8 Governance in Postgraduate Medical Education in Canada

Co-leads
Nathalie Saad
Alim Pardhan

Authors
Alim Pardhan
Nathalie Saad

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Executive Summary

Residency training is critical to the academic, clinical, and professional skill development required for the optimal practice of medicine. Residents are at once learners, workers, teachers, and professionals. Residency education is governed by multiple groups, including regulatory authorities, governments, affiliated university programs, and certification bodies. The complexities of these interrelationships are difficult to understand, as these stakeholders and their interactions have evolved organically, with no true overarching plan. Given the importance of governance in the development of current and future medical practitioners, it deserves further examination.

This paper seeks to explore several themes. It defines the stakeholders in residency education and the existing governance structure, identifies gaps, overlaps, strengths, challenges and opportunities inherent in the current system. In addition this paper will compare the Canadian model to those in selected countries. Results show that, while the number of organizations involved is numerous, the system has developed informal mechanisms for information sharing and accountability over time. However, these mechanisms do have room for improvement, and consolidation of some functions within organizations is possible. While the current system has its challenges, there are opportunities that could be leveraged for a better residency process without negative impacts.

Based on the literature review and stakeholder interviews undertaken in the preparation of this paper, three key messages were identified:

1. In Canada, PGME is a matrix of multiple organizations with no one organization “in charge”. This lack of oversight has resulted in some duplication of roles, and there are opportunities to remove redundancy and inefficiency. Despite the confusing process, the system does work well to produce high quality physicians.

2. The current governance can be challenging for residents (especially international medical graduates) to navigate. While it may be easier to navigate than other countries, the high number of organizations, some with compulsory membership and some optional, has resulted in confusion for those who try to understand exactly who does what.

3. Despite its complexity, PGME does work in a collaborative fashion, partially because of the relatively small number of individuals involved in the governance of PGME. Despite the number of organizations involved, most individuals involved in governance are based at a limited number of academic centers and universities. It is not uncommon for individuals in leadership positions to move between organizations, thus creating informal communications networks and affiliations.
Introduction

Governance in postgraduate medical education (PGME) is presently managed by a number of different organizations, regulatory authorities, and educational bodies. Each has a specific mandate for the training, evaluation, licensure or representation of residents. In some cases, this mandate is codified in legislation, while in others; it has evolved over several years through convention. Despite the multiple governing bodies, no readily apparent overarching structure provides overall direction to the education and training of medical residents in Canada.

Background

PGME in Canada is a complex landscape and depends on multiple stakeholders and organizations to function. Stakeholders that are involved in various levels of governance include residents, faculty and other attending physicians, provincial housestaff organizations (PHOs), provincial regulatory authorities, universities, and governments. Each plays a distinct role and contributes to the complexity of the governance structure of PGME in Canada.

Central to PGME are residents, who have multiple roles within the health care system in Canada. They have been described as having two primary roles: first as a trainee working towards certification in a particular specialty under the auspices of a university postgraduate program, and second as an employee of the hospital providing patient care on a day-to-day basis. In addition to these "classic" roles, residents are professionals, licensed under the provincial regulatory authority, and teachers who teach medical students and junior residents.

As much of PGME is experiential, one key group that is often not thought to be part of the governance structure is faculty members who act as teachers, mentors and supervisors for postgraduate trainees. Depending on the university site and the status of the faculty members, these are often non-remunerated positions. Depending on the province or center, this group may or may not have formal representation. Locally, they may be represented through the medical staff associations and provincially by the provincial medical associations, which may or may not have a formal interest group for clinical teachers. Faculty working at academic health sciences centers (AHSCs) are often represented by their university departments, but this may be less common at peripheral centers.

While residents act as learners, workers and teachers throughout their training, they require work/life balance and supportive working environments. PHOs are the official representatives for residents on matters of education, working conditions and well-being. PHOs act as the collective bargaining units for the residents in each province and, in most provinces, the PHOs are established as professional associations with mandatory membership. Three PHOs, namely the Professional Association of Residents of British Columbia (PAR-BC), the Fédération des médecins résidents du Québec (FMRQ) and the Provincial Association of Interns and Residents of Saskatchewan (PAIRS), are formal trade unions. On the national level, with the exception of Quebec, all residents are represented by the Canadian Association of Internes and Residents (CAIR), and residents from Quebec are represented by FMRQ. PHOs, CAIR and FMRQ represent residents at local, provincial and national committees and organizations and are typically led by an elected council and a board of directors with support from a professional staff.

Residents are health care professionals, and as with other physicians, are licensed by the provincial regulatory authorities. In general, postgraduate trainees have educational licenses restricting them to practice medicine only where required by their residency program and under supervision. The regulatory authorities are responsible for setting the standards and requirements of resident supervision.  

While the resident is a learner, he or she is also a worker. In most cases, a large percentage of postgraduate training occurs at hospitals. Resident trainees are employed by the hospitals and
provide clinical services concurrently with their training. Historically, training has been restricted to AHSCs; however, in recent years, it is becoming more distributed to non-AHSC hospitals as well as private facilities and hospitals. Hospitals have a number of responsibilities, which include, for example, ensuring work conditions in the hospital are in compliance with relevant legislation and collective bargaining agreements, providing space for working and teaching of trainees, and providing services to the residents as required by the collective agreements such as occupational health, salary and benefits.

The most commonly understood components of governance in PGME in Canada are the Royal College of Physicians and Surgeons of Canada (RCPSC) and the College of Family Physicians of Canada (CFPC). The role of the national educational colleges is to set the standards for and accredit both individual residency training programs and the universities that deliver residency training. The colleges are also responsible for evaluating and certifying the competence of postgraduate trainees at the conclusion of residency training.2, 3

In addition to the RCPSC and the CFPC, the Medical Council of Canada (MCC) also evaluates medical trainees at two points through their training: the first is immediately on completion of medical school, the second after the first year of residency. The MCC provides the qualification (Licentiate of the Medical Council of Canada) that is a requirement for entry into practice.4

Although the model of governance in most provinces is fairly similar, the system in Quebec has a slightly different model. The Collège des Médecins du Québec (CMQ) plays multiple roles in the province of Quebec. As with other regulatory authorities, the CMQ provides the license required for physicians to practice medicine in the province of Quebec. In addition, the CMQ is responsible for accrediting residency training programs in the province of Quebec. In the past four years, the CMQ, the RCPSC and the CFPC have harmonized their accreditation processes. Historically, the CMQ would accredit and issue its decisions independently of the RCPSC, but, under the new process, one common decision is endorsed. Similarly, since 2007, no separate specialty examination is required to practice medicine in Quebec, with the RCPSC and CFPC exams and certifications being used instead.

Universities are considered the center of PGME in Canada. All residency programs in Canada must be affiliated with a university.5 Each university site has one or more hospital affiliations, where postgraduate trainees work under the supervision of attending physicians/faculty members. The universities are responsible for providing the infrastructure for both the postgraduate education offices, which provide overall administration for all postgraduate trainees and programs at the university, as well as for individual postgraduate training programs. Universities’ postgraduate education offices and individual residency programs are responsible for meeting the accreditation requirements set by the national educational colleges, ensuring appropriate supervision for postgraduate trainees as required by the regulatory authorities and providing appropriate support for residents and faculty members.

The government also plays several roles in the governance of PGME. This is generally facilitated through the provincial ministry or department of health. In some regions this responsibility is shared with the Ministry responsible for higher education (e.g. the Ministry of Training, Colleges, and Universities in Ontario). The government plays a key role as the primary financial source for resident education by providing the funds required to support postgraduate offices, residency programs as well as the salaries and benefits paid to residents. In addition, provincial governments are responsible for ensuring that appropriate training is taking place and the systems in place are organized and working. From an organizational perspective, provincial governments play a major role in determining the mix and distribution of residency programs – which ultimately determines the mix and distribution of physicians. Finally, the government is responsible for representing the public interest in PGME.

It is evident that the governance structure in PGME in Canada is complex with numerous roles and players. Adding to the complexity is the fact that many of these organizational structures have
developed independently of one another and have limited formal inter-organizational connections. This is often mitigated somewhat by the significant overlap in the leadership of these organizations; however, there are occasions where the limited inter-organizational connections can lead to challenges for individual programs, universities and residents. Appendix 2 outlines the responsibilities and relationships of the different stakeholders in the PGME system in Canada.

Methodology

The review of governance in PGME was one of 24 commissioned papers commissioned for the Future of Medical Education in Canada Postgraduate (FMEC PG) Project. The physicians recruited to compose this paper were sought out for their expertise within the theme parameters and familiarity with the governance structure. The theme leads and research assistant performed literature searches from 2000 to present through PubMed, ERIC, MedLine, Google Scholar, and OVID. Pertinent research was also found within grey literature (College of Physicians and Surgeons in Ontario, RCPSC, MCC, CFPC). International literature searches were also performed, with a concentration on the similarities and contrasting features of comparable governance structures. By utilizing reference lists and citations from relevant articles and personal interviews, additional resources were located.

Literature Search

One of the important facets of our research was to examine current national and international literature on this topic. This exercise involved the examination of several databases, including Eric, Medline, Ovid, and PubMed. Key search terms included:

- Governance, Administration, Organization, Model
- Medical School, Medicine, Postgraduate, Education
- Resident, Residency, Registrar, Housestaff
- Dual Role, Registration, Licensure, Assessment
- Canada, United States of America, United Kingdom, Australia.

Although multiple articles were identified, few specifically discussed the topic of governance or organization of PGME at the national level. Despite this limitation, several were reviewed for context and background information.

Interviews

Interviews were conducted with a cross section of stakeholders who provided significant insight into this topic. Interview requests were sent to representatives from a number of different organizations including the educational colleges, postgraduate medicine offices, postgraduate deans and provincial housestaff organizations. Interviews were conducted using a standard set of questions (see Appendix 4) with representatives from the RCPSC, CFPC, the Ministry of Health and Long-Term Care, the Professional Association of Interns and Residents of Ontario, the Provincial Association of Interns and Residents of the Maritime Provinces, the Professional Association of Residents of Alberta, The FMRQ, the University of British Columbia, and McGill University.

Limitations

There were limited written resources on the topic of governance in PGME.

The International Perspective

In order to further explore governance in PGME, there is value in exploring the systems in place in other comparable jurisdictions, namely the United States (US), the United Kingdom (UK) and
Australia. This examination identifies strengths and challenges faced by other countries and may inform the discussion when considering potential changes to the Canadian system.

**Table 1: International Perspective**

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<th>Canada</th>
<th>USA</th>
<th>UK</th>
<th>Australia</th>
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<tbody>
<tr>
<td><strong>University Involvement</strong></td>
<td>High</td>
<td>Variable(^1)</td>
<td>Minimal</td>
<td>Minimal</td>
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<tr>
<td><strong>Source of Curriculum</strong></td>
<td>Family Med – CFPC</td>
<td>ACGME with input from Medical Boards</td>
<td>Foundation Years – GMC</td>
<td>Pre-Vocational Training – Post Graduate Medical Education Councils</td>
</tr>
<tr>
<td></td>
<td>Specialties – RCPSC</td>
<td>Specialty Training – Royal Colleges with approval from General Medical Council</td>
<td>Specialty Curricula – Specialty Colleges</td>
<td></td>
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<tr>
<td><strong>Accreditation</strong></td>
<td>Family Med – CFPC</td>
<td>ACGME</td>
<td>General Medical Council</td>
<td>Pre-Vocational Training - Post Graduate Medical Education Councils</td>
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<td>Specialties – RCPSC</td>
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<td>Specialty Colleges – Australian Medical Council</td>
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<td></td>
<td>PG Offices/ Universities – CFPC &amp; RCPSC</td>
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<td>Training Sites – Specialty Colleges</td>
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<td><strong>Trainee Evaluation &amp; Certification</strong></td>
<td>Initial Qualifying Exams – MCC</td>
<td>Licensing Exams – USMLE, implemented by the FSMB &amp; NBME</td>
<td>Specialty Specific Royal Colleges</td>
<td>Australian Medical Council for General Registration</td>
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<td></td>
<td>Family Med – CFPC</td>
<td>Specialty Board Exams – Specialty Boards</td>
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<td>Specialty Specific Colleges for Specialty registration</td>
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<td>Specialties – RCPSC</td>
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<tr>
<td><strong>Resident Representation</strong></td>
<td>Provincial – PHOs Nationally – CAIR</td>
<td>Many residents not unionized or in professional association</td>
<td>Junior Doctors Committee (JDC) of the British Medical Association (BMA)</td>
<td>Australian Medical Association Council of Doctors-in-Training (AMACDT)</td>
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<td></td>
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<td>Largest resident union is CIR</td>
<td></td>
<td>For Bargaining - joint function of the local AMA chapters as well as the local public sector union.</td>
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</table>

\(^1\) In the United States, residency programs can be based at either a university or a community hospital site

CFPC – College of Family Physicians of Canada
RCPSC – Royal College of Physicians and Surgeons of Canada
PG – Post Graduate
MCC – Medical Council of Canada
PHO – Provincial Housestaff Associations
CAIR – Canadian Association of Interns and Residents
ACGME – Accreditation Council of Graduate Medical Education
FSMB – Federation of State Medical Board
NBME – National Board of Medical Examiners
CIR – Committee of Interns and Residents
University Involvement

One of the unique features of PGME in Canada is the central role played by the universities. As outlined above, all residency programs in Canada must be affiliated with a university. Although most residency training occurs in the teaching hospitals, much of the infrastructure for the residency programs and support for the residents are provided by the university at which the residents are based. In most cases, the university is affiliated with multiple teaching hospitals, allowing residents to undertake clinical rotations at multiple sites to best suit the needs of their training program.

The Canadian model is unique when compared to other jurisdictions. In the US, residency programs can be based at either a university or a community hospital site. Although there is not a great deal of literature comparing these types of sites, the perception is that, in most cases, university-based sites are more research and academically focused, whereas community-based sites tend to focus primarily on clinical training. One potential advantage of this model is that it does provide two streams of postgraduate training: one that produces graduates who will likely go on to subspecialize and work in academic environments, and a second stream who will likely practice more clinically-based medicine.

Postgraduate training in the UK is coordinated by the General Medical Council (GMC), which is also the regulatory authority for the UK. This training is implemented by the postgraduate deaneries who are responsible for working with the relevant stakeholders to ensure that postgraduate education is delivered. The deaneries are not necessarily affiliated with universities, but are allocated geographically across the country. In addition to the geographical allocation of deans there are also lead deans who are responsible for specific specialties on a national level. The deans work with the National Health Service Trusts (public corporations responsible for delivering health care) to ensure appropriate training environments for postgraduate trainees in the United Kingdom. The standards and curriculum for junior doctors (the UK equivalent of residents) are set by the GMC for the foundation years (postgraduate years 1 and 2) and by the royal colleges and faculties of medicine (with GMC approval) for specialist training (general practice as well as other specialties).

Similarly in Australia, there is minimal university involvement in PGME. Pre-vocational doctors, defined as PGY1 and PGY2 trainees in the general part of their training, prior to entering specialty (vocational) training, generally fall under the jurisdiction of the provincial and territorial postgraduate medical education councils. Following these initial years; registrars (the Australian equivalent of residents) typically apply to a particular college for specialty training. Once accepted to a college, registrars then have to apply to accredited hospitals for registrar positions and rotations, which count towards their specialty training.

Curriculum and Accreditation

Postgraduate training programs in Canada derive their curricula from one of two organizations. At present, family medicine training programs obtain their curriculum from the CFPC and other specialty programs from the RCPSC. Within the RCPSC, there are a number of specialty committees that are responsible for setting the objectives of training for each specialty and determining what rotations and experiences are necessary for postgraduate trainees to complete their training. Postgraduate Offices and residency programs are also accredited by the RCPSC and CFPC. Presently, regular full accreditation visits occur as a joint process between the two colleges every six years. Individual program surveys include input from the specialty committee to ensure that each program is complying with the standards of training for that specialty.

All residency programs in the US are accredited by the Accreditation Council of Graduate Medical Education (ACGME). Each specialty has a specific Residency Review Committee, which is made up of a number of representatives, including representation from the particular specialty's medical board. This Residency Review Committee is responsible for setting program requirements, the objectives of training as well as accrediting residency programs in the US.
The GMC is responsible for postgraduate training programs in the UK. The curriculum and standards for the first two years of training (the foundation years) are set by the GMC. Following the foundation years, postgraduate trainees move to specialty training. Each specialty in the United Kingdom has its own Royal College, which is responsible for developing the specialty curricula in accordance with the guidelines established by the GMC. Once developed, these curricula must be approved by the GMC before they can be used to deliver specialty training programs. The GMC is also responsible for accrediting the foundation program through the Quality Assurance of the Foundation Programme (QAFP) and the specialty programs.

Similar to the UK, postgraduate trainees in Australia are divided into two groups. There is an initial program for pre-vocational doctors for whom the curriculum is set by the postgraduate medical education councils (provincial and territorial) who are also responsible for the accreditation of pre-vocational hospital training posts. Following this initial period, registrars apply to a particular specialty college for specialty training. Once accepted to a specialty college, registrars then have to apply to accredited hospitals for registrar positions and rotations which count towards their specialty training. The Australian Medical Council is the national standards body for medical education, yet is not the regulatory authority. The Australian Medical Council accredits medical schools and the various specialty colleges. Training sites (e.g., hospitals) are individually accredited by the different specialty colleges. For postgraduate posts to count towards specialty training, they must be at a site that has been accredited by the specific specialty college.

Trainee Evaluation and Certification

This paper only discusses summative formal evaluations, as opposed to in-training and formative evaluations done at specific training sites.

There are several steps to the evaluation and certification of postgraduate medical trainees in Canada. Upon the completion of medical school, graduates undergo a written examination, the Medical Council of Canada Qualifying Exam (MCCQE) Part 1. This is followed at the end of the first year of residency by the MCCQE Part 2, an Objective Structured Clinical Examination (OSCE). Both of these exams are administered by the Medical Council of Canada. Successful completion of these exams entitles physicians to be entered on the Canadian Medical Register as a Licentiate of the Medical Council of Canada (LMCC). The LMCC is one requirement for practice in most Canadian jurisdictions. At the conclusion of residency, postgraduate trainees sit an examination administered by either the CFPC (for family medicine trainees) or the RCPSC (for all other specialties). Successful completion of the exam and residency training leads to certification in that specialty by the relevant national educational college. In most cases, certification by the RCPSC or the CFPC is a requirement for new physicians entering practice. There are alternative pathways for international medical graduates (IMGs), particularly those who have training and practice experience in other jurisdictions; however, this makes up a minority of new practicing physicians. IMGs entering residency training must also write the MCCEE (The Medical Council of Canada Evaluating Exam) prior to applying for residency in Canada.

The system in the US is similar. Medical students typically write the United States Medical Licensing Exam (USMLE) Part 1 following their second year of medical school. This is followed by the USMLE Part 2, which is typically written in the final year of medical school. The USMLE Part 2 has two components: a clinical knowledge (CK) component, which is a written exam, and a clinical skills (CS) Component, which is an OSCE style examination. The final step is the USMLE Step 3, which has multiple-choice test items and computer-based case simulations. The USMLE Exams are a joint endeavor of the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME). Upon the completion of residency training in accredited programs, most physicians can practice medicine within their specialty as board-eligible practitioners. The majority go on to write their specialty board exams, which are administered by their specific specialty boards.
In the United Kingdom, following graduation from medical school, postgraduate trainees may write several exams during their specialty training years. These examinations are set by the specialty-specific royal colleges and may take a variety of formats including multiple choice, short answer and OSCE style exams.

Australia has several pathways to registration. General registration can be obtained by writing the Australian Council of Medicine exams, which are composed of a written and clinical component following one year of internship. In general, the majority of postgraduate trainees choose to undergo specialist training and assessment. Specialist registration is obtained by completing training at accredited teaching sites and completing the specialty examinations set by specialty colleges.26

Resident Representation

Canada is unique in that it has well organized, independent and robust professional associations that represent postgraduate trainees at all levels. The PHOs represent residents at the local and provincial level including negotiating collective agreements with the employer (depending on the province, this may be the hospitals, the regional health authorities or the provincial government), at local and provincial committees, and to the local and provincial governments. At the national level, CAIR and FMRQ represent residents to the national educational colleges, other national organizations and the federal government. Resident membership in PHOs is mandatory, thereby ensuring that all residents in Canada are represented by a professional association.

In the US, some residents are unionized. The largest resident union in the US is the Committee of Interns and Residents (CIR), which represents approximately 13,000 residents. This is only a small proportion of residents in the U.S and involves residents primarily at public hospitals. The majority of residents in the US are not unionized. Unlike Canada, where resident organizations have representation at most local, provincial and national stakeholder groups; the same cannot be said in the US. While many committees do have resident representation, they often do not come from resident organizations with the infrastructure and support they provide.

In the UK, junior doctors are represented by the Junior Doctors Committee (JDC) of the British Medical Association (BMA). This committee represents the post graduate trainees to government, other medical and political organizations, including the royal colleges and other educational bodies. The JDC also represents and negotiates on behalf of the junior doctors on educational and contractual issues.27

In Australia, the system is similar where doctors in training are represented by Australian Medical Association Council of Doctors-in-Training (AMACDT). As in the UK, the AMACDT is a committee of the Australia Medical Association (AMA). The AMACDT represents residents to the AMA on broad policy issues including working hours, education, and training.28 The various provincial chapters of the AMA also have councils of registrars and residents that work on local issues. Unlike in other jurisdictions, the AMACDT does not represent doctors in training on issues of bargaining, which is a joint function of the local AMA chapters as well as the local public sector union.29

One of the notable differences between the UK, Australian systems and the Canadian model is that the JDC and AMACDT are committees within the BMA and AMA, whereas in Canada, the PHOs are independent organizations. There is a varying degree of collaboration and support between the PHOs and the provincial medical association. Postgraduate trainees may also choose to be members of their provincial medical association or the Canadian Medical Association; however, on most issues, they are represented by their PHOs.

Discussion

Given the limited literature on the topic of governance in PGME in Canada, a large proportion of
information was obtained from interviews with various stakeholders. Each stakeholder provided a perspective of the governance structure in Canada based on his or her position in and experience working within the system. The strengths and future challenges described by the stakeholder interviews provided further clarity on the description and complexity of the governance structure in PGME in Canada.

Strengths of the Governance System

Interviewees provided strong evidence that Canadian training programs consistently produce well-educated, competent physicians. Despite the complexity and challenges that face PGME, residents are generally successful at completing their certification exams as well as being successful in future practice. As such, potential recommendations should be weighed against the possibility of negatively altering a system that at present works quite well.

Compared with international jurisdictions, a best practice of the Canadian PGME system is that residency programs must be supported within a university. This ensures that while there are service requirements that are placed on the residents, there continues to be a focus on the education and training of the postgraduate trainee. Training sites for residency educations must have affiliation agreements with the university. These agreements ensure that residents have an appropriate environment for working and training. This includes not only working conditions, but also appropriate space for teaching, offices and structures in place for training.

When asked about the multiple players and overlap of competing interests in the PGME governance system, a number of informants commented that the heterogeneity is often a strength as it provides a number of different forums where similar challenges can be examined from different perspectives. This multitude of perspectives reinforces that more than one option is considered. As the medical education community in Canada is relatively compact, it was noted that a small group of committed individuals have a degree of overlap between organizations; this may act as a surrogate for the lack of formal connections between certain organizations.

Also noted by multiple interviewees was that the number of stakeholder organizations and structure is actually quite small when compared to other international jurisdictions. Specific examples included the consolidation of all accreditation and evaluation functions to the two national educational colleges and the MCC. Despite this, a few comments suggested that perhaps this could be further consolidated to a single national educational college.

A further identified strength is that, unlike in some jurisdictions, once residents match to a particular program, there is a great deal of stability and, in most cases, residents remain in the same program and university until the completion of their initial residency program. Internal medicine and pediatrics have a second match for subspecialty training, but even in this case, there is generally a single stream of training until the subspecialty match in PGY3.

Current Challenges

Although identified as having components of strength, one area of concern was the number of stakeholder organizations involved in PGME. Although fewer in number than other jurisdictions, this issue was noted by almost all interviewees. The number of organizations creates important challenges for both residents and those responsible for managing residency programs (program directors and postgraduate offices). It is not uncommon for residents and program directors to be unsure of which organization to turn to for direction on a particular issue. This can be seen at the local level in terms of specific division of responsibilities between universities and hospitals, as well as more globally on issues such as resident supervision.

There is a lack of clarity about which organization is ultimately responsible for PGME, since this role is
claimed by a number of bodies - including the national educational colleges, universities, and in addition, the lines of accountability in PGME are often unclear. As an example, an individual postgraduate office has a number of lines of accountability which include:

- Postgraduate (PG) offices have certain responsibilities that are mandated by the RCPSC and CFPC.
- PG offices receive funding from government ministries and, as such, are also accountable to the government.
- As most academic hospitals require residents to function, PG offices and individual programs must ensure adequate staffing by housestaff to provide clinical service functions.
- The PG offices are accountable to the regulatory authorities to ensure that residents have the supervision and support that is required under the terms of an educational license.
- Albeit indirectly, the universities, PG offices and programs are ultimately accountable to the public in ensuring the quality of residency training.

The number of organizations and the lack of clarity in lines of accountability are further exacerbated by the lack of communication between the stakeholder organizations. It is not uncommon for a stakeholder organization to make a decision without consulting with other organizations. This can often lead to unintended consequences, which then need to be managed by the postgraduate offices and individual programs. This confusion often leads to the inconsistent application of policies not only between provinces, but also between universities and, in some cases, programs. A specific example of this is the Waiver of Training Policy created by the RCPSC and CFPC. Although this policy was implemented by the national educational colleges to standardize the process for residents who have taken leave during their residency training to apply for a waiver of a portion of the missed time, the application of the policy has been inconsistent. Individual universities have different policies of how this policy is applied: some follow the policy as laid out by the RCPSC and CFPC, while others opt not to allow waivers of training, regardless of the specific resident or circumstances. A further example of this is the lack of national coordination on certain issues such as the mix of residency spots in each province. At present, each province individually decides which specialty mix should be admitted each year; yet, often the needs or requirements of other provinces are not taken into consideration. This poses a challenge for more specialized programs, where other provinces may not have the resources for a training program and depend on graduates from larger centers to address the demand.

In addition to the lack of communication between stakeholders, there also appears to be a lack of communication between medical organizations and the government agencies that fund residency training. As programs and policies are instituted, there is often an additional cost, which is then passed on to the government, often with ambiguous indications or discussions about the potential return on investment. In many cases, the decisions are made without consultation with the government on how the changes will improve the care of the population. Part of the challenge is the differing priorities of the parties. The educational colleges and universities focus on scholarship, increased standards, specialization and academic medicine, whereas the government priority is on the broader picture, specifically the needs of the population at the present time.

Further to the role of various organizations in the governance of PGME, there are also challenges around the role of residents. Historically, residents gained experience and education simply by working in the hospital with more senior physicians. This model has changed, with residents having a more balanced role of both employee and trainee. There is a perception among some interviewees that, in some cases, residents are moving further along the spectrum, with fewer service requirements and increased educational time. There is also a lack of clarity around the resident reporting structure. Residents are employees of the hospital, represented by a professional association or union and are also trainees within university postgraduate programs. In some provinces, the universities are bound by the terms of the agreement, despite not being party to negotiations or being signatories to the
agreement. This topic is covered in more detail in commissioned paper 9: Issues Related to Residents as Workers and Learners.

Future Challenges

One of the future challenges for PGME is the tension that exists between the increasing demand for general practitioners and the rising pressure on postgraduate trainees to specialize and subspecialize. Many residents are encouraged to take additional time during their training to subspecialize or pursue additional training in the form of Masters or PhD training. With the aging population, additional practitioners, particularly in the primary care and more general specialties, will be needed, yet many residents are choosing to subspecialize. There are a number of factors that play into this tension. Specially committees at the RCPSC are often made up of specialists from academic centers, which often results in a push to increase the standards of training to require additional training. This composition may also lead to a failure to recognize the necessity to train practitioners to function in non-tertiary care environments. A further pressure is that, as the majority of specialty training occurs in academic centers, the majority of mentors for postgraduate trainees are subspecialists or academics. Once postgraduate trainees have this additional training, locations that can support their subspeciality or academic practice is often restricted to tertiary care and academic centers. Finally, these physicians often do not provide full-time clinical practice, as much of their time may be spent on research or teaching.

There is an increasing demand from governments and the population at large for community physicians who can provide primary care. As the government funds the majority of this training, it is asking, and likely will continue to ask, what the return of investment will be for this additional training. This issue highlights the lack of formalized communication between the national educational colleges, universities and government; all of whom play key roles in PGME.

Another challenge is the continuous increase in distributed medical education. A greater number of residents are training outside of the traditional academic centers, which is posing a number of challenges to the existing governance models. As a result, postgraduate trainees and clinical faculty are geographically removed from the administrative structures that are in place to support them, which leads to potential issues with teaching, supervision and access to support mechanisms. Although some of these hurdles can be mitigated with effective use of technology, they will continue to exist and likely grow as a greater percentage of residents are trained outside of traditional settings. Accrediting bodies will also have additional challenges, as an increase in the number of sites will invariably make accreditation of programs more difficult due to the geographical restraints of operating different teaching sites.

The final challenge that will have future implications on the PGME governance system is the increased number of IMGs in Canada. Governments and regulatory authorities have developed a number of alternate pathways for IMGs to enter practice. A number of these pathways require additional resources, particularly at the university level. Although IMGs play a vital role in ensuring an adequate supply of physicians in Canada, care must be taken to ensure that the educational continuum of Canadian medical graduates is not compromised. Many of the current governance models have not been modified to account for the presence of IMGs in the training system. One example of this is the existing accreditation process that reflects an assumption that residents are a relatively homogenous group. This is somewhat inconsistent given that the success of IMGs is often attributed to additional support structures and resources in the system.

Opportunities

At present, a number of organizations have consolidated their roles to streamline processes. This includes the consolidation of the accreditation process between the RCPSC and CFPC, the adoption of the CanMEDS roles by the CFPC, and the ongoing discussions around harmonization of the
MCCQE Part 2 and the CFPC exam. There may be value in examining further consolidation between the national educational colleges and evaluating bodies, which would lead to a decrease in the number of organizations and improve communications between organizations.

One major challenge raised is the lack of communication between different organizations, which exists at all levels of PGME. There are several possible solutions to this issue that should be examined. The first is to develop forums for increased formal communication between organizations by using representatives responsible for decision making on behalf of their own organization. The second possibility would be to develop an overarching organizational structure for all the stakeholders in PGME where they could meet on a semi-annual or quarterly basis to bring forward issues of national importance and address specific challenges. As above, it is critical for the representatives to this organization be in a position to make decisions on behalf of their organization. Regardless of what system is adopted to increase formal communications between the stakeholders, it is necessary to include both postgraduate trainees (likely through the PHOs, FMRQ and CAIR) as well as provincial governments to ensure that these two essential stakeholder groups are well represented.

Currently, there is limited orientation for both program directors and residents as to who the various players are in PGME. It is uncommon for the average resident to know the different stakeholder groups, their role and how they can be accessed when issues arise. The PHOs play an important role in assisting residents when these types of issues arise; however, there may be value in ensuring that all residents have some degree of familiarity with the different stakeholder groups and their role in PGME. It is equally important that program directors be familiar with not only the various stakeholder groups, but also the relevant policies that are in place for PGME.

Conclusion

Despite the challenges facing PGME in Canada, the system is robust in that it produces excellent medical graduates who are successful in practice. One of the larger challenges that faces PGME in Canada is the current state of governance. The multiple organizations and stakeholders result in different agendas and priorities with no clear overarching strategy or plan. It is evident from the literature that, although these issues exist in Canada, they are also prevalent in other jurisdictions.

While the purpose of governance in PGME is ultimately to provide a quality resident education, it is important to factor in the other external pressures that will affect residency education and also take into account the multiple roles of residents. The challenges that face PGME in Canada will likely continue to grow as the number of residents in distributed sites and the number of IMGs continue to grow. It is also important to factor in the tensions that will inevitably occur between the need for generalist practitioners to care for society and the increasing pressures on residents to subspecialize.

Many of the governance challenges facing PGME in Canada can be attributed to challenges in communication and a lack of clarity as to who is responsible for what areas of PGME. It is essential that, as we move forward, the level of communication between stakeholders increase on a national, provincial and local level and include all stakeholders, particularly the resident associations and government agencies responsible for resident education. It may be more effective to develop a formal overarching governance structure that puts all stakeholders under the same umbrella with a collective mission and common objectives. Ensuring a solid governance structure with clear roles and objectives will ensure that Canadian PGME continues to improve and remain a global leader in medical education.
References


2. Royal College of Physicians and Surgeons of Canada. About the Royal College. 2009 http://www.rcpsc.edu/about/


Appendix 1: About the Authors

Alim Pardhan, MD, FRCP(C)

Alim Pardhan is an Assistant Clinical Professor in the Division of Emergency Medicine at McMaster University. He completed his medical school at the University of Manitoba and completed his residency at McMaster University in Emergency Medicine in 2009. He was on the Board of Directors for the Professional Association of Interns and Residents of Ontario (PAIRO) from 2005-2010 and the President of PAIRO in 2008-2009.

Nathalie Saad, MD

Nathalie Saad is a Respirology resident at McGill after obtaining her medical degree from the University of Ottawa. She was President of the Academic Affairs Committee – Specialties of the FMRQ for 3 years from 2007 to 2010 and is now Vice-President of Union Affairs at the McGill Association of Residents. She is also currently involved in the re-organization of the Plans Régionaux d'Effectifs Médicaux (PREM) in Quebec.
Appendix 2: Overview of PGME Governance - Partners, Roles and Responsibilities
<table>
<thead>
<tr>
<th>Partners in the Postgraduate Medical Education System</th>
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<tbody>
<tr>
<td><strong>Government &amp; Governmental Agencies</strong></td>
</tr>
<tr>
<td>• Sets expectations for medical care in Canada Health Act</td>
</tr>
<tr>
<td>• Develop legislation, policies, and standards for health care systems</td>
</tr>
<tr>
<td>• Identifies health needs</td>
</tr>
<tr>
<td><strong>Universities</strong></td>
</tr>
<tr>
<td>• Establish mission, policies and guidelines to meet health system and health needs</td>
</tr>
<tr>
<td>• Prepare physicians to provide care</td>
</tr>
<tr>
<td>• Provide environment where faculty can fulfill tri-partite role in patient care, research, and teaching</td>
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<tr>
<td><strong>Regulatory Bodies</strong></td>
</tr>
<tr>
<td>• Establish standards to ensure quality care and protect the public</td>
</tr>
<tr>
<td><strong>Professional Associations</strong></td>
</tr>
<tr>
<td>• Promote professionalism and collaboration</td>
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<tr>
<td>• Advocate for members and patients (e.g., safe working environments/conditions)</td>
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<tr>
<td>• Provide malpractice insurance</td>
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<tr>
<td><strong>Academic Hospitals</strong></td>
</tr>
<tr>
<td>• Provide patient care</td>
</tr>
<tr>
<td>• Work to meet clinically accepted standards (e.g., wait times)</td>
</tr>
<tr>
<td>• Prepare students to meet population health needs</td>
</tr>
<tr>
<td>• Respond to/implement health system policies (e.g., wait times strategies)</td>
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<tr>
<td>• Establish standards to ensure quality care and protect the public</td>
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<tr>
<td><strong>Certifying Bodies</strong></td>
</tr>
<tr>
<td>• Establish competencies required to deliver patient care</td>
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<tr>
<td>• Set standards for accreditation and certification</td>
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<table>
<thead>
<tr>
<th>Roles &amp; Responsibilities</th>
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</thead>
<tbody>
<tr>
<td><strong>HR/HIR Planning to meet health needs</strong></td>
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<tr>
<td>Develop policies to recruit right number, mix and distribution of physicians to meet needs.</td>
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<tr>
<td>• Establish UGME quota</td>
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<tr>
<td>• Influence r/type of PGME positions/CAfRMS match</td>
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<tr>
<td>• Offer return-service and other incentives</td>
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<tr>
<td>• Develop IMG/Re-Entry programs &amp; other streams</td>
</tr>
<tr>
<td><strong>Health System &amp; Patient Care</strong></td>
</tr>
<tr>
<td>Develop policies to recruit right number, mix and distribution of physicians to meet needs.</td>
</tr>
<tr>
<td>• Establish UGME quota</td>
</tr>
<tr>
<td>• Influence r/type of PGME positions/CAfRMS match</td>
</tr>
<tr>
<td><strong>Education &amp; Training</strong></td>
</tr>
<tr>
<td>• Develop and deliver curriculum based on standards for certification</td>
</tr>
<tr>
<td>• Negotiate affiliation agreements with teaching sites</td>
</tr>
<tr>
<td><strong>Human &amp; Financial Resources</strong></td>
</tr>
<tr>
<td>Provide funding through:</td>
</tr>
<tr>
<td>• Funding for UGME and PGME</td>
</tr>
<tr>
<td>• Hospital Operating Budgets</td>
</tr>
<tr>
<td>• Doctor Billings</td>
</tr>
<tr>
<td>• Trainee Salaries</td>
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<tr>
<td>• FP/YT Transfers</td>
</tr>
<tr>
<td><strong>Assessment &amp; Certification</strong></td>
</tr>
<tr>
<td>• Develop programs to assess international medical graduates</td>
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<tr>
<td>• Implement and enforce the Agreement on Internal Trade (AIT)</td>
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<tr>
<td>• Enforce Human Rights Legislation</td>
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<tr>
<td><strong>Provide</strong>:</td>
</tr>
<tr>
<td>• Teachers</td>
</tr>
<tr>
<td>• Academic and Administrative Infrastructure</td>
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<tr>
<th><strong>Negotiate trainee salaries (residents’ association)</strong></th>
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<tbody>
<tr>
<td>• Negotiate collective agreement with resident association and pay trainees</td>
</tr>
<tr>
<td><strong>Provide</strong>:</td>
</tr>
<tr>
<td>• Training Sites</td>
</tr>
<tr>
<td>• Academies</td>
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<tr>
<td>• Foundation</td>
</tr>
<tr>
<td>• Inframurum</td>
</tr>
<tr>
<td><strong>Issue restricted licence without certification to allow trainees to practice</strong></td>
</tr>
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<p>| • Assist in developing curriculum to achieve competencies and meet standards for certification |</p>
<table>
<thead>
<tr>
<th><strong>Assess and certify trainees:</strong></th>
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</thead>
<tbody>
<tr>
<td>• Assess and certify trainees</td>
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Appendix 3: Annotated Bibliography


In Canada, two organisations are responsible for both the accreditation of residency programs and the credentialing of the residents. In the United States, multiple organisations fulfil those roles the ACGME accredits residency program while individual specialty boards credential residents at the completion of their training. In terms of accreditation, both countries emphasise the same criteria. The main differences arise from: sponsorship for residency programs (in Canada, all programs must be affiliated to a medical school which is not the case in the US) and from the way surveys are conducted. It also appears that the Canadian system, because it relies on volunteers for site visits, is a less expensive model.


This report looked at the situation of medical education in 5 different countries. In postgraduate medical education, some important points are highlighted. First, accountability for postgraduate medical education varies widely from one country to the next (for some the Universities are responsible, for others the teaching hospitals are). Second, some countries have independent Specialty Colleges. Third, some countries do not require a College certification in order to practice. Lastly, the number of positions in postgraduate training is determined either by the government (based on national needs) or by the medical school depending on the country.


The complexity of postgraduate medical education and training in Australia requires: recognition that there are many stakeholders (junior medical officers, registrars, teaching clinicians, health departments, governments, colleges and society) with overlapping but competing interests and responsibilities; a national dialogue to clarify the necessary resource investments and to assign explicit accountabilities; and improved coordination and governance, while maintaining appropriate flexibility. In other countries, stronger mechanisms of governance for oversight of postgraduate medical education have emerged, and Australia can learn from these.
Appendix 4: Standardized Interview Questions

OVERVIEW:

As part of the Future of Medical Education in Canada Post Graduate (FMEC PG) project we are examining the governance of PGME in Canada.

For the purposes of this project

⇒ we are defining governance as the structures, systems and processes that ensure the quality, accountability and outcomes for Post Graduate Medical Education in Canada

⇒ Governance for PGME in Canada is a shared activity across a collection of many different organizations who each have different roles and responsibilities in ensuring the quality, accountability and outcomes for Post Graduate Medical Education.

⇒ Some organizations have a direct responsibility for the quality, accountability and outcomes of PGME in Canada while other organizations have a keen interest as a stakeholder.

⇒ Currently in Canada, there are dozens of national and provincial organizations who share in PGME governance or are interested stakeholders responsibilities in ensuring the quality, accountability and outcomes for Post Graduate Medical Education.

QUESTIONS:

1. What part do you (or your organization) play in making sure that PGME ‘works’?

2. Who do you view as the organization(s) MOST DIRECTLY responsible for the quality, accountability and outcomes of PGME in Canada?

3. What about the current governance of PGME works?

4. What about the current governance of PGME does not work?

5. What is/are the most important parts of current governance that need to be fixed? Your advice/suggestions for ‘fixing’ or improving?

6. Can you give examples of when the number and diversity of organizations and stakeholders has led to challenges OR confusion?

7. Can you think of situations where the current structure has not worked for a particular resident or program?

8. Do you have any suggestions on how the present system could be:
   - Improved & Streamlined?
   - Better Documented?

9. OTHER COMMENTS or suggestions about governance of PGME