be classified as cognitive or non-cognitive. Difficulties with cognitive competencies include poor knowledge, poor integration of knowledge and inability to prioritize tasks. Difficulties with non-cognitive competencies include poor work habits, poor interpersonal skills and lack of motivation.

Although the factors that impede the development of the requisite competencies can be diverse, the approaches used by well-functioning training programs to identify (and fill) competency gaps are highly similar. They rely on expert judgment of professional competence, good written documentation and diligence to avoid discrimination in identifying competency gaps.

One framework that PDs or RPCs can use to diagnose problems and fill competency gaps is the four Cs of competence: capability, competencies, context of practice and continuum of development (Table 15.1).

Although the most frequent problems are in clinical knowledge (Medical Expert Role),<sup>2</sup> residents in difficulty often have more than one problem. A recent preliminary look at residents in difficulty who are undergoing remediation indicated that a very high number of these residents also have problems related to wellness. Remediation plans are increasingly addressing resident stress and wellness.<sup>9</sup>

**Table 15.1: Diagnosing & filling gaps in competence**

Component of competency	Description
<b>Capability</b>	An individual's capabilities are the physical, mental and emotional resources of an individual that enable him or her to fulfill his or her professional role. Although an individual's capabilities are inherent, the individual's performance may not always reflect them: in other words, the person may not perform to the limit of his or her capabilities. Conditions can be established to enable an individual to take full advantage of his or her capabilities. For instance, residents can be assisted to reduce their stress, so that they can function at the peak of their intellectual capacity.
<b>Competencies</b>	Competencies are the knowledge, skills and attitudes that an individual must acquire and integrate to perform a job (a role or responsibility). In medical education, competencies are often assessed in a particular context. Each competency can be measured against well-accepted standards and can be improved via training and development.
<b>Context of practice</b>	The context of practice is the "who" (types of clients, groups, populations), "what" (areas of practice, types of service), "where" (practice settings) and "how" (professional roles, funding models) of an individual's practice environment.
<b>Continuum of development</b>	As an individual moves along the expertise continuum he or she should become increasingly proficient at managing straightforward situations and handling complexity. In medical education, performance expectations differ for trainees at different points on the continuum of development, and assessments of residents in difficulty should similarly take into consideration the individual's position on the continuum. For instance, an inability to correctly diagnose a complex case may signal the existence of a difficulty for a senior resident, but not for a junior resident.

In a retrospective study, Zbieranowski and colleagues reported on the development of a remediation system to support programs and their residents in need.<sup>2</sup> Although residents may run into difficulty at any time, in this study most tended to follow one of two patterns: they were either early in their training and appeared not to be ready for residency (Textbox 15.2), or they were late in their training and appeared not to be ready for graduation into consultancy (Textbox 15.3). Residents in each category are typified by specific deficits in skills at different levels of their program.

**Textbox 15.2: Sample features of residents early in training who appear not to be ready for residency**

- » Resident has difficulty during service rotations and/or core rotations.
- » Resident's evaluation reports contain few comments and his or her performance is rated as average or below average in "off service" rotations.
- » Resident demonstrates poor or underdeveloped foundational knowledge and clinical judgment.
- » Resident has poor or underdeveloped communication skills.
- » Resident is unable to accept or respond to feedback.
- » Resident demonstrates limited insight into problems and seems unaware of how to fix them.
- » Resident may appear to be mismatched to his or her specialty (e.g., a surgical resident with poor technical skills or a psychiatric resident who lacks empathy).

### **Textbox 15.3: Sample features of residents late in training who appear not to be ready for graduation into consultancy**

- » Resident made steady, although not stellar, progress through early and middle training but started to experience difficulties later in training.
- » Resident has not been able to make the transition to autonomous consultancy.
- » Resident may have had a training gap (e.g., for research or personal reasons) and may have had trouble getting back on track.
- » Resident has trouble dealing with complex situations and/or emergent issues.
- » Resident is unable to perform efficiently and with adequate speed.
- » Resident's knowledge base is not fully developed and/or he or she may have difficulty applying clinical judgment.
- » Resident demonstrates poor organization and problems with time management.
- » Resident is unable to accept or respond to feedback.
- » Resident demonstrates limited insight into problems and lacks awareness of how to fix them.

## **Gathering the evidence**

In Chapter 14 of this manual, Connie LeBlanc and Lorri Beatty discuss the importance of gathering sufficient evidence before making a decision about how to address the needs of a resident in difficulty.<sup>1</sup> All concerns, meetings and discussions with the resident and/or colleagues about the resident's behaviour must be documented in writing. It is beneficial to note the dates and times of all meetings and the names of all parties involved. A brief summary email can be sent to all involved parties following each meeting. To ensure that this information is as up to date and as reliable as

possible, keep a written log of incidents in which the context and timing of each incident is described and the witnesses to the incident are listed. If it becomes necessary to bring the resident before the RPC or an external committee, this written documentation can support the case for remediation.

### **Setting up the remediation team**

If formal remediation is required, the membership of the remediation team should include the resident, the PD, faculty and remediation coaches, and representatives of the RPC, the postgraduate dean and the postgraduate medical education unit, the office of resident wellness and the external assessment committee (if relevant). Each member of the team has distinct responsibilities (Table 15.2); however, all members should interact and communicate regularly to ensure the remediation process runs smoothly and efficiently.

To foster a team approach, an educational inquiry tool can help teams to develop a shared understanding of the real problems and a comprehensive, consistent and competency-based approach. Appendix 15.1 provides a sample template of a remediation-planning tool. It is based on a tool developed at the University of Toronto by a residency program director in consultation with the postgraduate dean, educational consultants from the postgraduate medical education office, and resident, faculty and remediation coaches, which has been in use since 2006.<sup>2</sup>

## **Developing the remediation plan**

If possible, the remediation plan should be competency based. Good remediation plans also share several features, which are discussed below.

### **Comprehensiveness**

The more comprehensive the plan, the more likely it will be followed from beginning to end. A well-developed and documented plan that stipulates regular reporting on progress and outcomes will help to ensure that all parties understand what is expected of them and how each stage of the plan will unfold.

**Table 15.2: Team approach to remediation**

Team member	Responsibilities
<b>Postgraduate dean (and postgraduate medical education unit)</b>	<ul style="list-style-type: none"> <li>- Monitors due process for resident</li> <li>- Gives resident an opportunity to be “heard” by parties outside of his or her residency program</li> <li>- Supports PD and facilitates access to available central resources for residents in difficulty</li> <li>- Monitors demographics of residents in difficulty to allow for strategic use of resources and training in areas of highest need and/or biggest impact for PDs and for residents in difficulty</li> </ul>
<b>PD (or designate of the PD, such as a remediation coordinator)</b>	<ul style="list-style-type: none"> <li>- Leads (or oversees) the remediation plan, which should align planned learning, teaching, coaching, mentorship and evaluation with the needs of the resident</li> <li>- Consults with RPC (or evaluation subcommittee) about the remediation plan</li> <li>- Responsible for being familiar with and complying with university policies on evaluation, residents in difficulty, appeals, etc.</li> <li>- Responsible for ensuring that the resident is evaluated against established benchmarks</li> <li>- Monitors outcomes, processes and trends</li> <li>- Ensures that the resident is fully apprised of the remediation plan, the process that will be followed, and the expected outcomes</li> <li>- Reports regularly to the board of examiners on progress and interim outcomes</li> <li>- Provides a final report to the board of examiners</li> <li>- Accesses centrally available educational and assessment supports as required</li> <li>- Identifies needs for faculty development</li> </ul>
<b>Residency program committee</b>	<ul style="list-style-type: none"> <li>- Assists PD as required</li> <li>- May assume some of the responsibilities listed for the PD</li> </ul>
<b>Resident in difficulty</b>	<ul style="list-style-type: none"> <li>- Participates actively in the development and review of the remediation plan</li> <li>- Communicates with the team about his or her stresses or wellness issues (on a confidential basis if necessary)</li> <li>- Ensures that he or she understands the expectations for remediation including criteria for success</li> <li>- Takes advantage of wellness resources (if applicable)</li> <li>- Communicates regularly with PD (about progress, issues arising during remediation)</li> </ul>
<b>Faculty and remediation coaches</b>	<ul style="list-style-type: none"> <li>- Provide planned learning, teaching, coaching, mentorship and assessment as outlined in the remediation plan</li> <li>- Document and communicate resident’s progress and outcomes in a timely, transparent and detailed way (including both formative and summative feedback to resident)</li> </ul>

**Consistency**

The plan should be written in such a way that all parties understand what they need to do to stick to the plan. All remedial learning, teaching, assessment, reporting and communication should be consistent with the outlined plan. Consistency will facilitate a shared understanding of progress and agreement on planned next steps.

**Transparency**

The plan should stipulate that all documents be shared among all remediation team members, including the resident. The documentation should include applicable university policies and procedures, in-training evaluations and other assessments of the resident, sample assessment tools and/or scoring rubrics. It should be noted that the policies on and definitions of transparency vary from university to university.

## Explicitness

A detailed inventory must be kept of the resident's needs, which details learning gaps and aligns to teaching plans and planned assessments of the resident's progress toward achieving the desired outcomes of the remediation. All of the remedial teaching, coaching and mentoring that take place should also be documented in this inventory.

## Detailed assessment plans with measurable learning goals and teaching objectives

The learning goals and teaching objectives should be measurable, and they should be associated with detailed assessment plans. All three of these elements should be outlined on a month-to-month, week-to-week and role-by-role basis. Appendix 15.1 provides a template that can be used for this task.

## Monitoring and evaluating progress

Progress must be tracked on a monthly basis. A formal written report should be collated and prepared by the PD midway through the remediation period. This is an important best practice to ensure that all of the promised systems and processes have been implemented. Appendix 15.2 provides a template for such a report.

Textbox 15.4 lists some resources and tools that PDs may find helpful as they develop remediation plans. Textbox 15.5 outlines some learning and teaching strategies that may be beneficial in remediation.

### Textbox 15.4: Sample resources and tools for remediation

- » Site program tutor
- » Site mentor
- » Reading tutor or knowledge coach
- » Professionalism coach
- » Communication coach
- » Cultural coach
- » Resident wellness counselor/advisor

### Textbox 15.4 (Continued)

- » English as a second language (ESL) training resources (e.g., language needs assessment; comprehension, speaking and writing courses)
- » Assessment and evaluation services for residents with possible learning disabilities

### Textbox 15.5: Learning and teaching strategies for remediation

- » Assessments that are formative and summative (with results promptly shared with the resident)
- » Assignments (e.g., writing a focused theme paper, preparing answers to assigned questions)
- » Guided reflection
- » Frequent, structured, documented formal feedback
- » Increased observation
- » Microskills model of clinical teaching
- » One-on-one tutoring
- » Online modules
- » Readings (e.g., textbooks, "top twenty" journal articles, web sites) with or without follow-up by staff
- » Repetition of skills/key lessons, with feedback
- » Role modeling
- » Role-playing
- » Skills laboratories
- » Templates/frameworks
- » Timed interviews
- » Videotaping with feedback



## Case resolution 1

Given that Dr. M. is a PGY1 resident, you recognize that you need to explore whether her difficulties may have arisen from a problem transitioning into residency or from unmet orientation needs. You also recognize that the problems that have been identified in her clinical performance may be due to knowledge gaps or to troubles applying what she has learned. In addition, you need to consider whether her absences from work and from examinations reflect wellness issues and/or the need for additional training concerning professionalism. If Dr. M. has (or had) wellness issues, they are (or were) probably also having an impact on her clinical performance. Your first step is to **collect sufficient data to identify the issues at the root of her difficulties**. You examine her in-training annual progress examinations and rotation evaluations, as well as her attendance record for mandatory academic half-day sessions and journal club meetings and the notes for two documented one-to-one meetings with Dr. M at which she was given feedback about the concerns about her performance. You learn that Dr. M. has experienced stress related to her mother's two-year history of cancer treatments in a distant city. There are also issues related to her Professional competencies (her self-management, her professional accountability regarding her own limits, her attendance, her promptness in answering pages, her decision-making about asking for assistance when needed) and Medical Expert competencies (her medical knowledge, clinical reasoning and procedural skills in areas such as advanced cardiac life support, pharmacology, physical examinations and the interpretation of diagnostic reports). Next, **you elect to develop a structured formal six-month remediation plan** (see Appendix 15.1) with focused, enriched learning and regular progress and outcome assessments. You **confirm her readiness for remediation** by referring her for a wellness assessment and get a readiness for work report following her appointment with her family doctor.

During the six-month formal remediation period, Dr. M. meets twice each month with a coach to

develop the required **Professional** competencies relating to attendance, timeliness and collegiality (sample assignments are provided in Appendix 15.3). She will be deemed to have successfully completed this component of her remediation when/if her coach indicates on an encounter form (see the scoring tool in Appendix 15.4) that she was actively engaged in their meetings and when she has successfully completed a reflective paper describing the impact of her behaviour on patients, colleagues and faculty supervisors. Dr. M. is also expected to meet three or four times each month during the remedial period with another coach to improve her **Medical Expert** competencies through a list of readings, teachings and regular monitoring and assessments (see appendices 15.5 and 15.6). During the first month she will undergo baseline testing with a written test and an objective structured clinical examination. She will be deemed to have successfully completed the Medical Expert component of her remediation when/if her performance during the final three months of the remedial period is assessed as being at or above the PGY1 level. Outcome testing will be conducted with a written test and an objective structured clinical examination in the fifth month. During the remediation period, Dr. M. will be provided the following **structural supports**: her clinical schedule will be modified to accommodate an additional half day each week for studying and to enable her to attend wellness appointments and meetings with her coaches, and her call assignments will be modified for the first two months such that she will serve as an extra resident on call with support and coaching from a more senior resident (to ensure patient safety and educational progress). Her faculty supervisors will be specially selected during the remedial period, and details about Dr. M's needs for support and areas for development will be disclosed to them with Dr. M.'s knowledge. Finally, another faculty member who does not have responsibilities for evaluating her will be selected to mentor her. The mentor will connect regularly with Dr. M. via phone calls and emails to provide support and coaching.

## Case resolution 2

When concerns are raised about the performance of a senior resident, it is important to ascertain whether the problem is new (acute) or whether a long-standing problem is only now being reported. It is also possible that the resident's difficulties did not raise any red flags earlier in his or her training, but it has now become apparent that he or she has not progressed to the performance level required for independent practice.

You discuss Dr. T's performance with the supervisor who called you about this issue, and you also review it with the previous PD. At these meetings, you discuss whether Dr. T's weaknesses are global or whether they are focused on handling a particular type of case or using a particular skill set. You also discuss whether the identified difficulties arise primarily from weaknesses in Dr. T's communication or collaboration skills or from weaknesses in his medical expertise. As you assess Dr. T's performance overall, you determine that he is functioning at the PGY4 level even though he is a PGY5 resident.

In consultation with Dr. T., you set up an informal, program-based remediation plan for six months that will supply the necessary teaching, supervision and assessment to enable him to reach the PGY5 performance level. You **confirm his readiness for the remedial period** by determining whether there are any personal or professional hurdles or impending deadlines that need to be accommodated before or during the remedial period. You confirm that Dr. T. will limit his vacation or other planned leaves (e.g., up to two weeks) during the remedial period because of their probable impact on his progress and outcomes. Given that Dr. T. is a senior trainee, as early as possible you make an appointment to discuss with him the likelihood that his date for completion of training may need to be revised and to alert him of the impact of such a revision on his applications for fellowships.

The remedial plan notes that during the first three months of the remedial period, Dr. T. will meet twice per month with a coach to develop his **Professional**

competencies in relation to his history of rudeness and disruptive behavior. The plan notes very specific expectations concerning satisfactory behavior, it clearly outlines the consequences if he exhibits disruptive behavior. The plan also notes that he is expected to exhibit professional behaviour with all team members and to effectively manage his frustration and that he is expected to actively engage in the meetings with his coach (see appendices 15.3 and 15.4) and to demonstrate insight into the impact of his behaviour on patients, colleagues and faculty.

To develop his surgical skills as part of the **Medical Expert Role**, the remedial plan notes that you will identify a senior faculty member who will work almost exclusively with Dr. T. for the first four months of the remedial period to inventory areas in which he demonstrates satisfactory ability and areas in which he needs further surgical skill development. You will provide him with focused time in a simulation environment to improve his surgical skills.

In the first month of the remedial period, baseline testing will be conducted via a written test, an oral examination and an assessment of his surgical skills. During the remedial period, Dr. T. will be expected to follow a regular weekly study schedule focusing on the areas needing improvement, and his progress will be monitored with biweekly oral examinations. His performance will be additionally assessed during the third and fourth months via written tests, oral examinations and assessments of his surgical skills. To be successful in the first part of the remedial period, he will be required to demonstrate that he is functioning at or above the PGY4 level and that he has satisfactorily acquired all of the PGY1–PGY4 surgical skills before he will be allowed to move on to manage the operating room (OR) and the OR team (see below). To be successful at the end of the six-month remedial period, he will be expected to demonstrate that he is functioning at an early PGY5 level, as measured by the scores on the

weekly encounter forms completed by his coach (see Appendix 15.6) and the results of a final written test, oral examination and assessment of his surgical skills at the end of the sixth month.

Remedial activities to develop Dr. T's **Manager** and **Collaborator** competencies will be introduced only if/after he demonstrates that he is performing at or above the PGY4 level in all other areas. At such time, for the first two months, Dr. T. will be given increasing responsibilities to manage the OR and the OR team, with the oversight of his faculty supervisor. He will initially be assigned straightforward OR cases to manage; later the OR cases will gradually become more complex and require him to demonstrate PGY5-level competencies. During this period, the Manager and Collaborator competencies will be included in his regular weekly study schedule and in his biweekly oral examinations. Appendix 15.7 provides a scoring tool for these competencies.

During the remedial period, Dr. T will be given the following structural supports: his clinical schedule will be modified to accommodate an additional half day per week for studying and weekly meetings with his coaches, and his call assignments will be modified to match those of the faculty members who will work with him. He will have fewer supervisors for longer periods and he will purposefully be assigned cases that will enable his supervisors to ascertain his abilities and limits and to monitor his progress. His faculty supervisors will be specially selected during the remedial period, and they will be provided with details about Dr. T's needs for support and areas for development as appropriate, with Dr. T's knowledge. Finally, another faculty member who does not have responsibilities for evaluating Dr. T. will be selected to mentor him. The mentor will connect with Dr. T. regularly for support and coaching (e.g., via meetings, calls and emails).

## Tips

When residents are experiencing difficulty, their supervisors and other faculty members may express a variety of opinions on the nature of their difficulty and on the course of action that should be taken. This section offers tips in relation to some of these opinions.

### *“The resident just needs more time”*

- » The resident may indeed need more time, but the passage of time with more of the same training is generally not sufficient.<sup>10</sup> If the difficulty first became apparent awhile ago, it probably would have corrected itself by now if the resident simply needed more time.
- » Best practices in remediation include providing residents with focused teaching and assessment rather than solely adding weeks or months to a resident's training period.

### *“The resident doesn't get it” or “The resident is resistant to feedback”*

- » Receiving and understanding feedback is difficult for medical trainees. Residents are high performers who have probably done well academically and personally throughout all, or almost all, of their lives. Most residents are not experienced at doing poorly and thus are unaccustomed to receiving negative feedback. It should therefore not be surprising that they may be resistant to such information or the person providing it.
- » Sometimes residents are unwilling to accept negative feedback because they feel that the criticism is being delivered because of a personal difference between themselves and the evaluator and does not reflect a true shortcoming in their performance.

- » Residents may come from a culture in which admitting weaknesses or failures is not acceptable. Given their cultural background, they may feel that any weakness they disclose now might be used as evidence against them in the future.
- » Best practices in remediation allow for some mentorship or coaching to assist residents who have difficulty receiving feedback to learn to ask for it and to teach them how to accept, understand and build on feedback to improve their performance.

*“We need to transfer this resident to another (perhaps easier) residency program” or  
“We need to dismiss this resident”*

- » When you become a PD, it is critical that you immediately become fully familiar with your university's procedures for residents in academic difficulty to ensure that you do not place yourself, your resident, your faculty, your program or your university in jeopardy. If you fail to learn about and comply with the structured processes in place at your institution, you are asking for, at best, hardship and unsuccessful resolution of remediation cases.
- » Best practices in remediation are those in which the plan demonstrates the educators' commitment to supporting the resident in his or her current program. Do not hint or directly suggest that the resident should transfer or drop out of the program.
- » At some point in the remediation process, certain residents may elect to consider moving to another program, but in general such decisions are best explored with a mentor or other person skilled in career counselling rather than the PD.

*“Residents should just know what the professional expectations of residency are”*

- » All along their educational path before residency, students can achieve success by making choices solely on the basis of their own priorities. It is not reasonable to expect them to suddenly switch gears when they enter residency and recognize that the expectations of their “job” as a resident (e.g., regarding timeliness, attendance) are different, unless they receive proper guidance.
- » Best practices include ensuring that explicit guidelines on expectations as well as monitoring systems (e.g., attendance expectations, procedures for notice of unplanned absences, tracking systems for vacation and absences) are put into place and explained to incoming residents.

*“We should arrange for a faculty member to mentor and evaluate the resident”*

- » One person should not be responsible for both evaluating and mentoring a resident. The role of evaluators is to provide accurate assessments of and feedback to residents. The role of mentors is to guide and support residents. Additionally, mentors can serve as a “safe place” for residents to gain insight and interpret their needs and performance.
- » Best practices in remediation include assigning a faculty member who has no assessment responsibilities to mentor and work with a resident in difficulty.
- » Given the nature of the trusting and coaching relationship, it is good practice to allow the resident to provide some input into the selection of his or her mentor. For instance, the resident can be given the opportunity to select his or her mentor from a short list of two to four faculty members identified by the PD or RPC.

*“We shouldn't forward feed' information to the faculty. We need to protect the resident”*

- » The term **forward feeding** is pejorative and should be avoided. It implies that private and confidential information or secrets are being shared.
- » Use of the term **appropriate disclosure** of learner needs is a best practice.
- » To ensure effective learning, teaching, assessment and appropriate supervision for patient safety, you and/or the RPC must reach agreement with the resident on the type of information that will be shared with faculty to facilitate their participation in the remediation process.

*“We should give the resident some self study time to catch up”*

- » In most cases, it is not reasonable to expect residents in difficulty to be able to accurately assess their weaknesses and design and undertake a self-directed study program to address these. If they were capable of addressing their weaknesses on their own, they would probably have done so already and there would be no need for remediation.
- » Best practices in remediation include setting up a structured reading program with regularly scheduled tutorial sessions. Residents are typically required to do some advance preparation for each session; in the sessions, faculty teach them the required content or skills or coach them on cases. The program should include use of an assessment tool to provide residents with timely and focused feedback.

*“We should use our program’s usual assessment tools to measure success in the remedial period”*

- » In-training evaluation reports (ITERS) are the day-to-day assessment tools of residency education. Although ITERS are necessary, they are rarely sufficient to determine the successful completion of remediation.

- » Best practices in remediation include baseline testing at the beginning of the remedial period, with tools such as written tests, oral examinations and objective structured clinical examinations. This testing should be repeated at least monthly as well as near the end of the scheduled monitoring period. The resident’s attendance, engagement and performance can also be measured with specific assessment tools, including forms, assignments, oral examinations and reflective papers.

*“My resident has failed his first four months as a PGY4. We should keep using the PGY4 ‘bar’ to judge his performance until he gets it right”*

- » It is important that residents in remediation be evaluated according to the level of their current performance, which may be lower than their pay level or years of training level. For instance, it may be appropriate to assess a PGY4 resident at their actual performance level (e.g., the PGY2 level) for the first couple of months of the remedial period. Adjusting or lowering the expectations in this way will allow residents in difficulty to experience some success and develop a sense of safety. The hope is that as they develop confidence they will begin to perform more competently.
- » Sometimes resident are doing well in one area (e.g., in family clinics) but are underperforming in another (e.g., on the trauma team). It is often necessary to spend time in the first couple of months of remediation determining the resident’s current performance level and pinpointing the skills that are most in need of attention. This is done through baseline testing, careful subsequent assessments and close supervision. The balance of the remedial period can be spent ensuring that the learning, teaching and assessments are at the right level and focus on the right areas.

- » Best practices in remediation focus on developing the confidence and competence of the individual and are not time based.

*“The remediation period was successful in some areas, but some new problems have emerged”*

- » As the most acute symptoms clear, other problems may become more evident. For instance, as a resident improves in one area (e.g., Medical Expert skills), his or her needs or gaps in another area (e.g., Communicator skills) may become evident. In addition, it isn't unusual for the intense monitoring of remediation to reveal gaps that were not picked up in routine assessments. An additional remedial period may be required to address the newly identified weaknesses.
- » Remediation often needs to be extended because a resident's problems are complex or longstanding and need considerable attention. Rushing remediation or overcrowding remedial periods rarely works, as learners in difficulty require time to develop and consolidate skills.

## References

- <sup>1</sup> LeBlanc C, Beatty L. A resident in difficulty, or a difficult resident? Chap. 14. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>2</sup> Zbieranowski I, Takahashi SG, Verma S, Spadafora SM. A retrospective 10-year review of the experience of a postgraduate board of examiners. *Acad Med*. 2013;88(1):111–116.
- <sup>3</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. Standard B6. In *General standards applicable to all residency programs. B standards*. rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. p. 11. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>4</sup> Ratan RB, Pica AG, Berkowitz RL. A model for instituting a comprehensive program of remediation for at-risk residents. *Obstet Gynecol*. 2008;112:1155–1159.
- <sup>5</sup> Torbeck L, Canal DF. Remediation practices for surgery residents. *Am J Surg*. 2009;197:397–402.
- <sup>6</sup> Smith CS, Stevens NG, Servis M. A general framework for approaching residents in difficulty. *Fam Med*. 2007;39:331–336.
- <sup>7</sup> Cohen D, Rhydderch M, Cooper I. Managing remediation. *Understanding medical education: evidence, theory, and practice*. In T Swanwick, editor. *Understanding medical education: evidence, theory, and practice*. West Sussex (UK): Association for the Study of Medical Education; 2010.
- <sup>8</sup> Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Collège des Médecins du Québec. Standard B1. In *General standards applicable to all residency programs. B standards*. rev ed. Ottawa: Royal College of Physicians and Surgeons of Canada; 2012. p. 2. Available from: [www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation\\_blue\\_book\\_b\\_standards\\_e.pdf](http://www.royalcollege.ca/portal/page/portal/rc/common/documents/accreditation/accreditation_blue_book_b_standards_e.pdf)
- <sup>9</sup> Glover Takahashi S, Gold W, Martin D, Probyn L, Abner A, Zbieranowski I, et al. Best practices in remediation of residents in difficulty. Abstr. No. 114. In *Abstracts of the International Conference on Residency Education, 2011 Sept 22–24*. *Open Med*. 2011;5(3 Suppl):53.
- <sup>10</sup> Hodges BD. A tea-steeping or i-doc model for medical education? *Acad Med*. 2010;85(9 Suppl):S34–S44.

## Other resources

Adams KE, Emmons S, Romm J. How resident unprofessional behavior is identified and managed: a program director survey. *Am J Obstet Gynecol*. 2008;198(6):692.e1–4.

Bergen PC, Littlefield JH, O’Keefe GE, Rege RV, Anthony TA, Kim LT, et al. Identification of high-risk residents. *J Surg Res*. 2000;92(2):239–244.

Black D, Welch J. The under-performing trainee — concerns and challenges for medical educators. *Clin Teach*. 2009;6(2):79–82.

Blouin D, Dagnone JD. Performance criteria for emergency medicine residents: a job analysis. *CJEM*. 2008;10(6):539–544.

Boiselle PM. A remedy for resident evaluation and remediation. *Acad Radiol*. 2005;12(7):894–900.

Cohen D, Rhydderch M, Cooper I. Managing remediation. Chap 25. In *Understanding medical education: evidence, theory and practice*. Chichester (UK): John Wiley and Sons; 2010.

Dudek NL, Marks MB, Regehr G. Failure to fail: the perspectives of clinical supervisors. *Acad Med*. 2005;80(10):S84–S87.

Goulet F, Jacques A, Gagnon R. An innovative approach to remedial continuing medical education. *Acad Med*. 2005;80(6):533–540.

Hauer KE, Ciccone A, Henzel TR, Katsufakis P, Miller SH, Norcross WA, et al. Remediation of the deficiencies of physicians across the continuum from medical school to practice: a thematic review of the literature. *Acad Med*. 2009;84(12):1822–1832.

Hicks PJ, Cox SM, Espey EL, Goepfert AR, Bienstock JL, Erickson SS, et al. To the point: medical education reviews — dealing with student difficulties in the clinical setting. *Am J Obstet Gynecol*. 2005;193(6):1915–1922.

Katz ED, Dahms R, Sadosty AT, Stahmer SA, Goyal D. Guiding principles for resident remediation: recommendations of the CORD remediation task force. *Acad Emerg Med* 2010;17(Suppl 2):S95–S103.

Lacasse M. *Educational diagnosis and management of challenging learning situations in medical education*. Québec (QC): Université Laval; 2009.

Lake FR, Ryan G. Teaching on the run tips 11: the junior doctor in difficulty. *Med J Aust*. 2005;183(9):475–476.

Leung F, Ratnapalan S. 2011. A framework to teach self-reflection for the remedial resident. *Med Teach*. 2011;33(3):e154–e157.

Mayberry JF. The management of poor performance. *Postgrad Med J*. 2007;83(976):105–108.

Mitchell M, Srinivasan M, West DC, Franks P, Keenan C, Henderson M, et al. Factors affecting resident performance: development of a theoretical model and a focused literature review. *Acad Med*. 2005;80(4):376–389.

Paice E. 2009. Identification and management of the underperforming surgical trainee. *ANZ J Surg*. 2009;79(3):180–184.

Ratan RB, Pica AG, Berkowitz RL. A model for instituting a comprehensive program of remediation for at-risk residents. *Obstet Gynecol*. 2008;112(5):1155–1159.

Reamy BV, Harman JH. Residents in trouble: an in-depth assessment of the 25-year experience of a single family medicine residency. *Fam Med*. 2006;38(4):252–257.

Resnick AS, Mullen JL, Kaiser LR, Morris JB. Patterns and predictions of resident misbehavior — a 10-year retrospective look. *Curr Surg*. 2006;63(6):418–425.

Roback HB, Crowder MK. Psychiatric resident dismissal: a national survey of training programs. *Am J Psychiatry*. 1989;146:96–98.

Smith CS, Stevens NG, Servis M. A general framework for approaching residents in difficulty. *Fam Med* 2007;39(5):331–336.

Steinert Y. The “problem” junior: whose problem is it? *BMJ* 2008;336(7636):150–153.

Stewart JB. *Blind eye: how the medical establishment let a doctor get away with murder*. New York: Simon and Schuster, Stewart; 1999.

Torbeck L, Canal DF. Remediation practices for surgery residents. *Am J Surg* 2009;197(3):397–402.

Wilkinson TJ, Harris P. The transition out of medical school— a qualitative study of descriptions of borderline trainee interns. *Med Educ* 2002;36(5):466–471.

Williams R, Roberts N, Schwind C, Dunnington G. The nature of general surgery resident performance problems. *Surgery* 2009;145(6):651–658.

Winston K, van der Vleuten C, Scherpbier A. At-risk medical students: implications of students’ voice for the theory and practice of remediation. *Med Educ* 2010;44(10):1038–1047.

Yao DC, Wright SM. National survey of internal medicine residency program directors regarding problem residents. *JAMA* 2000;284(9):1099–1104.

Yao DC, Wright SM. The challenge of problem residents. *J Gen Intern Med* 2001;16(7):486–492.

## Appendix 15.1:

# Plan for remediation or probation

Date:

For: « *resident's last name, first name* »  
« *training program name* »  
« *training year* »

## A. Purpose of plan

- Informal, program-based remediation for « *period of time, e.g., 3–6 months* »
- Formal remediation for « *period of time, e.g., 3–6 months* »
- Remediation and probation for « *period of time, e.g., 3–6 months* »
- Probation for « *period of time, e.g., 3–6 months* »
- Other:

## B. Background

### Trainee information

Dr. « *first name, last name* » is currently a « *resident OR fellow OR other* » in the XX year of the « *program name* ».

The « *program name* » is a « *duration* » training program.

On the basis of « *his OR her* » current level of performance, we request that Dr. « *resident's name* » be evaluated at the « *PGYX* » level during this period.

### Past remedial plan(s)

Outline previous actions for this trainee:

- Not applicable
- Dr. « *resident's name* » previously underwent remediation as follows:
  - in « *time period* » with respect to « *area of weakness* ».
  - in « *time period* » with respect to « *area of weakness* ».

## Training profile

**Year one** (« *dates, e.g., July 20xx to June 20xx* »)  
« *outcomes of training and evaluations* »

**Year two** (« *dates, e.g., July 20xx to June 20xx* »)  
« *outcomes of training and evaluations* »

**Year three** (« *dates, e.g., July 20xx to June 20xx* »)  
« *outcomes of training and evaluations* »

In the « *program name* » program, a “pass” is  
« *benchmark for passing grade, e.g., 3/5* »

## C. Plan

### Rationale

« *Identify the aspects of the trainee's performance or behaviour that require remedial attention (provide a brief summary in narrative form that outlines the rationale for the request)* ».

### 1. Purpose of remediation or probation

- To provide a period of focused education to enable the resident to meet the goals and objectives of the « *program name* » for « *residency training level* »
- To provide a period of focused education concerning « *details* »
- To undertake a focused assessment of « *e.g., learning disability, wellness issues, medical or psychiatric concern, communication skills, technical skills* »
- Other: « *details* »

The plan will focus on helping the resident to meet the training goals and objectives related to the following CanMEDS Role(s):

- Medical Expert
- Collaborator
- Scholar
- Professional
- Communicator
- Advocate
- Manager



## 2. Details of plan

- « Specify the duration of the remedial or probationary period »
- « List the assigned rotation (s), training location(s), and length of time/dates to be spent at each rotation/location during the remedial or probationary period »

Notes:

- « Comment on who will supervise the trainee's remediation or probation. »
- « Comment on who will mentor the trainee during the remedial or probationary period (note that mentors should not also be responsible for evaluating the trainee). »
- « Comment on other evaluations of the trainee's remedial progress. »

Period of plan	CanMEDS Role	Goals and objectives	Learning or teaching strategy	Evaluation
« e.g., months 1 and 2 » « Note: the plan should focus on no more than two or three CanMEDS Roles at a time »	« e.g., Medical Expert »	« e.g., to improve in...; to satisfactorily complete...; to demonstrate... »	« Describe the proposed remedial education and the resources available to the trainee »	« State the following: <ul style="list-style-type: none"> <li>• evaluation method or tool</li> <li>• criteria being evaluated</li> <li>• PGY level at which the trainee is to be evaluated</li> <li>• frequency of evaluation</li> <li>• benchmarks for achievement (e.g., a pass is considered to be a score of 70% or greater in XX ) »</li> </ul>
« e.g., months 3 and 4 »				

« Outline a typical week during the remedial or probationary period, noting such elements as academic half-days, clinical sessions, coaching sessions and protected reading time »

	Monday	Tuesday	Wednesday	Thursday	Friday
a.m.					
p.m.					

### 3. Outcome of plan

Upon **successful** completion of the plan:

Dr. « *resident's name* » will begin residency training for PGY « *training level* »

**OR**

Dr. « *resident's name* » will have completed the PGY «*training level* » residency training

**OR**

« *other planned outcome* »

Upon **unsuccessful** completion of the plan

« *planned outcome* »

### 4. Development of the plan

The resident reviewed this plan on « *date* ».

The resident was offered the opportunity to meet with the residency program committee to discuss the plan and « *accepted OR declined* ».

This plan was reviewed and approved by the residency program committee on « *date* ».

### 5. Extenuating circumstances affecting plan

- \_\_\_ There are no extenuating circumstances concerning the resident (i.e., wellness, family situation) that will materially affect the implementation of the plan.
- \_\_\_ There are extenuating circumstances concerning the resident (i.e., wellness, family situation) but they will be managed so they will not materially affect the implementation of the plan.
- \_\_\_ There are extenuating circumstances concerning the resident (i.e., wellness, family situation) but the plan will not begin until they have been managed sufficiently that they will not materially affect the implementation of the plan.

### 6. Signed and dated

\_\_\_\_\_  
Program Director,

\_\_\_\_\_  
Date

« *program name* »

#### Notes:

« *Append all of the resident's failed in-training evaluation reports, examinations, final ITER, and other relevant evaluations* »

« *Append other relevant documents.* »

## Appendix 15.2:

### Remediation report

Date:

For: « resident's last name, first name »

« training program name »

« training year »

#### Type of report

Update report

Completion report

#### Notes:

« All aspects of the remedial or probationary plan (i.e., from Appendix 15.1) should be updated as necessary and then incorporated into this report to indicate what really happened in the planned period, including outcomes of all assessments. »

« Insert details from the approved remedial or probationary plan into the first five columns of the table. In the final two columns, comment on the resident's progress in each area (CanMEDS Role) and indicate the outcomes of completed evaluations (e.g., pass or fail). »

Period of plan	CanMEDS Role	Goals and objectives	Learning or teaching strategy	Evaluation of achievement	Progress	Outcome

#### Notes:

« Indicate the name of the resident's supervisor for the remedial or probationary plan (as noted in the approved plan). »

« Indicate the name of the resident's mentor(s) during the remedial or probationary period (as noted in the approved plan). »

« Indicate any additional evaluations of the resident's progress (as noted in the approved plan). »

### Outcome of remediation or probation

Dr. « *resident's name* » has/has not successfully completed the following objectives of the remedial or probationary plan:

- 
- 

### Discussion of the report

This report was forwarded to Dr. « *resident's name* » for review on « *date* ».

The resident met with the program director, « *PD's name* » to review his or her progress under remediation or probation on « *date* ».

### Extenuating circumstances affecting plan

- \_\_\_ There are no extenuating circumstances concerning the resident (i.e., wellness, family situation) that have materially affected the implementation of the plan.
- \_\_\_ There are extenuating circumstances concerning the resident (i.e., wellness, family situation) but they are being managed (or have been managed) so they do not (or did not) materially affect the implementation of the plan.
- \_\_\_ There are extenuating circumstances for resident (i.e., wellness, family situation) but the plan will not begin until they have been managed sufficiently that they will not materially affect the implementation of the plan.

### Signed and dated

\_\_\_\_\_  
Program Director,

\_\_\_\_\_  
Date

« *program name* »

## Appendix 15.3:

# Professional Role assignments

## Remediation of the Professional Role: a stepwise approach to match the plan to the person and the issue

### Erika Abner, LLB, LLM, PhD

Dr. Abner is an educational consultant with the postgraduate medical education office at the University of Toronto.

The overall objective of the reflective assignment(s) related to the Professional Role is for the trainee to develop insights into their behavior and strategies to modify it. The written work does not stand on its own; rather, writing is a springboard for reflective discussion of professional behaviours.

There are three key steps:

- A. Sort out the issue(s) and problem(s).
- B. Develop assignment(s) that match(es) the person's needs and the issue(s) and problem(s).
- C. Confirm processes for assignment(s).

### A. Sort out the issue(s) and problem(s).

#### 1. Consider the unprofessional behaviour at issue:

- » disruptive behaviour (rudeness, lying, intransigence)
- » criminal behaviour or professional misconduct
- » avoidant behaviour (missing clinics and/or rounds, not seeking help)

- » unthinking behaviour (boundary or privacy breaches on the Internet or otherwise)

#### 2. Consider the person: what are the special contextual issues or extenuating circumstances that appear to affect the unprofessional behaviour?

- » Has the resident grappled with, or does he or she continue to grapple with, wellness issues (e.g., depression or other illness)?
- » Is this a weak student, struggling with the Medical Expert Role?
- » Has this resident or a family member experienced unfortunate, acute circumstances (a personal illness or life event)?
- » Is this resident unaware of professional norms?
- » Is this resident apparently unwilling to conform to professional norms?

#### 3. Consider the person: what form of reflective exercise would most engage this person, leading to an understanding of appropriate professional behaviours?

- » analytical/research
- » role reversal
- » teaching

### B. Develop assignment(s) that match(es) the person's needs and the issue(s) and problem(s).

#### Sample assignment 1

**Type of assignment:** Analytical research

**Goal of assignment:** For the resident to develop a heightened understanding of professionalism by:

- » researching disruptive practice issues<sup>1</sup>
- » researching the Criminal Code and the regulations of the professional governing body (with a special focus on consequences)

<sup>1</sup>The search can include complaints and discipline cases from local or other regulatory organizations (e.g., the College of Physicians and Surgeons of Ontario, [www.cpso.on.ca](http://www.cpso.on.ca); the Canadian Medical Protective Association, [www.cmpa-acpm.ca](http://www.cmpa-acpm.ca); samples from the press).

- » providing a written summary or writing a paper describing the issues and their implications (the resident should be provided with instructions for the summary or paper and an appropriate scoring rubric and should be given an opportunity to engage in reflective discussions with a supervisor or mentor before proceeding to the writing phase)

### Sample assignment 2

**Type of assignment:** analytical/research

**Goal of assignment:** For the resident to develop an understanding of specific, appropriate behaviours in his or her discipline and at his or her level of training by:

- » researching acceptable behaviours, including focused research of the relevant literature (e.g., leadership behaviours for the resident's specialty) and/or interviews with other professionals
- » providing a written summary or writing a paper describing the issues and their implications (the resident should be provided with instructions for the summary or paper and an appropriate scoring rubric and should be given an opportunity to engage in reflective discussions with a supervisor or mentor before and during the writing phase)

### Sample assignment 3

**Type of assignment:** role reversal

**Goal of assignment:** For the resident to experience and reflect on his or her behaviour from a different perspective by:

- » crafting a sample policy guideline or document addressing the unprofessional behaviour at issue  
**OR**
- » role playing with his or her coach or mentor a scenario in which a program director or supervisor has to deal with unprofessional behavior, and then discussing and writing reflections on the experience.

### Sample assignment 4

**Type of assignment:** teaching

**Goal of assignment:** For the resident to take on the role of someone with expert knowledge about the professionalism issue (helpful when privacy and confidentiality issues related to the use of social media are of concern), as follows:

- » After completing Assignment 1 or 2, the resident prepares a sample teaching session for a specific group (e.g., case rounds, academic half day, rounds).
- » The materials to be created include slides for a presentation, case studies for group discussion and facilitator notes.
- » The materials are presented either to a small group (e.g., to the resident's coach or mentor) or at a regular educational event.<sup>2</sup>

## C. Confirm processes for assignment(s).

Assuming that the institutional and program processes are already managed, the processes for the Professional Role remediation are as follows:

- » An initial meeting should be held between the trainee and the individual who will serve as his or her Professional Role coach to:
  - review the remediation issues/problems,
  - review the planned assignment(s),
  - clarify expectations concerning timing of meetings, due dates and appropriate communication (in particular, the importance of the professionalism remediation within the entire remediation plan should be clarified) and
  - review assessment criteria and form(s).

<sup>2</sup> If the teaching is at a regular educational event there is no need to disclose the precipitating events or issues that led to the development of the teaching materials.

- » Two or three interim meetings should be held between the trainee and the Professional Role coach to review the trainee's written work, discuss any paper- or practice-based issues and set goals to revise the written work (see Appendix 15.4).
- » A final meeting should be held to review the trainee's written work; an interim assessment (see Appendix 15.4) should be conducted to ensure appropriate completion of the work.
- » The coach and an independent reviewer should review and mark the trainee's work.
- » If the written work is not rated as satisfactory by both raters, a third rater should be recruited to evaluate the work.

The trainee should be provided with clear expectations concerning the assignment(s) he or she must complete:

- » The trainee will be expected to attend all necessary meetings.
- » The trainee will be expected to respond promptly to communication(s).
- » The trainee will be expected to complete work on time (including drafts and final versions of written work) and in accordance with the assignment instructions.
- » The trainee will be expected to be engaged in the writing process by creating multiple draft versions and participating in reflective discussions.

The trainee will be deemed to have satisfactorily completed his or her assignments if pre-established scores are achieved on the Professional Role encounter scoring sheet (Appendix 15.4).

The following are features of a **satisfactory** written paper:

- » It identifies the incidents leading to remediation and discusses contextual issues relating to the incidents.
- » It thoroughly analyzes the required readings (demonstrating that the trainee understands the findings of any research publications in the readings) and/or undertakes required actions.

- » It describes the impact of the trainee's actions on himself or herself and on his or her major relationships in the sphere of the Professional Role:
  - relationships with patients,
  - relationships with colleagues and
  - relationships with society and the medical profession.
- » It identifies the trainee's learning issues in knowledge, skills or attitude, including any barriers or challenges to making ideal professional decisions and demonstrating ideal professional behaviours.
- » It demonstrates that the trainee has developed insights into the necessary behavioural changes, outlines the trainee's strategy to achieve these changes and describes the trainee's progress toward making the changes.
- » It demonstrates that the trainee respects any confidentiality/privacy considerations relating to others.
- » It demonstrates that the trainee takes responsibility for his or her own actions.
- » It demonstrates the trainee's overall learning from the process.
- » It is accurate, legible, well organized and grammatical, and it follows appropriate attribution and citation style.

The following are features of an **unsatisfactory** written paper:

- » It minimizes the importance of the incidents that led to remediation.
- » It contains minimal analysis.
- » It does not follow assignment instructions or engages the topic(s) at only a surface level.
- » It does not include analysis of the effect of the trainee's actions on his or her major professional relationships, or it provides only a superficial analysis.

- » It does not identify the trainee's learning issues, and it shows that the trainee has developed minimal insight into, or has refused to address, the necessary behavioural changes.
- » It shows that the trainee does not take responsibility for his or her own actions and instead blames others.
- » It demonstrates that the trainee breaches the confidentiality or privacy of others.
- » It demonstrates minimal learning from the process on the part of the trainee.
- » It is inaccurate, illegible, poorly organized and/or not grammatical, and it does not follow appropriate attribution and citation style.

## Key resources

Hauer KE, Ciccone A, Henzel TR, Katsufraakis P, Miller SH, Norcross WA, et al. Remediation of the deficiencies of physicians across the continuum from medical school to practice: a thematic review of the literature. *Acad Med* 2009;84(12):1822–1832.

Hodges BD, Ginsburg S, Cruess R, Cruess S, Delpont R, Hafferty F, et al. Assessment of professionalism: recommendations from the Ottawa 2010 Conference. *Medical Teach* 2011;33(5):354–363.

Steinert Y. The “problem” junior: Whose problem is it? *BMJ* 2008;336(7636):150–153.



## Appendix 15.4:

### Scoring tool for the Professional Role

Remediation of the Professional Role: a stepwise approach to match the plan to the person and the issue

Susan Glover Takahashi, MA(Ed), PhD, Dawn Martin, MSW, MA(Ed), PhD, Marla Nayer, PhD, and Erika Abner, LLB, LLM, PhD

Dr. Glover Takahashi is director of education and research, Dr. Martin and Dr. Nayer are educational and curriculum consultants and Dr. Abner is an educational consultant with the postgraduate medical education office at the University of Toronto.

Trainee name:

Program:

Trainee's training level:

Completed by:

Date:

Activity:

- Assignment Topic(s):
- Presentation Topic(s):
- Interim report
- Final report
- Other: « *specify* »

A. Self-awareness				
1	2	3	4	5
Fails to consider own emotions or actions. Does not appear to recognize impact of his or her behaviour on others.	Appears to be aware of own emotions. Does not appear to recognize cues or reactions of others.	Appears to recognize that his or her emotions and behaviour have an impact on others. Appears to recognize reactions of others to his or her emotions and behaviour. Appears to understand need to ask for help when needed.	Appears to understand the probable implications and impact of his or her emotions and behaviour, both for himself or herself and others, in a range of situations. Appears to have insight into his or her own strengths and limitations.	Appears to proactively self-manage emotional triggers by creating time out for reflection and seeking others' opinions. Appears to recognize others' anxieties and perspectives and is able to engage in helpful conversations.

Not applicable

Comments:

B. Reflection on practice				
1	2	3	4	5
Describes current situation. Reports with no added observations or insights into current, past or future practice.	Responds to questions. Makes obvious observations or judgments. Does not provide reasons for or alternatives to current, past or future practice.	Relates current situation to past and future practice. Is able to articulate personal meaning or to connect with the experience. Identifies need or plan to change.	Reasons and connects current, past and future practice. Thoughtfully explores a concept, event or experience, asks questions and considers alternatives.	Reconstructs current and past practice and constructs future practice through own in-depth synthesis. Is able to apply learning and to internalize the personal significance of learning.

\_\_\_ Not applicable

**Comments:**

C. Self-regulatory skills				
1	2	3	4	5
Appears to act in a manner that demonstrates disregard for or lack of understanding of regulatory issues. Did not or does not meet expected standards for professional responsibilities.	Appears inconsistent in actions, demonstrating lack of awareness of or value for regulatory issues and/or for professional responsibilities. Appears to be compliant if asked.	Actions appear to demonstrate that trainee has a basic awareness of, and value, for regulatory issues and/or for professional responsibilities.	Appears to understand the probable implications and impact of regulatory issues and/or professional responsibilities.	Appears to proactively manage the implications of regulatory issues and/or professional responsibilities.

\_\_\_ Not applicable

**Comments:**

D. Content knowledge				
1	2	3	4	5
Fragmented, inaccurate, misleading.	Not fulsome or fully current. Poorly organized.	Current. Somewhat organized.	Current and organized.	Up to date. Well organized. Complete. Demonstrates content expertise.

\_\_\_ Not applicable

**Comments:**

E. Depth of understanding				
1	2	3	4	5
Superficial.	Insufficient detail.	Sufficient detail.	Complete, full description.	Well researched, demonstrating sophisticated understanding of issues.

\_\_\_ Not applicable

**Comments:**

F. Verbal communication				
1	2	3	4	5
Trainee is not able to communicate content. Communication is confusing.	Reader/listener is able to follow or interpret key messages.	Trainee explains content by using appropriate language and providing examples.	Trainee demonstrates the ability to present material effectively and adapt it appropriately.	Communication is well organized and clear. Trainee links ideas across areas, showing sophisticated mastery of subject.

\_\_\_ Not applicable

**Comments:**

G. Non-verbal communication				
1	2	3	4	5
Distracting or disruptive non-verbal behaviour (e.g. relating to eye contact, facial expressions, gestures, vocalization, tone, speech errors or use of pauses or silence). Use of personal space inappropriate for activity. Inappropriate grooming or dress.	Some eye contact. Some difficulty engaging. May cause listener to feel mildly frustrated and/or antagonized.	Maintains appropriate eye contact. Exhibits enough control of non-verbal expression to engage listener. Demonstrates engagement through body language.	Good control of non-verbal expression leading to engagement of listener.	Is aware of and purposefully uses non-verbal behaviours and gestures to establish and maintain a relationship.

\_\_\_ Not applicable

**Comments:**

H. Response to feedback				
1	2	3	4	5
Argumentative. Does not feel there are any concerns.	Debates and rationalizes most feedback. Interrupts.	Listens respectfully. Attempts to incorporate feedback. Recognizes areas in which feedback is needed.	Asks appropriate, clarifying questions. Incorporates feedback regularly.	Seeks specific feedback from supervisors. Self-assesses and self-corrects with minimal cues. There is evidence that trainee has incorporated feedback in daily practice.

\_\_\_ Not applicable

**Comments:**

I. Overall performance				
1	2	3	4	5
Performance needs significant improvement	Performance is below expectations	Solid, competent performance	Performance exceeds expectations	Superb performance
Does not meet the goals and objectives for competent performance in the required competencies.		Meets goals and objectives for competent performance in the required competencies.		Demonstrates expertise in having met goals and objectives and consistently and significantly exceeds expected performance in the required competencies.
Performs consistently or considerably below level of typical resident. Demonstrates significant and/or multiple performance deficits.		Performs at level of typical resident. Demonstrates consistent, competent performance.		Performs superbly with minimal guidance or instruction. Performs well beyond level of typical resident.
Demonstrates unacceptable level of knowledge or skills in his or her understanding of the issues and interpretation and management of common problems.		Meets expectations in handling common or straightforward situations and presentations in day-to-day practice.		Can handle complex and rare situations and presentations.
Needs significant coaching or redirection. Is argumentative or resistant or avoids feedback.		Attempts to incorporate feedback. Recognizes areas in which he or she needs feedback or improvement.		Easily self corrects, welcomes feedback and accurately identifies areas for improvement.

**Focused comments for improvement:**

## Appendix 15.5:

### Sample reading list template

Reading list for:

Prepared by:

Date:

**Susan Glover Takahashi,  
MA(Ed), PhD**

Dr. Glover Takahashi is director of education and research in the postgraduate medical education office at the University of Toronto.

Session	Date of session	Faculty	Reading list topic(s)	Planned assessment of reading list topic(s)*	Notes
1				Feedback on session 1 topic(s).	
2				Feedback on session 2 topic(s).	
3				Feedback on session 3 topic(s). Formative assessment on the topic(s) of sessions 1 and 2.	
4				Feedback on session 4 topic(s). Review of the results of the session 3 assessment.	
5				Feedback on session 5 topic(s). Formative assessment on the topic(s) of sessions 3 and 4.	
6				Feedback on session 6 topic(s). Review of the results of the session 5 assessment.	
7				Feedback on session 7 topic(s). Formative assessment on the topics of sessions 1–6.	

8				Feedback on session 8 topic(s). Review of the results of the session 7 assessment.	
9					
10					
11					
12					
13					
14					
15					

\*The details in the first few rows of the column on planned assessments are filled in as examples only.

Notes:

- » This reading list template is to be completed for the focused list of topics for which the resident has been identified to need further development.
- » The full reading list should be drawn up to address identified gaps in performance and should reflect what the resident can be reasonably expected to learn given his or her other assigned activities.
- » The resident should know and have access to the key books, readings and resources.
- » The resident's ability to access the required resources should be verified before the remediation plan is implemented.
- » Faculty should review/teach topics at the remedial sessions. At some sessions, the resident may be asked to present what they have read.
- » Key concepts should be discussed at each session.
- » At each session there should be feedback on current topics, formative assessment of recent topics and occasional summary assessments of a group of topics. (See Appendix 15.6 for a sample Medical Expert encounter scoring form.)

## Appendix 15.6:

### Scoring tool for the Medical Expert Role

Susan Glover Takahashi,  
MA(Ed), PhD

Dr. Glover Takahashi is director of education and research in the postgraduate medical education office at the University of Toronto.

Trainee name:

Program:

Trainee's training level:

Completed by:

Date:

Activity:

- Assignment      Topic(s):
- Presentation      Topic(s):
- Interim report
- Final report
- Other: « *specify* »

#### A. Content knowledge

1	2	3	4	5
Fragmented, inaccurate, misleading.	Not fulsome or fully current. Poorly organized.	Current. Somewhat organized.	Current and organized.	Up to date. Well organized. Complete. Demonstrates content expertise.

Not applicable

Comments:

#### B. Depth of understanding

1	2	3	4	5
Superficial.	Insufficient detail.	Sufficient detail.	Complete, full description.	Well researched, demonstrating that trainee has a sophisticated understanding of the issues.

Not applicable

Comments:



C. Clarity of communication				
1	2	3	4	5
Trainee is not able to communicate content. Communication is confusing.	Reader/listener is able to follow or interpret key messages.	Trainee explains content by using appropriate language and providing examples.	Trainee demonstrates the ability to present material effectively and adapt it appropriately.	Communication is well-organized and clear. Trainee links ideas across areas, showing sophisticated mastery of subject.

\_\_\_ Not applicable

**Comments:**

D. Non-verbal communication				
1	2	3	4	5
Distracting or disruptive non-verbal behaviour (e.g., relating to eye contact, facial expressions, gestures, vocalization, tone, speech errors or use of pauses or silence). Use of personal space inappropriate for activity. Inappropriate grooming or dress.	Some eye contact. Some difficulty engaging. May cause listener to feel mildly frustrated and/or antagonized.	Maintains appropriate eye contact. Exhibits enough control of non-verbal expression to engage listener. Demonstrates engagement through body language.	Good control of non-verbal expression leading to engagement of listener.	Is aware of and purposefully uses non-verbal behaviours and gestures to establish and maintain a relationship.

\_\_\_ Not applicable

**Comments:**

E. Overall performance				
1	2	3	4	5
Performance needs significant improvement	Performance is below expectations	Solid, competent performance	Performance exceeds expectations	Superb performance
Does not meet the goals and objectives for competent performance in the required competencies.		Meets goals and objectives for competent performance in the required competencies.		Demonstrates expertise in having met goals and objectives and consistently and significantly exceeds expected performance in the required competencies.
Performs consistently or considerably below level of typical resident. Demonstrates significant and/or multiple performance deficits.		Performs at level of typical resident. Demonstrates consistent, competent performance.		Performs superbly with minimal guidance or instruction. Performs well beyond level of typical resident.
Demonstrates unacceptable level of knowledge or skills in his or her understanding of the issues and interpretation and management of common problems.		Meets expectations in handling common or straightforward situations and presentations in day-to-day practice.		Can handle complex and rare situations and presentations.
Needs significant coaching or redirection. Is argumentative or resistant or avoids feedback.		Attempts to incorporate feedback. Recognizes areas in which he or she needs feedback or improvement.		Easily self corrects, welcomes feedback and accurately identifies areas for improvement.

**Focused comments for improvement:**

## Appendix 15.7:

### Scoring tool for the Manager and Collaborator Roles

Susan Glover Takahashi,  
MA(Ed), PhD, and Dawn Martin,  
MSW, MA(Ed), PhD

Dr. Glover Takahashi is director of education and research and Dr. Martin is an educational and curriculum consultant with the postgraduate medical education office at the University of Toronto.

Trainee name:

Program:

Trainee's training level:

Completed by:

Date:

Activity:

Context:

- Ambulatory
- Community
- In-patient
- Emergency department
- Other: « *specify* »

A. Effective teamwork				
1	2	3	4	5
Unaware of need for communication with other health care providers.	Unable to integrate the provision of care by the medical team with that provided by allied health professional(s).	Demonstrates generally appropriate collaboration with allied health professional(s).	Demonstrates appropriate collaboration with allied health professional(s).	Demonstrates exceptional ability to elicit relevant details efficiently.

Not applicable

Comments:

B. Team communication				
1	2	3	4	5
Authoritarian or deferential in approach. Does not listen respectfully. Verbal and nonverbal communication is disruptive to process.	Actively listens and engages in meetings. Conveys information. Builds trust through actions.	Clearly and directly communicates. Uses reflective listening. Is responsive to others' requests and feedback.	Effectively and efficiently communicates relevant information, either verbal or written. Identifies communication barriers. Delegates responsibility appropriately and respectfully.	Skillfully recognizes and manages communication challenges. Maintains and coordinates necessary communication outside of meeting(s). Skillfully coordinates patient's care with others.

\_\_\_ Not applicable

**Comments:**

C. Manages teams				
1	2	3	4	5
Unaware of need for action or fails to act to coordinate team. Style (e.g., aggressive, passive) does not support leadership.	Unable to coordinate or lead team in provision of care.	Demonstrates generally appropriate coordination or leadership of team professional(s).	Demonstrates appropriate balance of leadership and collaboration of team.	Demonstrates exceptional ability to elicit optimal quality and quantity of work among team members.

\_\_\_ Not applicable

**Comments:**

D. Management of patient needs in organizations or within health system				
1	2	3	4	5
Unaware of need for action or fails to act to coordinate health system needs to achieve effective and safe patient care outcomes. Style or approach impedes effective patient care and creates barriers for others to provide care.	Demonstrates weak understanding or inconsistent management of the structure and function of the health care system to achieve effective and safe patient care outcomes.	Effectively manages health care system needs to achieve effective, safe patient care outcomes.	Demonstrates appropriate balance of leadership and collaboration in interactions with health system to achieve effective and safe patient care outcomes.	Demonstrates exceptional ability to manage and collaborate effectively with others to achieve effective and safe patients care outcomes within the health care system.

\_\_\_ Not applicable

**Comments:**

E. Management of time and self				
1	2	3	4	5
Highly disorganized and/or has an unrealistic approach to planning. Does not complete tasks and assignments in a timely fashion or with an acceptable level of quality.	Demonstrates poor time management. Demonstrates a haphazard approach and/or inconsistent planning, producing inconsistent outcomes.	Manages time to complete tasks and assignments. Demonstrates good planning and sequencing of work.	Demonstrates good coordination of time to efficiently complete tasks and assignments. Demonstrates solid approach to planning and organized sequencing of work.	Superb time manager. Efficiently and effectively completes tasks and assignments and achieves high-quality outcomes. Positively and constructively anticipates hurdles

\_\_\_ Not applicable

**Comments:**

F. Management of difference and conflict				
1	2	3	4	5
Argumentative. Does not feel there are any concerns. Lacks awareness of personal contributions to difference or conflict.	Acknowledges others' viewpoints. Respectfully listens to feedback. Prevents misunderstanding by actively listening. Recognizes own role and limitations	Identifies and manages difference constructively. Listens to understand and for common ground. Demonstrates a willingness to act upon feedback.	Recognizes own role in contributing to difference and acts to professionally resolve difference. Identifies potentially problematic team dynamics. Reflects on own actions.	Respectfully and skillfully manages differences and conflict. Resolves conflict and achieves consensus among team members.

\_\_\_ Not applicable

**Comments:**

G. Overall performance				
1	2	3	4	5
Performance needs significant Improvement	Performance is below expectations	Solid, competent performance	Performance exceeds expectations	Superb performance
Does not meet the goals and objectives for competent performance in the required competencies.		Meets goals and objectives for competent performance in the required competencies.		Demonstrates expertise in having met goals and objectives and consistently and significantly exceeds expected performance in the required competencies.
Performs consistently or considerably below level of typical resident. Demonstrates significant and/or multiple performance deficits.		Performs at level of typical resident. Demonstrates consistent, competent performance.		Performs superbly with minimal guidance or instruction. Performs well beyond level of typical resident.
Demonstrates unacceptable level of knowledge or skills in his or her understanding of the issues and interpretation and management of common problems.		Meets expectations in handling common or straightforward situations and presentations in day-to-day practice.		Can handle complex and rare situations and presentations.
Needs significant coaching or redirection. Is argumentative or resistant or avoids feedback.		Attempts to incorporate feedback. Recognizes areas in which he or she needs feedback or improvement.		Easily self corrects, welcomes feedback and accurately identifies areas for improvement.

**Focused comments for improvement:**

# Challenges for large programs

## Thomas Maniatis, MDCM, MSc (Bioethics), FACP, FRCPC, and Glen Bandiera, MD, MEd, FRCPC

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## Objectives

### After reading this chapter you should be able to:

- » outline problems commonly faced by large residency programs
- » describe at least five methods to improve communication and monitoring
- » list at least three opportunities provided by large resident numbers

## Case scenario

You have been the program director of an Internal Medicine program at a large university centre for the last three years. Your program has recently expanded and now has over 80 residents across four postgraduate years. Although you once prided yourself on your ability to provide one-on-one contact and oversight for all residents, recently you have been feeling more and more out of touch with individuals. You are surprised to find

that some faculty members have developed significant concerns about the performance of two residents in their third year. In addition, a recent internal review identified the lack of substantive career counselling as a potential weakness of your program. To complicate things further, your administrative assistant has been overworked lately dealing with the increase in paperwork and enquiries. You recognize that a growing program requires changes in both structure and process but are unsure where to start.

## Background and context

Canadian residencies are unique in that oversight is centralized in universities: only one program per university can receive an accreditation status with the Royal College of Physicians and Surgeons of Canada in each specialty. Some residency programs, particularly those for generalist specialties, can thus be quite large. Many jurisdictions in Canada are currently experiencing increases in resident numbers, and recent expansions in the number of undergraduate positions ensure that this will continue to be the case for the near future. Large residency programs face multiple challenges: they must adequately teach, supervise and assess a large number of residents, often at multiple sites each with their own institutional practices and infrastructure, and with the involvement of large numbers of faculty members. Furthermore,

accreditation standards increasingly stress transparency and outline expectations for formalized tracking of resident performance. Thankfully, the increased structure mandated by new standards of accreditation is especially useful for large programs. Whereas the traditional apprenticeship model with informal one-on-one oversight can lead to a haphazard management of the program and its residents' educational experience, a more rigorous structure allows for more sophisticated tracking of resident and program performance.

The current emphasis on competency-based education (the focus of a sister publication from the Royal College<sup>1</sup>) means that each program must have a well-defined set of goals and objectives, assessment strategies, expected levels of performance, and supporting policies and procedures for each rotation. Accreditation bodies, faculty and residents all expect the program director and the residency program committee (the program leadership) to assume responsibility for implementing a feasible, comprehensive and high-quality academic program that makes the best use of the unique resources available to the program. Although program development and oversight are the responsibility of the program leadership, it will not be possible to effectively implement the program unless all teachers and residents understand and accept how the program works and what it is trying to achieve. The program leadership holds the important responsibility of developing and maintaining a reliable and effective communication structure, a task whose complexity varies directly with program size.

Resources are a challenge in most Canadian teaching centres. Although most programs have an appropriate patient population to support quality education, many face challenges associated with faculty numbers, time for teaching and education planning, space, equipment and more sophisticated technology such as simulation methods. Large programs in particular are challenged to provide an equitable educational experience to all residents regardless of site assignment. For example, it may be difficult to apply consistent assessment methods (such as oral examinations) and offer consistent formal learning opportunities (such as small group lectures or simulation sessions) across sites. Certain clinical experiences (such as popular electives or highly specialized core requirements) may be bottlenecks.

There are some mitigating factors for large programs, however. Most such programs are large because of the generalist nature of the specialty and thus there is usually a large pool of faculty members from which to recruit teachers and leaders for the program. There is often a good variety of faculty members with subspecialist expertise and special interests (e.g., research, administration, public health, quality assurance) who can assist in curriculum development and delivery. The patient populations are usually large and varied and the training sites are often diverse, each providing unique experiences and learning opportunities. The expense of high-impact resources such as simulation equipment can more easily be justified for large resident numbers, and the cost of developing curriculum content and assessment tools can be spread over a greater number of individuals. For example, if a program with 10 residents and another program with 60 residents both decide to create a short-answer examination bank, the former program may need to extract 100 items from 20 available faculty members while the latter program can extract the same 100 items from 80 available faculty members. The art of running a large program, therefore, often lies not so much in getting the resources but rather in harnessing and organizing the resources in a coordinated manner.

## Literature scan

There is little in the peer-reviewed literature about the intricacies of running residency programs. The literature does discuss, however, some principles and best practices that can be helpful.

When a program calls on large numbers of faculty members to assess a large group of learners, the statistical reliability of the assessments can be a problem. The principle is that assessment scores should reflect individuals' relevant performance or characteristics and not some extraneous factor or source of error. It may appear that the only way to eliminate this risk is to have the same group of assessors assess each applicant (or to have the same group of examiners examine each resident). Reliability theory suggests that other options exist. By developing objective scoring instruments for interviews or application review, or



by using appropriately standardized examination and scoring methods, a program can achieve adequate reliability even though different learners are assessed by different teams.<sup>3-5</sup> (See Chapter 10 in this book for information on selecting residents for your program.<sup>2</sup>) Observations from multiple observers averaged together are more reliable than individual opinions. Strategies that include numerous samples of performance (such as objective structured clinical examinations, multiple mini-interviews and short-answer examinations with numerous questions) are preferable. The Royal College's certification examination model requires that much time and effort be put into developing the materials and scoring methods. At the time of the examination, multiple teams of examiners can examine a cohort of candidates and produce results that are largely independent of which candidate was examined by which team. By investing time in developing materials, the program can use a breadth of faculty members (from different backgrounds, fields and/or sites) to carry out the assessment task (interviews, oral examinations, marking portfolio essays, etc.) and avoid overburdening individual faculty members. It is recommended that programs consult an expert in assessment or curriculum design for assistance when developing such materials.

As programs expand, one source of concern is the increasing amount of time that personnel must spend dealing with enquiries and phone calls about various aspects of the program ("Where do I find policy X?", "I lost my schedule. What is rounds on next week?", "Could you please tell me again where the examination is being held?"). To address this concern, you can set up an effective website that trainees and faculty can easily search for answers to simple, data-related questions. It is important to ensure that the website is kept up to date and reliable. Invest upfront in an appropriate web design that your program administrative assistant(s) can modify directly. You will find that the time spent by personnel in updating the site regularly (weekly, monthly, etc.) is more than offset by the decrease in time spent responding to calls from people who can now find answers to their questions on the website. To effect change among a large faculty, your staff

will need to make a concerted effort to redirect calls to the website and will eventually have to refuse to provide answers that are on the website. In time, when individuals have developed faith in the website and have bookmarked it on their Internet favourites list, the calls will drop to a minimum and administrative assistants can devote time to other aspects of program operation. In many cases, the same website can be used for curriculum delivery (password-protected content pages, secure repositories for portfolio submissions, etc.), and such options should be explored with local information technology experts. Visit the websites of other residency programs, such as the Emergency Medicine program at the University of Toronto ([www.emergencymedicine.utoronto.ca](http://www.emergencymedicine.utoronto.ca)) and the Internal Medicine programs at McGill University ([www.medicine.mcgill.ca/internalmed](http://www.medicine.mcgill.ca/internalmed)) and McMaster University ([www.fhs.mcmaster.ca/medicine/](http://www.fhs.mcmaster.ca/medicine/)) to collect ideas for your program's website.

Finally, it is important for leaders to have some grounding in effective delegation, change management and organizational structure. Specifically, leaders of large programs must know how to establish subcommittees of the residency program committee with structured relationships with the parent committee, establish effective terms of reference for subcommittees and job descriptions for assigned roles, and effectively develop and communicate new ideas. Thankfully, basic teachings in this area are easily found. The business literature offers a number of good, accessible resources,<sup>6,7</sup> and you can find useful examples by consulting the terms of reference on the websites of other Canadian residency programs (e.g., [www.medicine.mcgill.ca/internalmed](http://www.medicine.mcgill.ca/internalmed)). Alternatively, you might consider taking leadership courses offered by many faculty development offices, institutions (hospitals or universities) or national organizations (such as the Canadian Leadership Institute for Medical Education [CLIME], which is produced by the Canadian Association for Medical Education [[www.came.ca](http://www.came.ca)]).

## Best practices

### Allocate residents fairly and transparently

In programs where the assignment of residents is complicated, consideration should be given to using an electronic planning resource. There are proprietary products available (e.g., T-Res), but you can also develop tools in house (e.g., see the website of the University of Toronto's Internal Medicine program, [www.utoronto.ca/med/residents/allocate.html](#)). Your program should have a clear process for allocating residents, in which there is a demonstrably equitable likelihood that each resident will get his or her preferred training location or faculty member. You should ensure that all faculty and residents understand the principles guiding the allocation process, and you should set up regular reporting of statistics related to the allocation system (e.g., percentage of residents getting their first choice, percentage of residents getting their second choice). By taking these steps, you will be able to mitigate many of the concerns residents may have about partiality in the allocation system.

### Connect with residents

Residents in large programs, especially new residents, can feel overwhelmed and anonymous. One director of a large program has an email address that he makes available exclusively to residents in their first postgraduate year (PGY1) so he can quickly identify and respond to their concerns. Alternatively, some programs have developed a well-functioning "big brother/sister" program to pair senior residents with juniors, or advisor/mentorship programs pairing faculty with residents. Some programs have structured the advisor or mentor role into the responsibilities of their chief residents: the chief residents hold meetings with the program's PGY1s at regular intervals (e.g., every three months) to help the PGY1s deal with the stresses of being a new resident. Ideally, the individuals chosen to be advisors or mentors will be given instruction on how to perform this role and have a good understanding of the local program, the specialty and the ambient practice environment.

## Track resident and teacher assessments

Tracking resident progress is a challenge, particularly in large programs. One way to address this is to use embedded flags in electronic evaluation systems to send messages to the program director or teachers when a resident gets a score below a certain level on an in-training evaluation report (ITER). Teacher evaluations can be similarly flagged. The use of reports in these electronic systems, which can generate numerical averages of multiple data points from resident evaluations, can be a very helpful means to identify residents who have weaknesses that have not set off any pre-determined flags. Furthermore, they can also be used to track pre-selected statistics, such as ITER completion rates and average teaching scores, for monitoring and reporting purposes. Producing an annual report can be particularly beneficial for large programs spread over multiple sites, as the process of generating the report enables the program director to quickly and systematically identify underperforming sites and highlight examples of excellence.

An electronic resident file can help you to consolidate information and track trends for your program. T-Res and one45 are two examples of commercial products; various homegrown products have also proven successful. Your local postgraduate education office should be able to give you advice.

One large program has a central residency program committee that meets monthly and a separate evaluation subcommittee that meets quarterly. The function of the subcommittee is to review in detail all assessment data for each resident (ITERS, examination scores, etc.), report to the central residency program committee any concerns on the basis of pre-existing parameters endorsed by the central committee, and make recommendations concerning promotion of each resident to the next level at the end of the year. This process ensures that each resident's progress is overseen systematically, no resident is overlooked and the central residency program committee is made aware of relevant concerns but can devote important time to improving the program and addressing upcoming issues.

One department has a formalized appeal process for both teacher and resident evaluations. This provides an important check in the system so that teachers have recourse should they feel they have received an inappropriate evaluation. The committee that handles the appeal process is separate from the residency program committee and reports to the chair of the department to preserve anonymity and avail itself of appropriate authority if necessary.

## Develop standardized teaching and testing materials

A large surgical department has a well-designed surgical skills laboratory that makes use of standardized teaching and testing materials year after year to ensure that all surgical trainees have consistent exposure to key skills training.

## Implement an effective communication strategy

Large programs need to have a solid communication strategy to keep faculty and residents aware of issues. The two easiest ways to ensure awareness are to send the minutes of residency program committee meetings to all involved parties and to prepare a briefing note for circulation highlighting the most relevant decisions and changes. Alternatively, these documents can be posted on the program's website and an email notice containing an active link to the new materials can be circulated. Site coordinators should be fully aware of their role as communication links and have a strategy to regularly update their site faculty on issues. Producing a monthly newsletter is another workable strategy, especially when the newsletter contains columns on topics of general interest and of interest specifically to residents. Finally, you as program director can hold a regular review or "town hall" session that enables faculty to socialize and get up to date on issues; you can either hold these sessions when you visit individual sites or host a centralized event.

## Tips

- » Document everything: things that seem fresh and obvious one day will fade from memory as new issues arise and take priority. Keep emails and correspondence.
- » Share well-crafted emails and letters with the leaders of your program and encourage them to send out similar ones. Emphasize the importance of sending out consistent messages.
- » Create formalized roles for key positions (career counsellor, research coordinator, rounds coordinator, etc.).
- » Develop tools for site program leaders to use when they meet with residents to review the residents' performance, to ensure consistency in the topics that are covered during these meetings.
- » Consider creating subcommittees of the residency program committee for important tracking functions. Ensure that these subcommittees have formalized relationships with the main committee and establish terms of reference for them. Examples include selection, promotions and evaluation subcommittees.
- » Develop and maintain a comprehensive website for communication.
- » Consider dividing up the residency cohort into groups on the basis of training site or interests. This helps to mitigate resident feelings of anonymity.
- » Manage resident expectations proactively, emphasizing the positive aspects of a large program and acknowledging the negative aspects.
- » Be attentive to resident morale and have an effective system for detecting residents

experiencing stress and/or academic difficulty. Ensure that you make time to meet with residents as a group and that you know when it's necessary to meet individually with a particular resident.

- » Ensure that every resident has a means to access you as the program director as well as an identified faculty resource person who is not directly involved in evaluating their performance.
- » Consider having resident representatives for each level or group of residents on the residency program committee and other relevant committees.
- » Consider instituting a structured resident mentor program, using both faculty members and senior residents as mentors. Target different kinds of mentorship to different trainee levels.
- » Develop a solid means of communicating major changes to front-line teachers. For example, you might choose to communicate through site representatives on the residency program committee, through regular newsletter updates or through a "breaking news" section on your program's website (assuming that individuals refer to the website regularly to obtain other information, such as rounds topics). Once you have chosen your communication method, use this — and only this — means of communication, to avoid mixed messages and confusion.

## Pitfalls

- » Subcommittees without a well-defined relationship to the parent residency program committee will not be effective.
- » Problems can arise if faculty at different sites do not have a clear understanding of the expectations and processes related to the operation of the program.

- » Residents can feel anonymous in a large program, and the program can seem impersonal.
- » The resident voice can be lost in a large program. It is important to reassure residents that their concerns are considered, if not always addressed to their satisfaction.
- » Residents can slip through the cracks in large programs if there isn't an effective system for tracking resident stress or performance.
- » Do not try to do too much at once. Making small changes can require a significant amount of time and energy, and you must not underestimate the important role of consultation even in seemingly trivial decisions.
- » Not everything can be settled by email. Reserve time for in-person meetings with both residents and faculty, and learn to identify those situations that can and can't be handled electronically.

## Case resolution

You decide to pace the changes you need to make to improve the program. Within the next 12 months, you convene a special retreat for the residency program committee to look at structure and process. At the retreat, you and the committee identify three key areas to focus on in the coming year: establishing a resident assessment committee, developing a comprehensive website that can be updated by the program administrative assistant and creating a faculty liaison position for each of the four levels of training in the program. These positions are funded jointly by the department and clinical groups. The assessment subcommittee is chaired by a member of the residency program committee and is given the mandate to develop and track resident assessment. The subcommittee will report to the residency program committee on a quarterly basis and at additional times when resident concerns are identified. The website will be developed using funds from an unrestricted educational grant and

some infrastructure resources from the sponsoring department. It will be organized with input from a small working group of interested faculty members and keen residents (key stakeholders) who have good ideas about how to improve the functionality of the current website. The university has provided some information technology expertise to develop the site. Finally, the faculty liaisons provide individual counselling for residents and develop two level-specific workshops each year to address issues such as rotation planning, career counselling and specialty-specific stress mitigation strategies. The residency program committee has committed to including a regular agenda item monitoring all of these initiatives as well as prioritizing reasonable change options going forward to address further program expansion. With the changes implemented for the three initiatives, the program is poised for its upcoming external review.

## Take-home messages

- » Big programs have big numbers of faculty members. Use them.
- » Be ruthless in your attention to detail and tracking of resident activity.
- » Be sure all residents have adequate support and contact options should they need assistance of various kinds.
- » Empower the residency program committee and its subcommittees to carry out explicit responsibilities. Establish concrete lines of communication between the committees.
- » Ensure that you have a well-functioning communication platform to transmit information to front-line staff and residents. This should be your first priority as program director. Without good communication, everything else is a much bigger challenge.

## References

- <sup>1</sup> Sherbino J, Frank JR, editors. *Educational design: a CanMEDS guide for the health professions*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2011.
- <sup>2</sup> Bandiera G, Chan D. Selecting residents for your program. Chap. 10. In G Bandiera, D Dath, editors. *The Royal College program directors handbook: a practical guide for leading an exceptional program*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2013.
- <sup>3</sup> Bandiera GW, Regehr G. Reliability of a structured interview scoring Instrument for a Canadian postgraduate Emergency Medicine training program. *Acad Emerg Med*. 2004;11(1):27–32.
- <sup>4</sup> Bandiera G, Regehr G. A structured application assessment instrument is a reliable tool for assessing applications to Canadian postgraduate training programs in Emergency Medicine. *Acad Emerg Med*. 2003;10:594–598.
- <sup>5</sup> Streiner DL. Global rating scales. In: G Norman, VR Neufeld, editors. *Assessing clinical competence*. New York: Springer-Verlag; 1985. p. 119–141.
- <sup>6</sup> Neff TJ, Citrin JM. *You're in charge, now what? An 8 step plan*. New York (NY): Random House; 2005.
- <sup>7</sup> Heath C, Heath D. *Made to stick. Why some ideas survive and others don't*. New York (NY): Random House; 2007.

# Accreditation

## Glen Bandiera, MD, FRCPC, and Paul Dagg, MD, FRCPC

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## Objectives

**After reading this chapter you should be able to:**

- » outline the purpose, advantages and disadvantages of program accreditation
- » list four common misperceptions about accreditation
- » describe four common areas for improvement that program directors should consider in their preparation for their next site accreditation

## Case scenario

You are the program director for a small specialty program, and your site accreditation visit will take place in a few months. A resident has complained about intimidation by one of the core teachers in the program. You have taken all available steps to resolve the issue, using both university and hospital policy. At the end of

the process, you have had to acknowledge that significant uncertainty remains about several events in the case, and you have taken limited disciplinary action in response to the established facts. The resident is not satisfied with the result and has been vocal about expressing this. The residency program committee and many of the teachers involved with the program are now very concerned that the program will receive a failing mark when the accreditation site visit takes place.

## Background and context

Few activities cause more anxiety for a residency program director (PD) than an impending accreditation survey. Despite explicit messaging and education that articulates the formative, continuous quality improvement rationale for accreditation, it is hard for PDs not to view a site visit as a pass/fail proposition and a reflection on them personally and professionally. Accreditation is, nonetheless, a process intended to ensure that all programs accredited by the Royal College of Physicians and Surgeons of Canada adhere to a set of minimum standards, and it provides a detailed report to a program's leaders about where the program excels and where it can make improvements. If they see accreditation in this way, PDs can make the most of the survey process and turn it into a learning experience that can set the course for the future of the residency program.

The Royal College charter states that it has the sole responsibility and obligation to provide an accreditation status for Canadian specialty residency programs other than those in Family Medicine. All programs accredited by the Royal College are university based, and there can be only one accredited program in each specialty per university. Thus, the number of programs in Canada in each specialty is relatively small compared with the number in the United States, for example, where programs are often hospital based and where there may be multiple programs in a given specialty in major cities. The Canadian system thus lends itself to easy maintenance of a high and uniform minimum standard across the country and a fairly detailed accreditation process. Indeed, the high standard of residency education in Canada has been recognized around the world.

The Royal College maintains General Standards of Accreditation applicable to all residency programs ([www.royalcollege.ca/portal/page/portal/rc/credentials/accreditation](http://www.royalcollege.ca/portal/page/portal/rc/credentials/accreditation)). This set of standards forms the major focus of an accreditation survey. In addition, each Royal College specialty committee (SC) in Canada is charged with generating three documents: Specialty-Specific Standards of Accreditation, Specialty-Specific Training Requirements, and Objectives of Training Requirements. All of these documents are available at [www.royalcollege.ca/portal/page/portal/rc/credentials/specialty\\_information/information](http://www.royalcollege.ca/portal/page/portal/rc/credentials/specialty_information/information) by selecting the applicable specialty from a drop-down list. During the survey, the program will also be reviewed in relation to these documents (see the section on the role of the SC later in this chapter).

The Royal College's routine accreditation cycle currently involves a survey of each residency program every six years. The survey includes both a document review and an on-site visit by an experienced physician surveyor who is part of an on-site team surveying all programs. The former step is intended to provide the PD with an opportunity to review his or her own program, review the accreditation standards and summarize in his or her own words the strengths and challenges in the program (see the section on understanding the survey documents later in this chapter). It also provides the surveyor with enough

background information to make an efficient site visit. The on-site visit is intended to ensure that accreditation decisions are based on a complete understanding of how the program functions in relation to the accreditation standards and incorporate input from program leaders, teachers, residents and support staff.

Surveyors are recruited from the Royal College membership and have extensive experience in postgraduate education, program directorship or accreditation. Although the surveyor will not be from the same specialty or subspecialty as the program he or she is reviewing, an effort is made to see that surgery programs are reviewed by a surveyor with a different surgical background and medical programs are reviewed by a surveyor from a different medical background. In addition, some program surveys may involve the Canadian Association of Internes and Residents, the Federation of Medical Regulatory Authorities of Canada, the Collège des médecins du Québec (for Quebec programs) or the Accreditation Council for Academic Healthcare Organizations; each of these organizations may have representation on the on-site survey team.

The Royal College standards focus on the building blocks of the program and the policies and procedures that underpin its operation. A program that meets the standards should be able to provide a uniformly excellent experience for all residents and address any challenges that may arise.

**Remember:** A good program is not necessarily one in which no challenges arise; rather, a good program is one in which challenges are effectively and expeditiously addressed using well-understood building blocks and policies.

Indeed, some programs that are running very well (at the moment) and have had no challenges in recent years may encounter problems at accreditation if they have become complacent and do not have policies in place to deal with potential challenges in the future.

Once the documents have been reviewed and the on-site survey has been completed, the surveyor will make a presentation to the on-site survey team, which will then make an initial recommendation on the status of accreditation for the program. This recommendation will be reviewed and commented upon by the nuclear members of the relevant SC, who will also make a recommendation on accreditation status. They may or may not make the same recommendation as the on-site survey team. Finally, all program documentation and recommendations are passed on to the Royal College's Committee on Accreditation for a final decision regarding accreditation status. The final decision may be appealed, but the processes involved in this unusual occurrence are beyond the scope of this chapter. The entire process, from the time of submission of the documents to the final decision, will take six to nine months. The on-site survey will take place somewhere near the middle of this time frame.

Given that there is a lack of literature on accreditation in general, the following section is organized according to the steps in the accreditation process and tips and best practices are discussed for each step.

## Step by step through the accreditation process

### Understanding the survey documents

The entire survey is based on the **General Standards of Accreditation**. The A Standards are applicable to the university and postgraduate dean's office, whereas the six B Standards are applicable to each residency program. Before they prepare anything in the lead up to accreditation all PDs should review the B Standards document, which is relatively brief, as their programs will need to comply with the standards it sets out.

**The Specialty-Specific Standards of Accreditation (SSA)** usually just reflect the General Standards but will also include some specific standards that relate to the specialty (e.g., they may include unique communication skills or access to specific resources relevant only to that specialty). PDs must ensure their program is in compliance with this document as well.

The **Objectives of Training (OTR)** for each national specialty will be in CanMEDS format and are available from the Royal College website. Every program is expected to adopt (or adapt) these for its specific circumstances and to ensure that all objectives are covered somewhere in the program.

The **Specialty-Specific Training Requirements (STR)** specify the number of months required to complete the program, the eligibility requirements for the program, any required (core) experiences, and any limits on elective time. The program must clearly demonstrate that it meets these requirements.

The core document for the survey, the specialty-specific **Pre-Survey Questionnaire (PSQ)**, is completed by the PD. The SC uses a general template from the Royal College to design the blank PSQ for your program and it will be provided to you via the postgraduate dean's office. You will be given several months to complete it. Some questions are best answered in narrative format, some in point form and some in tabular format; the PSQ will tell you which format to use for each question. SCs update their documents on an ongoing basis and newer versions of PSQs tend to include more specific and objective questions than earlier versions. Completion of the PSQ should be a team effort: PDs are expected to complete the PSQ with the help of their residency training committee and other leaders associated with the program (e.g., hospital administrators who can provide the numbers of cases seen each year and details of material resources available at the teaching sites). The completed PSQ may be anywhere from 25 to 150 pages long, depending on the size and complexity of the program. The length is influenced greatly by the number of training sites, the list of faculty members, the list of residents and research productivity.



### The following are tips and best practices for completion of the PSQ:

- » Start early and solicit input from those who are best able to answer the questions. Don't waste your time trying to figure out some statistic that somebody else in the program would have at their fingertips. This is a team effort.
- » A good place to start is the previous PSQ completed for your program. Much of the information will not have changed and can be copied (carefully, of course).
- » Create formalized roles for key positions (career counsellor, research coordinator, rounds coordinator, etc.).
- » Where the same answer would be given by all programs at the university (e.g., policies on harassment), you can seek stock answers from the postgraduate dean's office. Similarly, where the same answer would be given for all trainees posted at a hospital site regardless of program, you can seek template answers from the hospital (e.g., a summary of library resources). Ideally, such generic answers will be collected and inserted into the PSQ on behalf of PDs by the postgraduate education office.
- » Answer each question as succinctly as possible. Be careful to answer the question –and only the question — that is being asked. If in doubt about how to respond, check with your postgraduate dean or other PDs in your specialty across Canada, as they may have overcome similar uncertainty if they have recently undergone a survey.
- » Be careful to observe any limits placed by the question. For example, if the PSQ asks for publications over a period of one year, a reader may be frustrated if you provide more and may wonder why you feel the need to embellish productivity within your program.
- » Be sure that numbers add up properly. For example, the number of rotation months listed in the curriculum table should add up to the number of months required (core and elective) for program completion.
- » The curriculum table is a good opportunity to ensure that the program adheres to all requirements of the STR. The surveyor will add them up to the month to ensure this is the case.
- » Circulate the PSQ to the residency program committee and residents for review. This will allow for clarification of details and help all involved in the program become familiar with the standards and with the entire operation of the program.
- » Use the PSQ as an opportunity to showcase the strengths of your program but also to draw attention to challenges you have. All programs have challenges, and this is a way to acknowledge them.
- » The PSQ should be completed accurately. The surveyor will review it in detail before the survey and arrive prepared to cross check and verify all details during the various meetings. Nothing frustrates surveyors more (and raises their level of suspicion higher) than reading one thing in the PSQ only to find that participants in the survey believe something different is occurring.

### Understanding the role of the specialty committee

In addition to generating the SSA, OTR, SSR and blank PSQ for their specialty, the members of the SC will review the completed PSQ for your program and will provide a number of questions they would like the surveyor to address during the on-site survey visit. Generally, the SC is expected to focus on issues that are highly specialty specific, usually pertaining to Standard B2 (concerning the structure of the program) and Standard B4 (concerning resources). These questions will be provided to the PD just before the on-site survey so that he or she can prepare some responses. Once the on-site survey has been completed, the SC will get a copy of the surveyor's report (which should contain answers to the SC's questions) and the survey team's recommendation. The SC will state whether they agree or disagree with the recommendation; if they disagree with it they will state their alternative recommendation

and the reasons why they are making it. This information will be passed on to the Royal College's Committee on Accreditation but not to the program director.

### **We suggest the following tips and best practices related to the SC:**

- » Ensure that the description of the program and its core components is clear and consistent.
- » Prepare responses to the SC's questions before the survey visit, if you have not already addressed the issues they have raised as part of the regular preparation you have done. (In many cases, the PD receives the SC's questions only a week before the survey visit). You can present your responses in the form of a handout, you can include your responses in a summary statement or you can simply await direct questioning from the surveyor.
- » Do not be alarmed if the SC asks questions that you did not anticipate or that you feel are not relevant to the accreditation process. It is up to the site surveyor and survey team to decide if an issue is related to a standard or not; weaknesses can only be identified in relation to a specific standard. Despite their best intentions, SC members sometimes ask questions out of curiosity rather than to ensure adherence to a standard.

## **Preparing your residency program committee, faculty members and residents for the survey**

No matter how well you understand the accreditation process, rest assured it will be a foreign concept to your residents, many members of your residency program committee and most faculty members. They will benefit from early, frequent and repetitive reminders of what to expect.

### **The following tips should help:**

- » Have them read this chapter.
- » Share the PSQ with them and solicit their input.
- » Be sure they have read and understand the previous survey report for your program,

including the weaknesses listed in the report, and that they are aware of the steps that have been taken to rectify the weaknesses.

- » Ensure they understand the current issues facing your program and the plan to address them.
- » Make the impending accreditation visit a standing agenda item for the year before the visit.
- » Encourage individuals to be honest and candid in their answers to the surveyors, but try to resolve any differences of opinion before the visit. The issues faced should be substantive, and the committee, faculty and residents should all be on the same page in terms of their perspectives on the program. Even if the residents and faculty disagree on a key issue, they should be able to acknowledge this disagreement and state what attempts at reconciliation have been made.
- » Emphasize the focus on process. All programs have challenges to address and the accreditation visit looks specifically at the process in place for the program to do so. An incident of intimidation is not unusual in programs and is not a guarantee that the program will not receive approval. The surveyor will look at the process in place to address the issue, how well the process is working, and the degree to which all involved understand what is being done. A well-handled incident can be a sign of strength in a program.
- » Ensure that the members of the residency program committee understand why they are on the committee; it can be helpful to review the committee's terms of reference with them. You might be surprised at how many members are there because they were told to be and do not really understand their role.
- » Ensure that residents and faculty are aware of the potential outcomes of the accreditation process (see the section on follow-up and implications later in this chapter) and the timelines involved. Warn them that there is a lot of waiting for the final decision after the site visit.

- » Notify individuals as soon as possible about the day and time of the visit. Insist that no unnecessary absences be planned: sparse attendance by a key group at this pivotal event for the program will create doubt about the level of commitment and engagement in the program.

## Preparing documents for review at the site visit

In addition to reviewing your program's PSQ, one of the first things the surveyor will do is review other documents associated with the program. He or she will look for evidence that the program takes meticulous care of important details and applies all relevant policies and processes and evidence of how well the central program administration communicates with important individuals and groups.

### Tips and best practices include the following:

- » Have a well-organized and up-to-date website with all program policies, rotation-specific goals and objectives, and orientation materials readily available. Spend the resources required to keep it current and useful. An outdated website is a death knell if it is the only means of communication.
- » Ensure that working links to other key websites (e.g., websites for the postgraduate office, hospitals and resident organizations) are readily available on your program's website.
- » Use your program's website to track or at least describe the curriculum in the program, including rounds and special events. This can be an excellent record of the formal curriculum delivered by the program, especially if the surveyor can go back over archived rounds and events mapped to CanMEDS Roles and see how the program looks over time.
- » Ensure that all documents are well labelled and organized chronologically for the surveyor. He or she will not have a lot of time to review the documents and you want to show off your attention to detail.

- » You should get a list from the postgraduate office of all relevant documents you will be expected to provide; at the very least, you should include goals and objectives, residency program committee minutes, a copy of the recent curriculum going back at least two years, examples of evaluation tools (examinations, simulation evaluation sheets, etc.), policies and procedures, and resident files for both well-functioning residents and those in difficulty (the latter will demonstrate how you have handled problems). Note that the resident files should be accompanied by documentation showing that the residents in question have consented to this use of their information.
- » Start as early as possible to keep good minutes of the residency program committee's meetings that demonstrate complete discussions and follow-through from one meeting to the next until issues are resolved and that show that the committee carries out all of the functions outlined in Standard B1 of the General Standards of Accreditation.
- » Assume the surveyor will want to review the documents in private and include time during the visit for them to do so. Ideally, they should be given login information to the program website and allowed to browse it on their own.

## Preparing for the site visit itself

Once everybody knows what to expect on the day of the site visit and is equipped with a good knowledge of the issues facing the program, the only remaining activity is to ensure everybody is aware of the schedule and location of meetings. The Royal College and your postgraduate education office will look after including your survey in the overall site visit schedule; they'll consult with you to some degree as they do this. A template will be provided that will outline the timing and length of each of the meetings, which are designed to allow the surveyor to best learn about the program. The location, catering, invitations, attendee lists and any transportation of the surveyor(s) will need to be coordinated by the program. Much of this preparatory

work is administrative in nature, and you should recognize that it will put a significant burden on your administrative staff.

### Here are some tips and best practices to consider:

- » Ensure that a comfortable room of appropriate size to accommodate all survey-visit meetings is available. Ideally the surveyor will be located in the same room for the entire visit, unless site visits (or other special activities such as a visit to a simulation centre) have been pre-arranged. Remember that the surveyor will be in the room for at least a half day and in some cases more than 1.5 days, so it should be accessible, comfortable and close to washroom facilities. Ideally it will also have an adjacent room, office or reception area where groups awaiting the next meeting can congregate.
- » Refreshments are a nice touch but can be basic. If you are going to provide refreshments for the meeting attendees (residents, faculty, etc.) then make it absolutely clear in your communications with them that this is the case. Awkward moments occur and food is wasted when people are unsure if the refreshments are for them or not.
- » Arrange to have the surveyor escorted from place to place, even he or she simply has to walk down the hall. The surveyor has a lot to think about as he or she is striving to accurately review your program and should not be subjected to any further challenges or anxieties about how to navigate a new city or building. In most circumstances, the survey schedule will specify where, when and by whom the surveyor will be escorted each day.
- » To identify any last-minute issues, do a run-through of all documents a week before the survey visit and regularly remind all participants about the upcoming visit. Solicit members of the residency program committee to help organize particular groups of people for the visit (e.g., residents).

- » Be sure to brief other leaders on the nature of the accreditation process and what the anticipated issues are going to be. For example, department chairs and clinical chiefs may not be familiar with the process or some of the issues facing the program, or they may be unclear on their role and the questions they may be asked. If the surveyor uncovers any uncertainties like this on the part of other leaders, he or she may question the degree of support the program receives and the communication structure.
- » It is a good idea for the PD and a designated person to be available for the duration of the survey to ensure that any overlooked detail can be addressed and any last-minute request by the surveyor (e.g., a request to see a document not included in the materials provided) can be accommodated if possible.

## Follow-up and implications

Typically, the surveyor will provide little feedback during or immediately after the formal review. He or she will collect his or her thoughts, assemble the data and present a summary to the on-site survey team. The recommendation of this team will be communicated to the program director within 24 hours. Potential outcomes are as follows:

**Accredited program:** This designation is given to existing programs that are fully accredited, have no critical deficiencies, and in which time spent will generate credit for training (toward eligibility for the certifying examination). All accredited programs will be required to undergo some form of follow-up, as follows:

- » **Regular follow-up:** No major concerns exist; the next scheduled review will be done as part of the routine accreditation cycle (currently six years).
- » **Mandated review:** There are some weaknesses in the program that require attention in less than a full cycle, and the Royal College needs to see evidence of progress on the issues. The review will involve a repeat survey earlier than the full cycle interval and may take one of two forms.

- **Internal review:** No external individual will be involved. The review will be carried out by the university's internal review process and will include a written report from the residents. The Royal College will get a report of this review.
- **External review:** The Royal College will identify an external reviewer to carry out the review. This is done to address weaknesses that are (a) persistent over repeated surveys, (b) of a nature that call into question the ability of the university process to accurately assess them (commonly political or interpersonal issues, power relationships, etc.) or (c) highly specialty specific in nature and requiring the expertise of a specialist in the field. The specialist comes in from another university to eliminate conflict of interest.

- » **Progress report:** The university will be required to provide a written report to the Royal College outlining progress on specific issues that can reasonably be demonstrated by written means.

**Accredited program on notice of intent to withdraw accreditation:** There are weaknesses of sufficient magnitude to call into question the existence or safety of a functioning residency program. The program will need to show evidence that it has resolved the concerns in a short time frame or the program will lose its accreditation. All residents and prospective applicants will be made aware of this decision. Only in dire circumstances would an accredited program lose its accreditation immediately as a result of a survey: this might happen if the program completely lacked a curriculum, if there had been a catastrophic change in resources or faculty, or if it placed residents in a dangerous situation. All accredited programs, including those on notice, are accredited for the immediate future. The requirement for mandated follow-up reviews and reports does indicate, however, that the program has significant work to do to remain accredited, and a timeline and specific list of deficiencies will be provided to help the program address challenges.

**Withdrawal of accreditation:** The program has failed to demonstrate that it has responded to identified weaknesses during a period of notice; the integrity and ability of the program to graduate competent residents remain in question. The program will no longer have an accredited status, training in the program will no longer be recognized for certification purposes and the program must submit a new application to be considered for accreditation going forward.

**Accredited new program:** A new program has submitted an application that has substantially met the standards. The program can admit residents, training will be recognized and the program will undergo a review within two years of admitting its first resident.

## Key resource

- » The Royal College's website ([www.royalcollege.ca](http://www.royalcollege.ca)) includes the General Standards of Accreditation and other useful documents.

## Case resolution

You decide to limit the discussion of the issue to the formal meetings of the residency program committee. You reassure non-members who enquire about this issue that the proper process is being followed but you cannot discuss details. You keep the committee informed about the process being used to address the issue and ensure that all appropriate documentation is complete and accurate. You also ensure that the residency representatives on the committee keep their colleagues informed about the appropriateness of the process and you solicit their help in dissuading the residents from having uninformed and unprofessional discussions about this private matter. During the survey, the surveyor identifies the allegation as an issue and is able to clearly follow the process employed to address the issue. When

the survey is completed, the surveyor compliments the program on its attention to detail and respect for process. Given that the survey did not reveal any breach of accreditation standards related to this issue, the issue does not prevent the program from receiving a favourable recommendation for accreditation.

## Take-home messages

- » View accreditation as an opportunity to get an external expert's opinion on how the program may be improved in the future.
- » Accreditation is about processes rather than specific events. A good program is one that has all the building blocks in place to address issues that arise.
- » Proper preparation of documents and orientation of participants is essential to a smooth accreditation site visit. Ensure that all stakeholders are aware of the PSQ and any follow-up from the last site visit and that they understand their role in the program.



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