

Insights into the physician assistant profession in Canada

Danielle Fréchette, MPA; Arun Shrichand

ABSTRACT

Physician assistants (PAs) have been used for decades in the Canadian military. Now, PAs are being introduced in various clinical settings to provide patient care for the general population. This article reviews major developments in the PA profession across Canada over the last decade. Nearly 541 PAs are employed in Canada or work for a Canadian agency. Growing evidence demonstrates the positive effect of PAs; however, key issues challenge the extent to which the PA movement will continue to build momentum.

Keywords: physician assistants, Canada, workforce, training, regulation, pilot project

Canada's healthcare system, as others in the world, is facing challenges such as wait times, chronic diseases, care for older adults, mental healthcare, and health inequities within its vulnerable populations.¹⁻⁵ These issues have been compounded by the country's shortcomings in health workforce planning.⁶

Canada's provincial and territorial governments are increasingly expanding the use of other healthcare professionals, including physician assistants (PAs). PAs, who have been used for decades in the Canadian military, have now been introduced in various clinical settings to provide patient care for the general population. Concurrently, civilian training programs have been introduced to develop a cadre of PAs for the future.

OVERVIEW OF THE CANADIAN HEALTHCARE SYSTEM

Healthcare in Canada is administered and delivered by the country's 10 provinces and three territories, broadly guided by the Canada Health Act.^{7,8} Healthcare delivery and use of healthcare professionals such as PAs vary across jurisdictions.⁹

This variability applies to PA salary funding, which is provided through various sources including provincially funded programs and pilots and directly from physicians.

At the Royal College of Physicians and Surgeons of Canada in Ottawa, **Danielle Fréchette** is executive director of health systems innovation and external relations and **Arun Shrichand** is senior analyst of health system and policies. The authors have disclosed no potential conflicts of interest, financial or otherwise.

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Additionally, PAs also work outside the publicly funded healthcare system.^{9,10}

Similarly, regulation of PAs' scope of practice varies across jurisdictions. Although statutes enable PAs to practice under the supervision of a physician, they are not regulated in all Canadian jurisdictions. Each PA's scope of practice is determined individually, through negotiated roles outlined in a formal contract or agreement between the PA, the supervising physician(s), and possibly the setting where the PA is employed. These roles can include:

- taking patient interviews and recording medical histories
- conducting physical examinations
- requesting diagnostic tests
- prescribing
- conducting select controlled acts delegated by a physician
- counseling on preventive healthcare.¹¹⁻¹³

EDUCATION

The first PA educational program in Canada was offered at the Canadian Forces Medical Services School at Borden, Ontario, which graduated the first class of formally trained Canadian PAs in 1984.¹⁴ The program grants the degree in collaboration with the University of Nebraska Medical Center.

In 2008, the University of Manitoba and McMaster University in Hamilton, Ontario, offered the first civilian PA training programs in Canada. A third civilian program was launched in 2010 by the PA Consortium, and grants a University of Toronto degree delivered in collaboration with the Northern Ontario School of Medicine and the Michener Institute for Applied Health Sciences. The University of Manitoba is the sole graduate program for PA education in Canada, offering a master's of physician assistant studies. The program spans 26 months. Applicants must have a bachelor's degree from a recognized university and complete undergraduate courses in human anatomy, physiology, and biochemistry.¹⁵

The Ontario universities offer PA programs at the undergraduate level. The length of McMaster University's bachelor of health sciences (physician assistant) degree and the PA Consortium's bachelor of science physician assistant degree is 24 months. Both programs require applicants to have completed a minimum 2 years of undergraduate study. The PA Consortium also requires

Key points

- PAs have been used for decades in the Canadian military and are now being introduced in various clinical settings to care for the general population.
- More than 500 PAs are employed in Canada or work for a Canadian agency.
- A number of studies have shown strong support for PAs among healthcare providers and Canadians in general.
- The lack of a long-term, sustainable model of funding is one hindrance to further expansion of the profession.

applicants to have a minimum 910 hours of healthcare experience acquired through employment, volunteering, or clinical placements that were undertaken in a healthcare educational program.^{16,17} The Canadian Association of Physician Assistants (CAPA), the national organization that represents PAs in Canada, also ensures that members meet the national standard of practice for PAs. The national standard for PA education, CanMEDS-PA, was refined in November 2015 to mirror the Royal College of Physicians and Surgeons of Canada's recently revised CanMEDS framework for physicians.¹⁸

The national certification examination for PAs is administered by the Physician Assistants Certification Council (PACC), an independent body within CAPA. Most employers require PAs to be certified before they are hired.¹⁹ The PACC Continuing Professional Development Committee also requires that all Canadian certified PAs complete specific continuing professional development requirements, similar to those required of physicians.²⁰

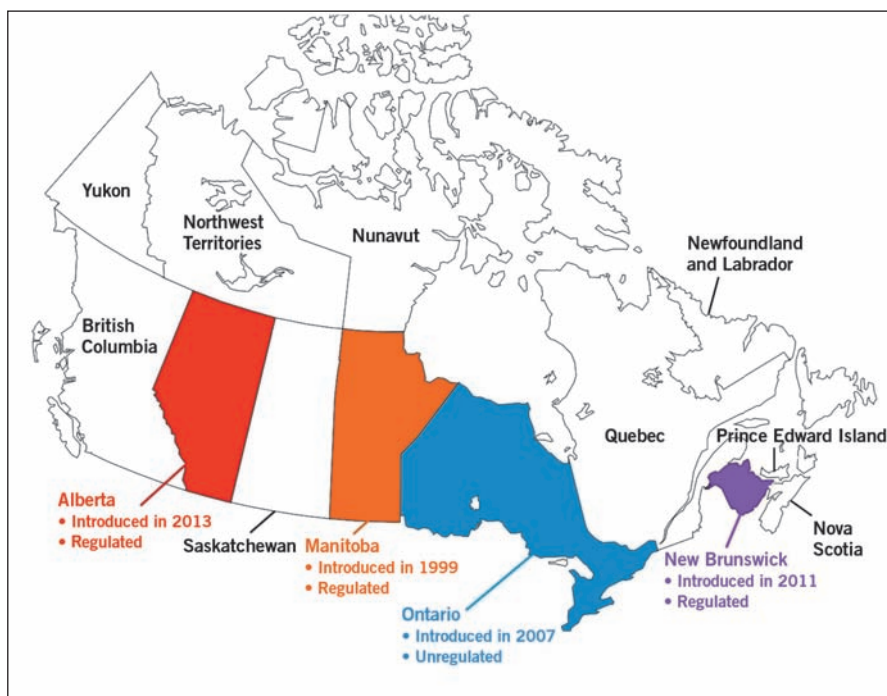


FIGURE 1. PAs in Canada: Provinces with regulatory and/or legislative frameworks

PROVINCIAL DEVELOPMENTS

Alberta In 2010, the College of Physicians and Surgeons of Alberta passed a bylaw allowing PAs to work under the responsibility of a regulated member (Figure 1). Subsequently, the medical regulatory authority established a voluntary, nonregulated registry for PAs.²¹ In 2013, the provincial government announced a 2-year PA demonstration project to evaluate the effect of the profession as part of a collaborative healthcare team. The project comprises 10 PAs in acute, ambulatory, and primary care settings.^{22,23}

In May 2016, the Health Professions Amendment Act was passed into law and took immediate effect. This law makes PAs a regulated health profession under the College of Physicians and Surgeons of Alberta.

British Columbia To date, PAs have been limited to simply being part of the policy discourse in the province. Doctors of BC has been a strong advocate of PAs, producing a policy paper and policy statement expressing their support.^{12,24} In 2015, the British Columbia Ministry of Health announced in a policy paper that it will pursue a surgical health human resource strategy, which will consider the potential contribution that can be made by health professions such as PAs.²⁵

Manitoba In 1999, Manitoba became the first province to establish a legislative and regulatory framework for PAs. An amendment was made to the province's medical act to allow the licensing of clinical assistants; this act was amended in 2009 to include the title of PA. PAs are registered at the College of Physicians and Surgeons of Manitoba.¹² For licensure, the College also requires PAs to submit a contract of supervision, which

includes an outline of the roles and responsibilities that will be performed by the PA under the supervising physician.²⁶

New Brunswick PAs are regulated by the College of Physicians and Surgeons of New Brunswick. In 2009, the New Brunswick Medical Act was enacted to allow PAs to be licensed, provided that they register and follow the College's terms of practice.^{27,28} According to Ed Schollenberg, MD, registrar of the College of Physicians and Surgeons of New Brunswick (oral communication, June 2015), the province has maintained two positions for PAs since 2011, in an ED in the city of Fredericton.

Ontario PAs are unregulated in Ontario. The PA's clinical work falls under the direct supervision of a physician, which includes 13 controlled acts that physicians are authorized to delegate to other

individuals under the Ontario Regulated Health Professions Act.⁹ PAs were introduced as part of an overarching plan introduced in 2006 aimed at tackling Ontario's health human resource needs. They were presented via demonstration projects that recruited graduates who completed formal PA training in the Canadian Forces or the United States. Select international medical graduates also were hired as PAs.²⁹ Following the initial demonstration projects, the province has continued to

provide funding through salary grants. These grants have been given as contract extensions to previously funded PA positions, and to employers who hire graduates from Ontario's PA programs and deploy them in priority settings.⁹ In 2012, CAPA submitted an application to the Ontario Health Professions Regulatory Advisory Council requesting that the province regulate the profession under the Regulated Health Professions Act. The advisory council rejected the proposal, stating that the application did not demonstrate sufficient evidence that the profession can pose a risk of harm to the public to the extent that it warrants regulation.³⁰ This risk of harm threshold is the primary criterion of assessment for the Health Professions Regulatory Advisory Council; as such, the council advised the government to maintain the status quo of unregulated PAs in the province. Instead, the council advised that the government create a compulsory registry for PAs under the oversight of the College of Physicians and Surgeons of Ontario as a means to increase certainty about practitioners' qualifications.³⁰ No significant developments have occurred in this area since the release of this recommendation in 2012. The government has publicly stated that it continues to work "with key stakeholders to explore what requirements would be necessary to establish a PA directory."³¹

Other provinces Notwithstanding the absence of provincial regulatory and legislative frameworks, PAs also are practicing in other provinces and one territory: Saskatchewan, Quebec, Prince Edward Island, Newfoundland, Nova Scotia, British Columbia, and in the Northwest Territories (Table 1).

EVIDENCE

An emerging evidence base within Canada supports the positive effect of PAs in delivering high quality care across a variety of clinical settings. For instance:

- An examination of six EDs 14 days before and 14 days following the introduction of PAs observed that when PAs were on duty, patient length of stay decreased 30% and

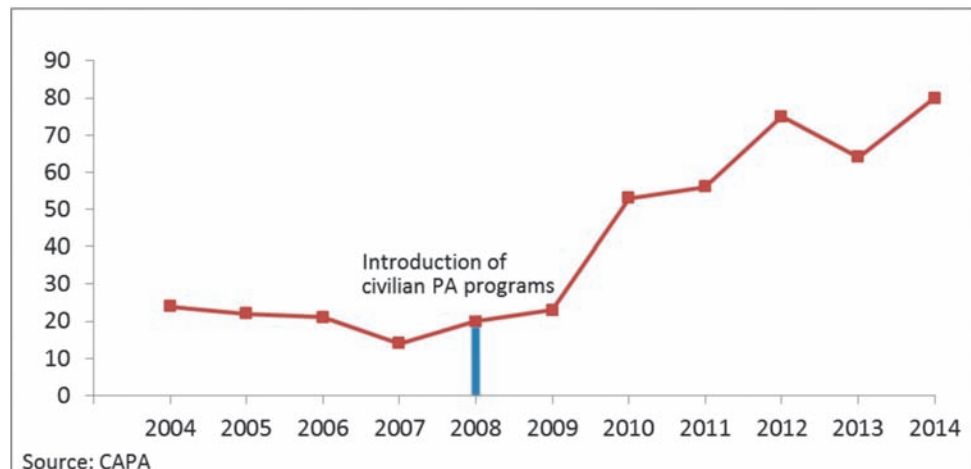


FIGURE 2. Number of PA students graduated per year

patients were 1.6 times more likely to be seen within wait time benchmarks.³²

- Comparing with a control group, an infectious diseases consult service found that the PAs led to decreases in time to consultation (21.4 hours to 14.3 hours) and length of stay by 3.6 days per patient.³³

- A study of an arthroplasty service showed that PAs saved the supervising physician about 204 hours per year and reduced median wait times from 44 weeks to 30 weeks following their introduction. Additionally, the research found that PAs were a cost-neutral alternative to using general practitioner surgical assistants, who could devote a larger proportion of their time to primary care services as a result.³⁴

A number of studies have shown strong support for PAs among healthcare providers and Canadians in general.³⁵⁻⁴⁰ This also has been observed in project evaluation reports commissioned by the governments of Ontario and Manitoba on their respective PA initiatives. In Ontario, supervising physicians, care team members, and administrative representatives across various settings found that PAs improved patient satisfaction, reduced wait times, increased average daily billings for hospital-based supervising physicians, increased referrals to home care and long-term care, reduced acute care length of stay, and reduced alternate level of care days for residents of long-term care.²⁹ In Manitoba's multiphase evaluation of six primary care sites, patients, physicians, and staff revealed that PAs contributed to improvements in areas including access, quality of care (including enhanced documentation, continuity of care), and the work-life balance of physicians and other providers.⁴¹ In Alberta, preliminary evaluation findings of the 2-year PA pilot project have been positive as well.⁴²

AN EXPANDING WORKFORCE

The introduction of PAs in various provinces and the concurrent introduction of civilian training programs

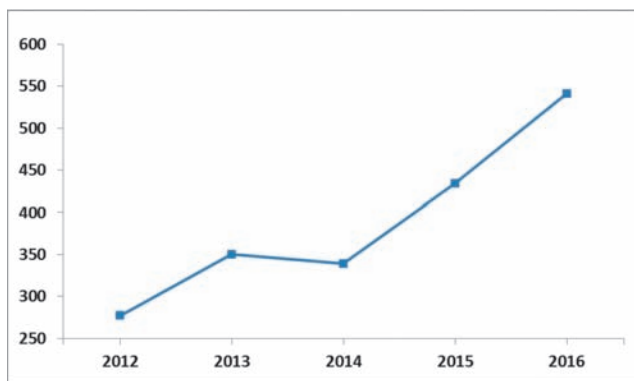


FIGURE 3. CAPA regular membership, 2012-2016. Membership is as of March in all years except 2016, for which membership is as of February.

underlie the notable increases in the PA supply and workforce in Canada over the last decade.

As shown in **Figure 2**, the number of PA graduates has more than tripled over the last decade or so. The numbers are particularly illuminating following the introduction of the first civilian PA programs in 2008; previous cohorts were introduced through the Canadian Forces PA program. There was a fourfold increase in 2014 in the number of new PAs graduating from Canadian programs compared with 2008. According to Patrick Nelson (oral communication, December 2015), executive director of CAPA, future projections suggest an average of 75 new PAs per year going forward.

Figure 3 shows that the number of CAPA regular members (those who completed an approved PA program and are employed in Canada or for a Canadian agency) has nearly doubled since 2012. These figures may be an underrepresentation of the PA workforce's growth in Canada because membership in CAPA is not mandatory. Of the provinces, Ontario overwhelmingly has the highest proportion of PAs (more than 60%) who are registered as regular members by CAPA.

ADVANCING THE PROFESSION

The growth of the PA profession in Canada, albeit positive, has been moderate. Indeed, the 500-strong workforce looks modest in comparison to other health professions such as midwives and NPs, who numbered 1,800 and 3,286 in 2012, respectively.⁴³ Looking ahead, projecting the extent to which the PA movement will continue to build momentum is difficult. A long-term, sustainable model of funding will be critical to support the growing number of graduates in Canada's PA programs.

In the interest of sound workforce planning and to properly support the development of the PA profession in Canada, greater effort will be needed to continue to build the quantity and quality of Canadian evidence in regards to PAs. A larger library of domestic knowledge on the effect of PAs on patient health outcomes and health system performance (especially cost-effectiveness) will be

TABLE 1. CAPA regular members, 2015

• Alberta—25
• British Columbia—21
• Manitoba—58
• New Brunswick—5
• Newfoundland and Labrador—1
• Nova Scotia—27
• Northwest Territories—1
• Ontario—274
• Prince Edward Island—1
• Quebec—16
• Saskatchewan—4

particularly informative for decision-makers.⁹ This also will assuage concerns about a disproportionate reliance on American evidence to support the profession.³⁰

CONCLUSION

In 2014, the United States had 101,977 certified PAs—clearly illustrative of their well-established roots in the country.⁴⁴ Comparatively, Canada has one PA for every 200 in the United States. With small numbers and spotty distribution across the country, the profession remains very much in its infancy in Canada, particularly in the civilian setting. Important developments in the last decade, such as the expansion of the profession in select provinces and the introduction of three civilian PA training programs since 2008, are promising signs. However, the unstable funding base for PAs across the country serves as a reminder that expansion may be uncertain. Scholars have compellingly made the argument that Canada's historical success with PAs in its military should catalyze the profession's foray into the civilian sector.⁴⁵ Moving forward, developments relating to regulation, legislation, funding models, and the pursuit of further empirical evidence will be some of the key variables that will determine the PA profession's eventual foothold in Canada. **JAAPA**

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