



Report on Generalism in Postgraduate Medical Education

Postgraduate Medical Education Governance Council

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Executive Summary:

In establishing the PGME Collaborative Governance Council, the participating organizations noted that “effective collaborative governance is essential to move towards more efficient and effective medical education that prepares socially accountable physicians who provide high quality health care to Canadians”. Recognizing the complexity of the PGME system, the partners agreed to establish the PGME Collaborative Governance Council “to work together in an ongoing, collegial and coordinated manner to address a breadth of issues, notably those that cannot be resolved at other tables, including sensitive controversial and often difficult issues”.

Generalism was amongst the first topics that was brought to the Council. Consequently, the PGME Collaborative Governance Council assembled a Generalism Working Group to examine generalism and generalist practice with a goal of recommending ways that postgraduate medical education could better align with the needs of the health care system and, more specifically, to address the health needs of Canadians and their communities. The ultimate goal is to deliver the highest quality health care possible for all Canadians, wherever and whenever they are. To achieve this goal, it is important that, within all disciplines in medicine and surgery, physicians acquire generalism competencies as part of undergraduate and postgraduate medical education. Within each discipline, there is a need for a mix of generalists and specialists to fulfill needs of the health delivery system.

This document begins by defining generalism and generalist physicians, building on definitions previously developed by the Royal College of Physicians and Surgeons of Canada and the Royal College of General Practitioners in the UK. It explores the commonalities and distinctions between generalists and specialists across the medical disciplines. Understanding these distinctions is important for building and maintaining the collaborative relationships and strong rapport necessary to provide quality, accessible, seamless care to Canadians and for ensuring a fit-for-purpose physician workforce to meet the needs of the Canadian population.

The Generalism Working Group was tasked by the PGME Collaborative Governance Council with investigating the scope of practice and competencies required of generalists; looking at generalism beyond rural and family medicine; appreciating that patient-centered care is one of the core facets of a generalist system; and making recommendations about the education of our health workforce so it is aligned with the health care system and society it is there to serve (social accountability). Changing the educational culture and tailoring training to be more fit-for-purpose and context-specific were two strategies discussed to help increase the value proposition of a generalist career in the eyes of learners for all medical disciplines.

Introduction

Complementing the broad spectrum of health care providers' competencies, Canadians need a robust generalist medical workforce as the backbone of the health system working collaboratively with specialist colleagues in order to improve their health overall, but also to improve the effectiveness of the health delivery system. It is for this reason that it is crucial to clearly identify what the concept of generalism is, who generalist physicians are, and what work they do in the system. There is a need to identify both the barriers and possible solutions to the current shortages of generalist physicians in many medical disciplines.

For example, there is substantial evidence that patients' health outcomes are improved when there are more primary health care professionals, particularly more family physicians (Starfield, 2012), in a geographic area than other specialists and that health systems are more efficient and cost-effective (Starfield et al., 2005; Larson et al., 2005). There is also evidence that health outcomes improve when patients have a continuity relationship with a generalist physician (Pereira Gray et al, 2018; Tammes et al, 2017). The generalists in various disciplines have been in decline for decades (Rosser, 2002; Thurber and Busing, 1999; Imrie et al., 2011).

Definitions of Generalism/Generalist

The Generalism Working Group examined many definitions of generalism and generalists in order to identify one that could be used more broadly in medical education in Canada. This is important to ensure that when the term is used in discussions, there is a common understanding about what is meant.

It is important to understand that generalism is practiced by many disciplines of medicine. For example, family physicians are not the only generalists and not all family physicians are generalists (McWhinney, 1997).

The commissioned paper on Generalism for the Future of Medical Education In Canada Postgraduate (FMEC PG) identified the need for a common definition of generalism: "There is need for a widely accepted working definition of generalism that reflects not only a broad foundation of training, but an ongoing philosophy of care that is comprehensive, and integrative – working to reach across gaps in the health care system and adaptive to the needs of local communities." (Imrie et al., 2011)

The working group members propose that the PGME Collaborative Governance Council adopt the following definitions of generalism and generalist physician, based on the definitions developed by the Royal College of Physicians and Surgeons of Canada and the UK's Royal College of General Practitioners, in order to underpin further work.

Generalism* is a professional philosophy of practice, distinguished by a commitment to holistic, integrated, person-centred care, the broadest scope of practice within each discipline and collaboration with the larger health care team in order to respond to patient and community health needs.

Generalists are a specific set of physicians and surgeons with core abilities characterized by a broad-based practice. Generalists diagnose and manage clinical problems that are diverse, undifferentiated and often complex. Generalists have an essential role in coordinating patient care and advocating for patients. (Royal College, 2013)

While the following apply in varying degrees to all physicians, a **generalist physician** explicitly:

1. Takes a holistic approach to patient care, i.e. acknowledges the multidimensional aspects associated with patients and patient care including the context of her/his family and the wider social environment.
2. Uses this perspective as part of their clinical method and therapeutic approach to all clinical encounters.
3. Is able to deal with the widest range of unselected patients and undifferentiated conditions.
4. Takes responsibility for the continuity of people's care over time to support and promote healthy outcomes.
5. Coordinates care as needed across disciplines and between organizations, within and between health and social care.
6. Uses their adaptive expertise to handle clinical uncertainty, think creatively and solve challenging and atypical situations.

*Definition adapted from the Royal College of Physicians and Surgeons of Canada and the Royal College of General Practitioners in the UK

Generalism and Generalists in Medicine

Why is generalism important for all physicians and why is there a need for generalist physicians? While discussions regarding the distinction between generalists and specialists often revolve around the folk wisdom that generalists know a little about a broad range of areas of medicine while specialists have a depth of knowledge in a narrow area, it is important to look more deeply into the distinctions. These can be categorized as both cultural and contextual.

Heath & Sweeney (2005) discuss the gap between what they call the "map of medical science" and the "territory of individual human suffering (p1462)." In this cultural landscape, it is the medical generalist who uses the map to "try and make sense of the whole human person, transcending all the arbitrary divisions of specialist practice... (p1462)." Howe (2012) states: "Whether a practitioner is a true generalist or not depends on their training, their attitudes, their scope of practice, and frequently their work setting. There is a difference between being a generalist and using generalist skills." (p342)

As quoted in an article by Freeman (2006), Homer-Dixon (2001) states: "...complexity science makes clear that, paradoxically, the more complex systems become, the greater need there is for general thinking..."(p584). McWhinney (1997) debunks the myth that the "explosion of knowledge...has made it impossible for any individual to cover the whole field (p22)". He refers to this as "the lump fallacy (p22)", based on the misunderstanding that "knowledge is a quantity (p22)."

A generalist approach provides physicians with the ability to operate in uncertainty, seeing patients with undifferentiated problems, and use not just a patient's symptoms and signs but also an understanding of the disease prevalence and the context in which the patient is situated to guide diagnosis and management. The responsibilities of generalist physicians lie in identifying complex cases, treating where appropriate, and referring where appropriate but also in "avoiding the anxiety, inconvenience, and cost of unnecessary referrals (Greenfield, 1996, p246)" and investigations. On the other hand, specialist physicians are responsible for doing "everything as definitely as possible and thus places more value on identifying every case of disease (Greenfield, 1996, p246)." Greenfield argues that these "role conflicts" lead to "value conflicts" (Greenfield, 1996, p246). Generalists and specialists might have difficulty relating and understanding each other's roles owing to spectrum bias, as each sees a different aspect of the disease spectrum. (Manca, 2011) It is critical to recognize that each has an important role in the health delivery system and building better understanding is important to ensure that that system is effective, efficient and delivers the best care to Canadians.

Previous efforts to identify those with a broad scope of practice in a particular area as a generalist have been unproductive. This perspective prevents the changes that are necessary to build a system that values both generalist and specialist skillsets and create an environment in which they can collaborate effectively in order to better care for Canadians. Understanding the cultural and contextual distinctions between generalists and specialists assists in moving the discussion out of the binary thinking that so often dominates discussions of this nature.

While the following diagram from Eraut (1994) is not from the medical field, it is helpful in showing the significant overlap between generalist and specialist. This diagram appeared in one of the background documents written for the Future of Medical Education in Canada Postgraduate (FMEC PG) project.

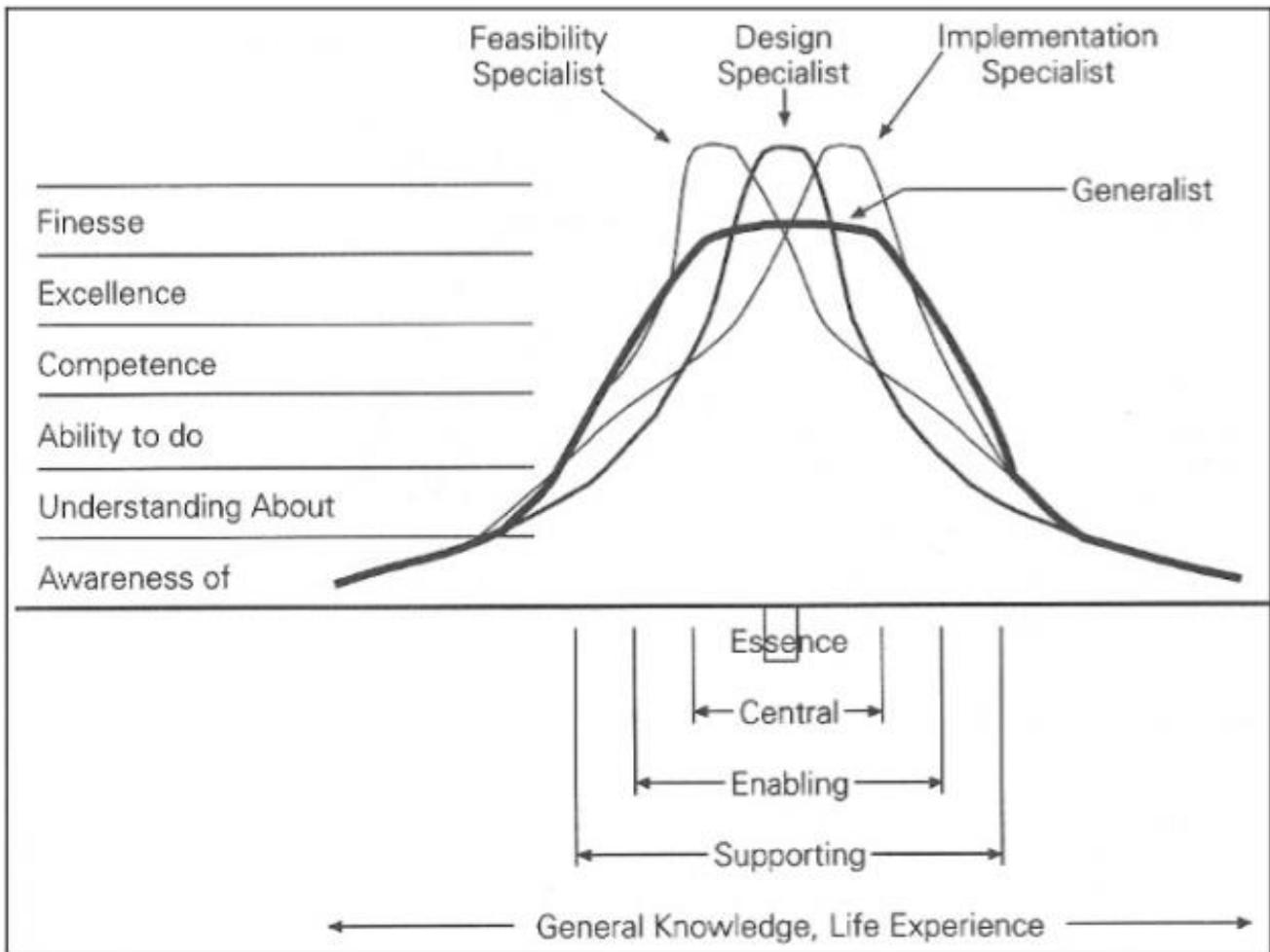


Table from Eraut 1994 as referenced in the FMEC-PG document (Imrie et al., 2011).

The Community of Practice (CoP) literature assists in responding to those who suggest that there is no longer a need to use the designations of generalist and specialist. “Medicine consists of many communities of practice, and physicians generally belong to more than one....A physician’s specialty is a community of practice that exerts a particularly strong influence on the identity of its members.”(Crues et al 2018, p186) Further, “[t]he literature on communities of practice is clear: The establishment of standards and the assessment of competence are carried out within the community.” (Crues et al 2018, p190).

In summary, in order to better meet the priority health concerns of Canadians, generalists and specialists need to work together in a complementary way, respecting each other’s roles in the system across the spectrum of patient care needs. It is important to understand that there is a range of generalists and specialists in each medical discipline when looking at the work through the

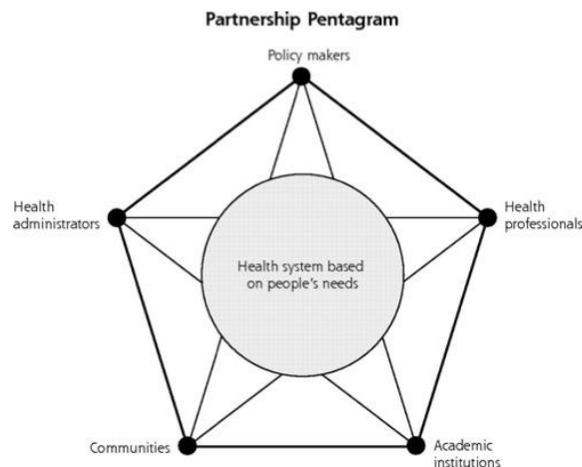
generalism cultural lens. In this context, it should be recognized that physicians who are principally generalists often function in specialty areas, and that many specialists use generalist skills, but it is crucial to acknowledge and celebrate that they have different but complementary roles. It is also important to identify the generalist skills that are necessary for specialist/subspecialist training. Both are important if our health delivery systems are to better meet our communities' priority health concerns.

Factors that Inhibit or Facilitate Generalism and Generalist Practice

This section grew out of discussions of what elements either facilitated or inhibited generalism and generalist practice in the Canadian healthcare context and, in particular, what elements were present in the resident learning/working environment that influenced generalist career choice. Six factors have been identified. For each factor, initiatives necessary to strengthen generalism and generalist practice are proposed for both the educational environment and the workplace environment.

Factor #1: Meeting Population Health Needs

Both Future of Medical Education in Canada reports ([MD](#) and [PG](#)) recommended that Canadian medical schools need to work with various partners and, most importantly, with the communities they serve to determine their health priorities. "The Social Accountability partnership pentagram will provide a useful framework so that all key players are involved, always focused on improving people's health: 1. Policymakers (governments at all levels); 2. Health service and health system managers (federal, provincial and territorial, as well as health authorities and health service agencies); 3. Health professionals (Colleges, medical associations and professional societies); 4. Academic institutions (universities, research and education/training organizations); and 5. Communities (local governments, service clubs, and other volunteer organizations)."



Boelen, 2004

Strategies to be considered include: building more flexibility into career paths for current residents; training residents in community settings where most health care is delivered; and ensuring that learners in our programs are sufficiently exposed to generalist environments and role models to be able to make intentional, informed choices between generalist and specialist career paths. This may require residency programs to increase the amount of time residents spend in community practice settings to replace some of the hospital-based in- and out-patient rotations. Community settings refer to learning/work environments that are geographically separate from the academic health science centres' tertiary/quaternary care hospitals. This could include time in small urban and rural communities, where appropriate for a given residency training program, but is not exclusive to them. Time with generalists in community office practices could be included. This reorientation to include community settings is not intended to lengthen the training time in residencies. There should also be consideration of increasing the profile of generalist physicians in university and teaching settings.

As for the working environment, the importance of rebalancing the ratio of specialists to generalists is identified. One example of accomplishing this is by reallocating residency positions to generalist streams. This would ideally be informed by a coordinated, evidence-based national health human resources planning strategy. The Québec evidence based model allocates 55% of residency positions in Family Medicine and 45% in other specialties, with clear emphasis on generalist specialty residency positions.

Factor #2: Reaffirmation of the role of generalists with the public

The public may prefer specialists over generalists while, paradoxically, wanting holistic care. In order to support generalists in all specialties with the public, the health care system, faculties of medicine and organizations representing the medical profession need to develop a robust public education program with regards to the role and value of generalists in the health care system. Specialists and generalists must reflect their respect and understanding of the roles and value of both groups of medical professionals to the public through their interactions with patients.

Factor #3: Valuing the role of generalists in medical education

There needs to be a move to community-engaged medical education by medical schools and the academic health centres with which they are associated by building respectful relationships with the communities they serve, both in the metropolitan areas in which they are situated but also the small urban, rural and remote communities in their area of influence. Some medical schools, for instance, are erasing the distinction between full-time faculty and community/clinical faculty, making the academic enterprise more inclusive rather than exclusive. Others are engaging in meaningful ways with communities to improve education and service delivery.

A second important issue is the effect that subspecialty rotation requirements create for residents early in their training, e.g. PGY1 & PGY2. There has developed a dependency for trainees to provide service on subspecialty rotations as part of their learning. The intensive learning experience and immersion in subspecialties should not happen to the exclusion of longitudinal experiences.

Factor #4: The importance of continuity of relationships

It is recommended that the shared care model be explored more widely for all specialties to guide their work together with the generalists in their specialty as well as across disciplines and, in particular, between those physicians involved in secondary/tertiary care and those in primary care. There is growing evidence that continuity of relationship for patients and primary care physicians improves health outcomes and decreases costs (Pereira Gray et al., 2018, Starfield et al., 2005, Tammes et al. 2017, Larson et al., 2005).

The introduction of the [Triple C Competency Based Curriculum](#) in Family Medicine and [Competence by Design](#) in Royal College specialties will be supported and enhanced by attention in program design to relationships, particularly, the support for longitudinal relationships between patients and learners as well as learners and teachers. This will be much easier for some programs than others but learning in all programs will be enhanced if this is enabled.

With regards to workplace strategies, Quadruple Aim is a program that evolved from the Triple Aim process first described by the [Institute for Healthcare Improvement](#). The primary goal of Quadruple Aim is to improve the health of the population. The secondary goals are: improving patient experience, reducing costs, and improving the work life of those who deliver care. Health services and medical education programs should consider using this framework.

Factor #5: The Shift to increasing subspecialization

It is important that residents are exposed to high functioning generalist workplaces to experience dealing with uncertainty, to manage patient problems using fewer resources, and to have clinical teachers who are role models for care of patients with undifferentiated problems, for managing uncertainty and for clinical courage. These environments model safe, quality healthcare and facilitate learning and working to the full scope of practice. All residents need to work with the generalists in their chosen discipline early in their residency to better understand how the various subspecialties are integrated in the work of the generalist and how generalists and specialists can work together to deliver the most effective and efficient care for their patients.

There are concerns about credential creep with added recognition of categories of certification and achievement may continue fragmentation of medicine over recognition of achievement of a national standard. This may be complicated and compounded by special billing codes. A balance needs to be

achieved between the need for establishing truly national standards and a fragmented delivery of care.

Factor #6: Remuneration gap between generalists and specialists

There have been tensions in the medical profession with regards to pay equity for many years. A number of provincial medical organizations developed relativity initiatives in the 1990s but these were abandoned due to the significant conflict that arose in response to them.

In the past, there was recognition that those who pursue specialties and subspecialties spend more time in residency training which postpones and shortens their earning years. This was a reasonable consideration. However, years of across-the-board percentage fee increases widened the gap between generalists and sub-specialists. This includes family physicians as well as Royal College specialties like general internal medicine, pediatrics and psychiatry that have the longer residencies and yet these specialists experience a considerable gap in income when compared with other Royal College specialties. This is exacerbated by the codes assigned to newer procedures.

The issue of pay equity is currently back on the table with some of the provincial medical associations. It is something that needs to be addressed as it is a factor in career choice for many medical learners.

Conclusion

Generalism and generalists are important for an efficient and effective health delivery system. If there are to be sufficient generalists in the future, it is important to understand generalism and generalist practice and to identify enablers and barriers to ensuring sufficient generalists in the system. This document has provided background information with regards to generalism and proposes a definition of generalist practice. It has further identified, both enablers and barriers, for generalist practice generally and, more specifically, has identified areas in the learning and working environments of residents in the Canadian postgraduate medical education system that could be changed to improve the ability of the system to meet the priority health needs of Canadians. It is the expectation of the Postgraduate Medical Education Collaborative Governance Council that this document will facilitate further discussions about residency training in Canada with the ultimate goal of ensuring better access to quality health care for all Canadians.

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