RCRHS
Réseau canadien sur les ressources humaines en santé

CHHRN
Canadian Health Human Resources Network

A PRIMER ON

# THE CANADIAN HEALTH WORKFORCE

**Prepared for students and new participants attending the Canadian Health Workforce Conference**

**by Sarah Boesveld, Robin Hebert, Olena Schell & Ivy Lynn Bourgeault**

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## STUDENT ACTIVITIES AT THE CANADIAN HEALTH WORKFORCE CONFERENCE

There has been enthusiastic turnout by students for the CHWC:

- 8 students on the CHWC Planning Committee
- 11 students presenting poster presentations
- 18 students presenting oral presentations
- 34 students registered to attend

**Upcoming events**

In addition to the pre-conference roundtable discussion, the student subcommittee of the CHWC Planning Committee has organized the following student activities:

**Student Social**

***What***: Meet and mingle with your fellow students during this evening of good company and great conversation. This is an opportunity to network and to unwind after a thought-provoking first day at the 2016 CHWC. Light fare will be provided and drinks will be available for purchase.

***When***: Tuesday October 4, 2016 from 5:35pm to 6:50pm
***Where***: D'Arcy Mcgees

**Student Career Panel**

***What***: The purpose of the student career panel is to provide student participants with an idea of what career options are available to them in the future should they choose health human resources as a field of study. The panel consists of five individuals working in positions related to health human resources, representing Academia, Health Policy, Professional Associations, and Post-Doctorate. The panel will start with each panellist providing a 5-minute presentation on their career path followed by questions asked by the moderator and the audience.

***When***: Wednesday October 5, 2016 from 11:00am to 12:30pm
***Where***: Room 106, Shaw Centre

**Lynda Buske Student Poster/Presentation Award**

***What***: Announcement of winners for the best student poster and best student presentation.
***When***: Wednesday October 5, 2016 from 4:45pm to 5:00pm
***Where***: Canada Hall 1 Ballroom, Shaw Centre

## INTRODUCTION

The health workforce represents the single largest financial component in health service delivery. The management of the health workforce and its associated and expanding wage bill is the most pressing challenge for health system decision makers in Canada. Paradoxically, despite being such a critical element of the healthcare system, the health workforce can sometimes be so pervasive as to be invisible.

Efforts to shift or reform Canadian healthcare can often be met with human resources challenges, not the least of which is an over- or under-supply of health labour, changing skillset needs, and inflexibility in being able to adjust what health professionals do—their scopes of practice—to meet shifting treatment standards. There is increasing concern whether the supply and current mix of health professionals will be able to meet not only future health system demand, but also population health needs more broadly.

The purpose of the Canadian Health Workforce Conference (CHWC) is to begin to address the challenge of planning, deploying, and managing the health workforce by bringing together health workforce researchers, stakeholders, and decision-makers for a national dialogue to advance health workforce management and planning across all jurisdictions in Canada. Critical to the success of the CHWC and the health workforce domain more broadly in Canada is the building of capacity in health workforce research and evidence informed policy.

**Purpose of the Primer**

The intent in preparing this primer document, which outlines the background context and key concepts in health workforce in Canada, is to take a step towards the overall capacity building objective. The primer event is meant to provide an informal orientation to the health workforce field, drawing upon this document to ensure new members of the health workforce field will share a baseline level of expertise.

The purpose of this accompanying primer document is not to detail everything that there is to know about the Canadian health workforce. Rather, it is the goal of this primer to provide an *introduction* to the important terminology, background concepts, Canadian health workforce context, and key challenges that are relevant to the study of the heath workforce.

## BACKGROUND CONCEPTS & TERMINOLOGY

In this section we provide an introduction to some of the key concepts and terminology important to understanding the health workforce.

First, it is important to understand what is meant by the concept of the **health workforce.** We draw in large part on the broad definition of **health workers** by the World Health Organization (WHO 2006) as "all people engaged in actions whose primary intent is to enhance health". This broad definition includes both front-line clinical staff that work directly with patients and those that provide support to these staff and those who manage the health workforce and health system. The front line staff could be further broken down into members of **health professions** and **health occupations/health care workers**, the distinction being that professions tend to have longer educational preparation in a more esoteric body of knowledge—typically at the university level—and are more likely to have self-regulatory authority (*see discussion below about professional regulation*). There are a number of **regulated** health professions (e.g., physicians, nurses and pharmacists) and **unregulated** health care workers (e.g., paramedics and personal support workers) in Canada.

A related WHO concept is of **human resources for health (HRH)**, which again focuses on health as a key outcome of the activities of a broad range of workers in a health system. The more traditional term, and one used more often in Canada, is **health human resources (HHR)**. This term tends to refer more narrowly to the planning of the health workforce. These terms are used interchangeably, but HRH is a more global and broader term than is HHR. The activities of the Canadian Health Human Resources Network, however, are consistent with a broader HRH definition.

Other concepts that are important refer to how health workers and health professionals work together. The term **scope of practice** specifies the roles, functions, tasks and activities, professional competencies, standards or practice, entry to practice, and registration requirements. It tends to designate the domains of practice and scope of role enactment for regulated health professions (Baranek, 2005) and has legal, social, and practical dimensions including:

- How professionals are defined (who is known as a 'member of a profession')
- What professionals are trained to do
- What professionals are authorized to do by legislation
- What professionals actually do
- How a profession does what he/she does
- What others expect a professional can do *(HPRAC, 2007 p. 2-3)*

Related to scopes of practice is the term **model of care,** which refers to the structure and organization of how health professionals interact and work together in the delivery of health care. **Interprofessional care (IPC)** models are one such model where different health professionals work together collaboratively with a more patient-oriented focus. **Model of practice** refers to a profession's specific approach to delivering care. For example, midwives have a different approach and model of practice for childbirth attendance than do obstetricians/medical specialists. (*For a more detailed discussion, please refer to the CAHS 2014 report*).

The health workforce field is inherently interdisciplinary, drawing upon the health sciences, social sciences, and management literatures. One disciplinary field that has a range of particularly useful concepts to apply to the study of the health workforce is the **sociology of the professions.** One of the key concepts from this literature is of a **health care division of labour**. Rooted in sociology as well as economics, this is broadly defined to include work arrangements, control of work setting, and influence on social relationships. Division of labour can refer to specialization; in other words, subdividing work into limited operations performed by separate workers to increase productivity (Storch, 2010).

A particularly influential theorist in the sociology of profession is Andrew Abbott (1988) who developed the concept of a **system of professions**. He describes this as "a complex, dynamic and interdependent structural network of a group of professions within a given domain of work". Professions are constantly struggling over areas of knowledge and skill expertise called **jurisdictions**; this can be seen as comparable to the concept of *scopes of practice*. Professions develop when a jurisdiction becomes vacant, either through external system disturbances (e.g., organizational change) or internal changes (e.g., abandonment of the jurisdiction by another profession). The process whereby a set of tasks undertaken by a certain group of health workers becomes organized, controlled, and codified into the educational and regulatory systems has been referred to as **professionalization**. In this way, a profession can be defined as the *control over one's occupation*. Another term for this control is **professional autonomy**, often indicated by a professions self-regulatory status. A profession's success in occupying a jurisdiction reflects its own efforts as much as the situation of its competitors.

The health care division of labour is not a level playing field. Like Abbott's system, it should be viewed as a complex, dynamic, and adaptive system. **Complex adaptive systems**, in turn, have been defined as entities with multiple, diverse, and interconnected elements often accompanied by feedback effects, nonlinearity, and other conditions that add to its unpredictability (see http://www.change-ability.ca/Complex_Adaptive.pdf). One of the ways that the stratification of the health care division of labour has been described is using the

concept of **professional dominance** (Freidson, 1970). This refers to the way in which a profession uses *legal* and *clinical* autonomy to gain control over other competing professional groups, over the profession's institutional domain, and over its financing. It specifically includes the following features:

- Control over context/terms of work
- Control over content of work
- Control over clients
- Control over other occupations

The first two features make up professional autonomy; it is the latter two features that pertain to the control over other occupations. Freidson described how **medical dominance** is one of the clearest exemplars of professional dominance. (*For an excellent application of the concept of medical dominance to the Canadian context, see Coburn, Torrence, & Kaufert 1983*).

As noted above, regulation is a key distinguishing feature of some members of the health workforce. **Regulation** at its most basic level can be defined as a form of government intervention to control or alter the behaviour of a certain set of participants. **Self-regulation** in particular is seen as a form of recognition of a particular group of health workers towards achieving professional status. One of the tasks of regulation is registration of its members and developing a list of its members. Some regulatory bodies are tasked with collecting data from its members that will assist in health workforce planning, called a **minimum dataset.** In Canada, the Canadian Institute of Health Information (CIHI) has developed a minimum dataset that can be used to collect standardized data across health professions with the aim of developing more accurate and interprofessional models of health workforce planning.

Other related terms to regulation are **licensing** and **certification** (Health Professions Legislation Review, 1989). Licensing is a process whereby a government or designated agency restricts entry into an occupation by defining a set of functions and activities (i.e., constituting a scope of practice) and grants permission to engage in that practice only to persons meeting predetermined qualifications. These qualifications could include an educational credential and/or a certificate of competency. Certification, by extension, is a process whereby a government or designated agency recognises persons who meet agency specified standards for entry and practice and grants a certificate entitling the holder to claim a particular set of competencies and/or use a particular occupational title.

As we note in more detail in the Canadian context section below, health professional regulation is a provincial jurisdiction, and as such we have a number of different regulatory models. In Text Box 1 below, we outline some of the key details of the Ontario model of health professional regulation, which is seen internationally as a gold standard (e.g., Dower et al., 2013).

**Regulating the health professions:**
**Case study of Ontario**

In 1983 in Ontario, the Health Professions Legislation Review (HPLR) had the mandate to review legislation governing the health professions in Ontario and advise the Minister for Health on changes to this legislation. This lengthy (i.e., 10 year) review included written submissions and public presentations.

The criteria for inclusion of health professions in the legislative package included:

- Is it a health profession?
- Can it do harm?
- Does the profession have a body of knowledge that can form the basis of standards of practice?
- Will it favour public over professional self-interest?
- Is it likely to comply with regulation?
- Is there sufficient number of members to bear the costs of self-regulation

The *Regulated Health Profession Act (RHPA),* which was proclaimed in 1993, applies an *umbrella model* of legislation to 23 self-regulating professions through a common framework emphasizing public interest principles. Each self-regulating profession also has its own act that stipulates their defined scope of practice, but this is not how they are regulated. Each regulated health profession is regulated to deliver one or more of 13 *controlled acts.* A controlled act includes such activities as prescribing, communicating a diagnosis, setting a fracture or delivering a baby and can only be undertaken in whole or in part depending on competency by a member of a regulated profession with as stipulated by their individual practice act.

The other distinguishing feature of the RHPA is its stipulation of significant lay (i.e., non-professional) involvement in health professional legislation. All regulated health professions must have transparent and public processes for complaints and disciplinary activities and be governed by boards that have at least 40% but no more than 50% lay representation.

Also created under the *RHPA* is the Health Professions Regulatory Advisory Council (HPRAC) which is the organization that continues to provide advice to the Ontario Minister of Health regarding the regulation of health professions in the public interest. The Advisory Council is made up of appointed members (not members of a health profession), and provides advice to the Ontario Minister of Health regarding the regulation of health professions in the public interest – which professions should be newly regulated or no longer regulated, amendments to the RHPA and related Acts, and any other matter referred by the Minister of Health related to the regulation of health professions.

**For more information:**


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World Health Organization (2009) *Human Resources for Health Toolkit*: http://www.who.int/healthinfo/statistics/toolkit_hss/EN_PDF_Toolkit_HSS_HumanResources_oct08.pdf

## KEY HEALTH WORKFORCE PROBLEMS

The field of Health human resources (HHR) covers a range of issues from preparing, regulating, deploying, and assigning tasks to people who work in health care. It deals not only with the types of workers that presently exist and what each type of worker does but is also future oriented to how this will evolve over time to new workers and new tasks designations. HHR planning involves a range of stakeholders at the national, provincial, regional, and university level, from national certifying bodies and health professional colleges and associations, through to government ministries and colleges and universities, and healthcare delivery organizations. These are detailed more explicitly in the section on the Canadian health workforce context below.

Here, we provide an overview of the key HHR issues faced by all health care systems that can be categorized as follows:

- Problems with **supply** addressing the *numbers* of health care professionals providing services to a population
- Problems with **distribution** addressing the *location* or deployment of health care professionals across geographic areas
- Problems with **mix** addressing the relative number of health care professionals providing *various types of specialty services*

The issues of sustainability and productivity of the health workforce are also critical issues (*on the latter point see Evans et al., 2010).*

**Supply**

Problems with supply of in the health workforce are manifested in the waxing and waning from shortages and surpluses. Although there are no hard and fast measures of shortage and surplus, **shortage** is typically when persons with legitimate needs for care must wait long times or travel long distance, or do without care altogether (areas with shortages are sometimes known as 'underserviced'—a **distribution** issue we discuss more fully below). A **surplus** is when providers do not have enough legitimate work to keep them busy.

Experiences of shortages and surplus may have less to do with the actual number of health workers than with the participation and productivity of individual practitioners. That is, you may have 100 practitioners but if each of them is participating only half of the time doing their health care tasks that is a very different situation than if 100 practitioners are practicing beyond full time. Because of this difficulty in simply counting practitioners there have been efforts towards how to measure a full time equivalent, or FTE. This is particularly complex when there

are multiple sources of employment or sources of funding for different cadres of health workers.

In general, there have been a number of different approaches to forecast requirements for health personnel. Historically, health professional groups determined their own numbers without a clear link to or measurement of population health needs. This approach, though still in place today for a number of health workers, is problematic because of the variability in estimates from each profession. Some also feel that the projections based on the health profession itself could become political; those who have greater control over their numbers can be less likely to experience periods of under and unemployment but a self-induced shortage could be used for political gain.

A typical, yet problematic, approach is the use of health personnel-to-population ratios. This approach involves empirically examining the number of health professionals in each discipline currently working in a given geographic area (such as a province/territory or region); then census data are used to estimate the population-to-provider ratios. In some cases, the relevant population is measured rather than the population in general. For example, for midwife to population ratios, the population in question would be women of childbearing age. For health care professionals that have a broader clientele base, broader population estimates are used. One of the key flaws with this approach is that it assumes that all within the population has equal access to care, regardless of distance or ability to pay. It also assumes that all care is necessary. There is typically a lack of clarity on what is the optimal ratio. In Canada, for example, we often compare our ratios to the OECD average. But the OECD average is by their own argument not necessarily an optimal measure but rather a mathematical average of their member countries; all their countries could be suboptimal. These ratios are also typically uni-professional, that is, about one profession. But a ratio of 2:1000 for physicians is a very different situation when the nurse-population ratio is 10:1000 than if it is 100:1000. Econometric approaches address some of the problems with the practitioner to population ratio approach in that it measures demand (as opposed to need) as the ability to pay. This augments projections of how many health professionals are possible within a given budget.

These traditional approaches to HHR planning in Canada have resulted in cycles of over and under supply, high turnover and attrition, and a lack of stability in the health workforce. They have also done little to address the persistent problems with health workforce distortion in alignment with population health needs; thus, there is a call for health workforce planning that is **population needs-based** and **outcomes-directed** (*c.f.,* Tomblin-Murphy & MacKenzie, 2013). A population needs-based approach is based on principles of evidence of need, provider requirements derived from service needs, and a mix of human and non-human health

resources. These and other inputs are incorporated into hybrid models that include analysis of historical trends, professional estimates, ability/willingness to pay in the context of general economic trends, the impact of technology, regulation and reimbursement systems on utilization.

**Addressing Shortages Through Use of Internationally Educated Health Professionals**

Despite acknowledging that the use of internationally educated health professionals (IEHPs) is, at best, a temporary solution, Canada, the United States, and Australia use IEHPs to address shortages in underserviced areas through the use of a range of policy instruments such as visa waivers (US), temporary licenses and work permits (Australia & Canada), and direct recruitment (in all countries). The ratio of internationally educated health care workers in Canada varies by profession. For nurses, there are roughly 6 to 8% who are educated outside of Canada; for physicians there are between 22 and 25%.

Bourgeault et al. (2009) compared the situation for internationally educated health professions across professions. They found that International medical graduates (IMGs) face the most significant difficulties with a lengthy and expensive process, with few opportunities for professional integration largely because of the tight control over the number of medical residency positions they are required to undertake. They found that internationally educated nurses (IENs) were more likely to be practicing because they were more likely to have been recruited; a number, however, felt they were practicing below their qualifications and experience. Internationally trained midwives (ITMs) experiences challenges related to the unique model of practice in Canada where midwives are primary care providers for both home and hospital births. They also had the fewest opportunities for bridging programs and an overall lack of preceptor capacity.

**Distribution**

There is competition between jurisdictions for limited health human resources, which may draw the health workforce away from areas in need, resulting in severe shortages among vulnerable communities (ACHDHR 2007, CRaNHR 2013). These problems with distribution occur across care sectors (e.g., long term care), but are largely geographic (urban/rural/remote). Thus, the issue of the distribution of health workers is intimately tied to issues of supply.

Consider, for example, the inter-jurisdictional migration patterns of physicians: of the 62,307 physicians in Canada in 2006, 550 (0.8%) moved to another jurisdiction in 2007. This is the lowest migration rate in five years. Between 2003 and 2007, only two jurisdictions continuously experienced net physician gains due to inter-jurisdictional migration (British Columbia and

Alberta), while several jurisdictions experienced a net physician loss (Newfoundland and Labrador, Quebec, Manitoba, Saskatchewan, the Yukon) (CIHI, 2007).

**Retention of Health Human Resources in Rural and Remote Communities**

Simply adding more doctors to the system overall does not address problems with distribution that leave rural areas perpetually underserviced (CFHI, 2012). Physician migration statistics expose a pattern of rural to urban migration: only 31% of rural family physicians are retained in their communities 10 years post registration, compared to 50% of urban family physicians (Liu et al., 2013).

Retention of rural physicians would make a significant contribution to alleviating the uneven distribution of doctors in Canada. Attempted strategies to retain health human resources in rural and remote communities include:

- Incentives – loan forgiveness/return of service agreements
- Disincentives – regulate billing numbers, discounting fees in 'over serviced' areas
- Alternate care providers – e.g., nurse practitioners for family physicians

Are these retention strategies working? A recent Cochrane review of a variety of retention strategies (educational, financial, and regulatory approaches) found no well-designed studies to say whether any of these strategies are effective of not (Grobler et al., 2009).

Nevertheless, there are three factors that are most strongly associated with students entering rural practice after education and training: rural upbringing, positive clinical and educational experiences at the undergraduate level, and targeted training for rural practice at the postgraduate level (including residency programs that prepare medical students to practice in rural areas).

**Mix**

Achieving the **right mix of health professionals** that align with population health needs is a complex challenge, linked with both supply and distribution challenges. The 2007 Framework for Collaborative Pan-Canadian Health Human Resources Planning highlighted that "Canada's ability to provide access to 'high quality, effective, patient-centred and safe' health service depends on the right mix of health care providers with the right skills in the right place at the right time" (ACHDHR, 2007:1).

Problems with achieving an appropriate mix, both within and between professions, include the following issues:

- What is the right balance of generalists and specialists practitioners? For example, there may be shortages of specific types of physicians and surpluses of others. Indeed, the

under and unemployment of medical specialists are indicative of the lack of coordination in supply and distribution (Frechette et al., 2013).

- Interprofessional organization of scopes of practice and models of care has typically been on the basis of tradition and politics rather than population health needs.
    - Legal and historical legacies create a system that, in some cases, prohibits health professionals from practicing to their full scope of practice (e.g., advanced practice nurses)
- Responsivity to community and population health needs requires flexible models of care that support collaborative patient-centred care, not service organized along health professional needs.

A focus on rationalization of the health care division of labour (in other words, a focus on the most efficient use of health care resources), has led to dramatic changes in who does what, to whom. Working to optimal scope means achieving the most effective configuration of professional roles as determined by other health care professionals' relative competencies (Nelson et al., 2014). In some cases this involves the delegation or re-assignment of tasks—**task shifting**—from a more highly trained and skilled health worker to a less highly trained but still appropriately skilled worker. What makes this rational, in part, is the economic argument that tasks are typically shifted from more to less expensive health workers; this may involve the expanded scope for existing health workers, such as nurse practitioners (NPs), or the development of new professional roles or new cadres of health workers, such as physician assistants (*see text box below*).

**Physician Assistants in Ontario**

Physician assistants (PA) support physicians in a range of health care settings and work under the supervision of a licensed physician to provide patient care. Physician assistants are not a regulated health profession, thus do not have a defined scope of practice; the specific duties of a physician assistant vary depending on the individual competencies of that PA, the supervising physician's area of practice, and the types of duties that the supervising physician chooses to assign.

Some of the duties a physician assistant may carry out include:

- Conducting patient interviews and taking medical histories
- Performing physical examinations
- Performing certain controlled acts delegated by a physician
- Providing counseling on preventative health care

As of 2012, there were about 125 military and non-military PAs working in Ontario (Jones, 2012). PAs are also employed through various ministerial initiatives in Alberta and British Columbia, with regulation and certification requirements still under consideration.

**For more information:**

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## THE HEALTH WORKFORCE CONTEXT IN CANADA

The mosaic of health workforce stakeholders and the complexity of jurisdictional roles reflects historical legacies regarding the jurisdiction of health care more broadly, that is, of a federated system. There is also a complex web of stakeholders reflecting a range of public and professional interests that cut across education, accreditation, practice, funding, regulation, and deployment concerns.

### Federal/Provincial/Territorial Jurisdiction

The jurisdiction for health care was largely determined in the 1940s following a series of evaluations and reports that were completed to evaluate the possibility of a national health insurance plan. There were questions about which level of government should hold responsibility for social security, due to the challenges of interpreting the division of legislative powers, as outlined in the British North American Act (the BNA Act), between the provincial and federal governments (Ostry, 2006; Taylor, 2009). The Rowel-Sirois Royal Commission on Dominion-Provincial Relations evaluated this question for the provision of unemployment insurance and the results of this review largely determined the division of powers for other provisions of social security. It concluded that, although the BNA Act did not expressly allocate jurisdiction for health, it did assign all matters of local or private nature to the provinces (Bryden, 2012), including the allocation of the hospitals, asylums, charities, and eleemosynary institutions. Thus, the commission determined that the provinces were largely responsible for all matters related to health while the federal government was largely responsible for raising funds (Bryden, 2012; Taylor, 2009).

In consequence, the Commission had drawn narrow boundaries for the jurisdiction of health care and Canada's health care system evolved into a mosaic of 14 systems, comprising of the country's ten provinces, three territories, and the federal government. The provincial and territorial governments are largely responsible for delivering health and other social services within their jurisdictions while the federal governments is responsible for delivering these services to certain groups of people (Frechette & Shrichand, 2011). The federal government also provided funding arrangements that allowed provinces to build the institutions and human capacity to deliver health care services to its population (Bryden, 2012; Taylor, 2009).

The professional development of health workers also often evolved within the geographical jurisdictions of Canada's provinces and territories. Concerns over patient safety and the protection of economic interests prompted health profession groups to lobby provincial and territorial governments for professional self-regulation (O'Reilly, 2000). In Canada, self-regulation is achieved through legislation that provides a framework for the regulation of a

specific profession within each province and territory. Consequently, developments in health human resources are often achieved within individual jurisdictions and by individual professions.

**National/Federal Stakeholder Groups**

Efforts in Canadian health workforce planning and research are rich. A range of organizations and stakeholder groups are undertaking a number of activities to improve the planning and management of the health workforce but they are often working in either professional isolation or within the boundaries of their jurisdiction (Frechette & Shrichand, 2011).

1. **National certifying bodies:** The College of Family Physicians of Canada (CPFC) and the Royal College of Physicians and Surgeons of Canada (Royal College) are the professional organizations responsible for establishing standards for training, certification, and lifelong education of family physicians and specialists, respectively. Both carry out various scholarly and analytic projects relating to the medical workforce and the health system more broadly. The Canadian Nurses Association (CNA) manages the only national nursing certification program in Canada and collects unique data that help inform workforce planning and policy development.

2. **National accreditation groups:** Accreditation of Interprofessional Health Education (AIPHE) initiative was funded by Health Canada to accredit pre-licensure education for physical therapy, occupational therapy, pharmacy, social work, nursing and medicine. The objective of this initiative was to propose a strategy and work plan to explore and encourage the development of core joint principles for accrediting interprofessional education at the pre-licensure level. Their various projects have influenced the planning and the mix of health professions within interprofessional collaborative efforts to improve the delivery of health care services.

3. **Professional associations:** The Canadian Medical Association and the Canadian Nurses Association are national, voluntary associations of physicians and nurses, respectively, that lobby and advocate on behalf of its members. They coordinate the efforts of their provincial and territorial counterparts to promote the interests of their members. Both groups have been involved in scholarly projects that seek to promote efficiencies in health human resource planning and management that help inform workforce planning and policy development. HEAL, the Health Action Lobby, represents the collective interests of the remaining national health professional associations.

4. **Governmental agencies/committees:** The Federal/Provincial/Territorial (F/P/T) Advisory Committee on Health Delivery and Human Resources (ACHDHR), established in 2002 by the F/P/T Conference of Deputy Ministers of Health (CDM), was mandated to provide policy and strategic advice on the planning, organization and delivery of health services. This Committee included senior representatives from each province/territory, Health Canada, and external experts that provides a national forum for discussion and information sharing of F/P/T/ issues.

5. **Data, research and knowledge translation:** There are a number of national organizations involved in the collection of health workforce data, research, and knowledge translation. They include: The Canadian Institute of Health Information (CIHI); The Canadian Institutes of Health Research (CIHR); The pan Canadian Health Human Resources Network (CHHRN); The Canadian Association of Health Services and Policy Research (CAHSPR); and the Canadian Foundation for Health Improvement (CFHI), formerly the Canadian Health Services Research Foundation (CHSRF).
    - **CIHI** is a major national source for health workforce information in Canada, funded through voluntary bilateral funding agreements with federal and provincial/territorial ministries of health and individual care institutions. CIHI works with stakeholders to create and maintain a broad range of health databases, measurements, and standards. CIHI is uniquely placed to develop reports and analyses from its own data that help inform policy development and effective management of the health system.
    - **CIHR** is the major federal agency responsible for funding health research in Canada. It brings together researchers and policy-makers from voluntary health organizations, provincial government agencies, international research organizations and industry, and patient groups to develop evidence-based research and enable the translation of this information into improved health, health services and products, and health care system. The CIHR Institute for Health Services and Policy Research (IHSPR) has been a key proponent of strategic research on the health workforce.
    - **CHHRN** was funded by Health Canada and CIHR to provide a national forum for national experts, researchers, and policy makers involved or interested in HHR research, policy and planning. CHHRN's goal is to create a virtual platform that enables participants to share HHR knowledge, innovation, and practices. It provides secretariat support for the Canadian Health Workforce Conference.
    - **CAHSPR** provides an annual forum that links researchers and decision makers to promote knowledge translation and exchange. While the organization's mandate is broad, supporting all health services and policy research, a number of evidence-based research help inform workforce planning and policy development. A specific HHR theme

group has been established at CAHSPR to further its commitment to health workforce knowledge exchange.

- **CFHI** is an independent not-for-profit corporation funded by the Government of Canada, dedicated to the acceleration of healthcare improvement across Canada. It does so by helping jurisdictions to develop partnerships working together on common improvement priorities, and by providing pan Canadian opportunities to share and implement evidence-informed solutions. A number of these initiatives address the health workforce explicitly or implicitly.

**Provincial/Territorial Stakeholder Groups**

The main provincial and territorial groups that influence the health workforce emerged as a result of the regulatory mechanisms implemented by provincial and territorial governments to govern health professions. As a matter related to health, the regulation of health professions is considered a provincial jurisdiction (Epps, 2011; O'Reilly, 2000) but the responsibility of governing health professions is delegated to the professions themselves (Epps, 2011; Morris, 1996). This regulatory model, called "professional self-regulation", is described as a "social contract" between the profession and the public; recognized health professions are able to regulate their practice in exchange that they maintain "…high standards of competence and moral responsibility" (Epps, 2011, p. 78) among its members.

Professional self-regulation was initially developed to restrict fraudulent medical practitioners from providing health services, thereby, ensuring public safety and protecting the medical professions' economic interests (O'Reilly, 2000). The protection of the profession's self-interests continues to be evidenced in regulatory models across Canada (Alderson & Montesano, 2003; Epps, 2011) because recognized health professions are given exclusive rights, protected by law in most jurisdictions, to deliver health services based on their specialized training and expertise (Morris, 1996; O'Reilly, 2000). There is broader consensus that the main objective of any regulatory regime is mainly to protect the public interest and remedy the market failures of health care (Epps, 2011; Ostry, 2006).

A key section of the statutes and overarching legislation is the establishment of a regulatory body, which delegates the authority to regulate the profession. Consequently, regulatory bodies are expected to act in the public's interest by setting and enforcing the standards of practice, establishing the entry-to-practice criteria, licensing or registering members, setting guidelines for continuing education, and ensuring member discipline (Epps, 2011; Morris, 1996). Individuals who want to provide the services offered by the profession are required to register with the regulatory body after demonstrating they meet the standards of practice.

The regulatory bodies are given significant autonomy from the government in regulating its profession. There is generally an arms-length relationship between the government and regulatory bodies; the government is not expected to interfere directly with the decision-making process of the regulatory bodies but it does retain some ability to direct the agenda on professional self-regulation. To ensure public accountability, the government does require some mechanisms, usually facilitated through reporting requirements, introducing public disciplinary hearings, and appointing members of the public to the governing board (Epps, 2011; Morris, 1996). The percentage of representation by public members can vary from one appointment to just under half of the total number of board members (Epps, 2011).

It is important to note the existence of professional associations that function independently of their regulatory body. Professional associations are non-profit groups that protect the interests of their profession rather than the public. When the public's and profession's interests converge, the professional associations typically work in collaboration with their regulatory body counterparts to further their interests. Membership in a professional association often requires a fee but, unlike regulatory bodies, it is voluntary and individuals do not have to register with the professional association to practice in the jurisdiction. Within each province and territory, the regulatory bodies and professional associations are often involved in a number of projects that help further the professional development of their members. Much like the CMA and CNA, these provincial and territorial groups also lobby their governments to influence HHR policy development within their jurisdictions.

**The International Experience of Health Workforce Agencies**

A number of countries have created health workforce agencies or what some call 'observatories' as a strategy to improve the performance of their health systems and to get away from the wild fluctuations in surpluses and shortages of health workers. A review of these observatories for the WHO (2011) describe that these observatories, "*collect, analyze and disseminate data and information on the health workforce and the labor market, conduct applied research and produce knowledge, contribute to policy development, contribute to building capacity and understanding of HRH issues and advocate/ facilitate the dialogue between stakeholders. ... To accomplish their objectives, observatories use a range of strategies and tools, such as dedicated websites, HRH databases, technical publications, discussion fora, technical meetings and policy dialogues.*" (p.2). Some of these tasks are covered by different agencies and organizations across Canada, but not in a coordinated fashion that an agency would afford.

**The International Experience of Health Workforce Agencies**
***(cont.)***

Most relevant to the Canadian context is the similarly federated system in Australia. In 2010, Australia adopted and launched a national health workforce agency, Health Workforce Australia, to help guide nationally coordinated action towards strategic long-term healthcare reform and innovation, in order to address the challenges of providing a skilled, flexible, and innovative health workforce that meets the healthcare needs of all Australians (HWA, 2013a; HWA, n.d. a). Health Workforce Australia recognizes the complexity of the healthcare system, in that issues cannot be addressed in isolation. It has endeavoured to meet these challenges through holistic and collaborative means that see the development of a sound evidence base to be able to inform national policy, and reform the formation of policy programs that facilitate reform, "in training, workforce, workplace and international recruitment and retention and by working across jurisdictions, sectors, health and high education providers, professions and stakeholder groups" (IHWC, 2014, p. 66).

Their approach was yielded promising tools. Health Workforce 2025, for example, was produced by HWA to provide national projections of the health workforce numbers, as well as develop models to determine the effects of different policy scenarios for a range of health professions. In line with HWA's commitment to develop a sound evidence base, the purpose of these projections is to quantify the current health workforce, "and provide impetus and consensus for reform through the provision of evidence" (IHWC, 2014, p. 66). In addition to providing Australia's first major, long-term, national projections for doctors, nurses, and midwives, Health Workforce 2025 outlines why without a "nationally coordinated reform Australia is likely to experience limitations in the delivery of high quality health services" (HWA, 2013b, p. 7). Health Workforce 2025 also presents "alternative, more sustainable views of the future, based on policy choices available to government" (HWA, 2012a, p. iii). Moreover, "to address the findings of Health Workforce 2025, a clear set of actions is needed. The work to be undertaken will require a coordinated national approach involving governments, professional bodies, colleges, regulatory bodies, the higher education system and training providers" (HWA, 2012b, p. 3).

**For more information:**

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## ACRONYM DICTIONARY

This acronym dictionary has been prepared with input from a variety of colleagues cutting across a number of professions and sectors. It is not (yet) exhaustive. We would be pleased to have your input in adding to the dictionary to make it closer to complete.

| Acronym | Meaning |
|---|---|
| ACCC | Association of Canadian Community Colleges |
| ACOT | Alberta College of Occupational Therapists |
| ACP | Advanced care paramedic |
| ADAC | Alberta Dental Association and College |
| ADM | Assistant Deputy Minister |
| ADPC | Association of Deans of Pharmacy of Canada |
| AFMC | Association of Faculties of Medicine of Canada |
| AFPC | Association of Faculties of Pharmacy of Canada |
| AIPHE | Accreditation of Interprofessional Health Education |
| AIT | Agreement on Internal Trade |
| APN | Advanced practice nurse *(includes CNSs & NPs)* |
| AUCC | Association of Universities and Colleges Canada |
| AUD | Audiology |
| BCDA | British Columbia Dental Association |
| BScM | Bachelor of Science in Midwifery |
| BScN | Bachelor of Science in Nursing |
| CAA | Canadian Academy of Audiology |
| CACO | Canadian Assessment of Competency in Optometry |
| CAIR | Canadian Association of Interns and Residents |
| CAM | Canadian Association of Midwives |
| CAMRT | Canadian Association of Medical Radiation Technologists |
| CAO | Canadian Association of Optometry |
| CAOT | Canadian Association of Occupational Therapy |
| CAPA | Canadian Association of Physician Assistants |
| CAPER | Canadian Post MD Education Registry |
| CaRMS | Canadian Resident Matching Service |
| CASPLA | Canadian Association of Speech-Language Pathologists and Audiologists |
| CAUSN | Canadian Association of University Schools of Nursing |
| CCA | Canadian Chiropractic Association |
| CCHL | Canadian College of Health Leaders |
| CCP | Critical care paramedic |
| CCPA | Canadian certified physician assistant |
| CCCPR | Canadian Collaborative Centre for Physician Resources |
| CCMTS | Canadian Council of Massage Therapy Schools |

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|---|---|
| CCUPEKA | Canadian Council of University Physical Education and Kinesiology Administrators |
| CDA | Canadian Dental Association |
| CDA | Canadian Dietetics Association |
| CDHA | Canadian Dental Hygiene Association |
| CDAA | Canadian Dental Assistants Association |
| CDTA | Canadian Dental Therapists Association |
| CDSS | College of Dental Surgeons of Saskatchewan |
| CEO | Canadian Examiners in Optometry |
| CFMS | Canadian Federation of Medial Students |
| CFNU | Canadian Federation of Nurses Union |
| CFPC | College of Family Physicians of Canada |
| CHLNet | Canadian Health Leadership Network |
| CHA | Canadian Health Act |
| CHR | Community health representatives |
| CHW | (Federal/Provincial/Territorial) Committee on Health Workforce |
| CHWs | Community health workers |
| CIHI | Canadian Institute for Health Information |
| CIHR | Canadian Institutes for Health Research |
| CIPC | Canadian Interprofessional Health Collaborative |
| CKA | Canadian Kinesiology Association |
| CMA | Canadian Medical Association |
| CMCC | Canadian Memorial Chiropractic College |
| CMRC | Canadian Midwifery Regulators Consortium |
| CMRE | Canadian Midwifery Registration Exam |
| CMTA | Canadian Massage Therapist Alliance |
| CMTO | College of Massage Therapists of Ontario |
| CNA | Canadian Nurses Association |
| CNPI | Canadian Nurse Practitioner Initiative |
| CNS | Clinical Nurse Specialist |
| CoF | The Council of the Federation (Canada's Premiers) |
| COKO | College of Kinesiologists of Ontario |
| COTBC | College of Occupational Therapists of BC |
| COTM | College of Occupational Therapists of Manitoba |
| COTNS | College of Occupational Therapists of Nova Scotia |
| COTO | College of Occupational Therapists of Ontario |
| CPA | Canadian Physiotherapists Association |
| CPA | Canadian Psychological Association |
| CPHA | Canadian Public Health Association |
| CPhA | Canadian Pharmacists Association |
| CPMA | Canadian Podiatric Medical Association |
| CPO | College of Physiotherapists of Ontario |
| CPO | College of Psychologists of Ontario |

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|---|---|
| CPR | Cardiopulmonary resuscitation |
| CPSA | College of Physicians and Surgeons of Alberta |
| CPSM | College of Physicians and Surgeons of Manitoba |
| CPSNS | College of Physicians and Surgeons of Nova Scotia |
| CPSO | College of Physicians and Surgeons of Ontario |
| CKA | Canadian Kinesiology Association |
| CSAO | Canadian Standard Assessment in Optometry |
| CSHA | Canadian Speech and Hearing Association |
| CSMA | Canadians Studying Medicine Abroad |
| CSMLS | Canadian Society for Medical Laboratory Science |
| CSRT | Canadian Society of Respiratory Therapists |
| CT | Computed tomography |
| DAC | Denturist Association of Canada |
| DAPEI | Dental Association for Prince Edward Island |
| DCh | Diploma of Chiropody |
| DG | Director General |
| DPM | Doctor of Podiatric Medicine |
| DM | Deputy Minister |
| DSW | Development support workers |
| ED | Emergency department |
| EHR | Electronic health record |
| EHS | Emergency Health Services |
| EMC | Emergency Medical Care |
| EMS | Emergency Medical Services |
| EMT | Emergency medical technician |
| EMT-P | Emergency medical technician- Paramedic |
| ER | Emergency room |
| ESDC | Employment and Social Development Canada (*Formerly HRSDC – Human Resources and Skills Development Canada)* |
| FCR | Foreign credential recognition |
| FFS | Fee-for-service |
| FPT | Federal/Provincial/Territorial |
| FMRAC | Federation of Medical Regulatory Authorities of Canada |
| FQR | Foreign qualification recognition |
| GED | General Educational Development |
| HCC | Health Council of Canada |
| HEAL | Health Action Lobby (*all national professional assn except CMA and CAN)* |
| HESA | House of Commons Standing Committee on Health |
| HFO | Health Force Ontario |
| HHRP | Western and Northern Health Human Resources Planning Forum |
| HPLR | Health Professions Legislation Review *(Ontario)* |
| HPRAC | Health Professions Regulatory Advisory Committee *(Ontario)* |
| HRSDC | Human Resources and Skills Development Canada |

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|---|---|
| HSSA | Health Sciences Student Association |
| IEHP | Internationally educated health professional |
| IEN | Internationally educated nurse |
| IMG | International Medical Graduate |
| IPAC | Indigenous Physicians Association of Canada |
| IPC | Interprofessional Care |
| IPE | Interprofessional Education |
| LHIN | Local Health Integration Networks *(Ontario)* |
| LPN | Licensed practical nurse |
| MAINPRO | Maintenance of Proficiency |
| MCAT | Medical College Admission Test |
| MCC | Medical Council of Canada |
| MCCEE | Medical Council of Canada Evaluating Exam |
| MCCQE-1 | Medical Council of Canada Qualifying Examination, Part 1 |
| MCCQE-2 | Medical Council of Canada Qualifying Examination, Part 2 |
| MDA | Manitoba Dental Association |
| MEP | Midwifery Education Program |
| MINC | Medical Identification Number for Canada |
| MMBP | Multi-jurisdictional Midwifery Bridging Project |
| MScN | Master of Science in Nursing |
| MOC | Maintenance of Certification |
| MOHLTC | Ministry of Health and Long Term Care |
| MRA | Medical Regulation Authority |
| MRI | Magnetic resonance imaging |
| MSN | Master of Science Nursing |
| NACM | National Aboriginal Council of Midwives |
| NBAOT | New Brunswick Association of Occupational Therapists |
| NBDS | New Brunswick Dental Society |
| NCP | National Competency Profile |
| NLDA | Newfoundland and Labrador Dental Association |
| NLOTB | Newfoundland and Labrador Occupational Therapy Board |
| NOCP | National Occupational Competency Profile |
| NP | Nurse practitioner |
| NSDA | Nova Scotia Dental Association |
| NTNDA | Northwest Territories & Nunavut Dental Association |
| OAT | Optometry Admissions Test |
| OCSA | Ontario Community Support Association |
| OD | Doctor of Optometry |
| ODA | Ontario Dental Association |
| OECD | Organization for Economic Cooperation and Development |
| OEQ | Ordre des ergotherapeutes du Quebec |
| OHA | Ontario Hospital Association |
| OKA | Ontario Kinesiology Association |

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|---|---|
| OPA | Ontario Psychological Association |
| OSOT | Ontario Society of Occupational Therapy |
| OT | Occupational therapist |
| PA | Physician assistant |
| PAC | Paramedic Association of Canada |
| PACCC | Physician Assistant Certification Council of Canada |
| PAEP | Physician Assistant Education Program |
| PCP | Primary care paramedic |
| PEIOTRB | Prince Edward Island Occupational Therapists Registration Board |
| PHAC | Public Health Agency of Canada |
| PHC | Primary healthcare |
| PRPTF | Physician Resource Planning Task Force |
| PSNO | Personal Support Network of Ontario |
| PSW | Personal support workers |
| PT | Provincial/Territorial |
| QDSA | Québec Dental Surgeons Associations |
| RCDC | Royal College of Dentists of Canada |
| RCDSO | Royal College of Dental Surgeons of Canada |
| RCPSC | Royal College of Physicians and Surgeons of Canada (*Royal College)* |
| RD | Registered dietitian |
| RHA | Regional Health Authority |
| RMT | Registered massage therapist |
| RN | Registered nurse |
| RNAO | Registered Nurses Association of Ontario |
| RPN | Registered psychiatric nurse |
| SAC | Speech-Language and Audiology Canada |
| SCA | Sudden cardiac arrest |
| S-LP | Speech-Language Pathology/Pathologist |
| SOCI | Senate Standing Committee on Social Affairs, Science and Technology |
| SSOT | Saskatchewan Society of Occupational Therapists |
| UQTR | Université du Québec à Trois-Rivières |
| VF | Ventricular Fibrillation |
| WCIHC | Western Canadian Interprofessional Heath Collaborative |
| WHO | World Health Organization |
| WSIB | Workplace Safety and Insurance Board |
| YDA | Yukon Dental Association |