Physician Assistants – A solution to wait times in Canada?

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Abstract
Access to medical care is limited in most of Canada, and the population often endures lengthy waiting times to see a physician. The use of new and varied health care providers has been suggested as a means to alleviate the shortage of physicians. This paper reviews the history and role of the Physician Assistant (PA), both in Canada and internationally, and outlines the clinical competencies currently held by this provider to fill the role of a physician extender in our country. PAs’ experiences are reported in the Canadian Forces (CF), where they have been employed for many years, and in Manitoba, where they are used as surgical assistants. The potential for the PA to be incorporated into our provincial health care systems will be considered in light of common barriers to Health Human Resources (HHR) strategic implementation.

The First Ministers’ Meeting on the Future of Health Care in 2004 identified a deep and broad consensus for a renewal of health care in Canada. This renewal specifically points to the need to make timely access to quality care a reality for all Canadians. The resulting 10-year plan to strengthen health care committed federal and provincial governments to better management of wait times and the measurable reduction of wait times that are longer than medically acceptable.1

To address access and wait list problems, the federal government has responded with two major initiatives. First, $41-billion in federal funding was announced as part of the 10-year plan, which stipulated that provinces achieve improved access in five priority areas (cancer, heart, diagnostic imaging, joint replacements and cataracts). Secondly, a 10-year $5.5-billion Wait Times Reduction Fund was announced to coincide with benchmarks aimed at cutting waiting times for medical services.2

There is still considerable focus on the shortage of health providers, particularly physicians and nurses. The Commission on the Future of Health Care in Canada, headed by Roy Romanow, pointed out that “the situation for health care providers is serious and demands national attention.”3 In its recent annual report on the progress of the 10-year plan, the Health Council...
of Canada stated, “Sufficient numbers of health care providers trained in teams must be put in place; otherwise all other efforts would flounder.”

The Romanow Commission called for “new approaches to training and education in addition to a careful look at how the roles and responsibilities of various providers are changing.” The Commission also identified “new and emerging health professions,” one of which was the Physician Assistant (PA). In the evolving landscape of Health Human Resources (HHR), the PA has emerged as a promising new provider. The Canadian Association of Physician Assistants (CAPA) reports ongoing dialogue with a number of provincial health organizations. The role of PAs in the Canadian Forces (CAPA) reports ongoing dialogue with a number of provincial health organizations. The role of PAs in the Canadian Forces (CF) has been well reviewed, and used as a guideline for the role of PAs in Canada. “Clinical Assistants,” namely, civilian PAs, have been successfully employed in Manitoba for five years, mainly on surgical wards. The Minister of Ontario Health and Long-Term Care recently announced the inclusion of the PA in Ontario’s provincial health care system. Also, the British Columbia Medical Association, in a recent report, recommended the introduction of PAs within that province’s health care system.

**Purpose**

With a number of health providers, regulated and non-regulated, who assist physicians in many arenas of care, ambiguity arises regarding the definition and scope of practice of the PA. This paper reviews the history and role of the PA, both in Canada and internationally, and clarifies this provider’s current clinical competencies. Results from a recent report of the Canadian Orthopedic Association (COA) on improved services employing the PA as part of a surgical team in Winnipeg are outlined. Experiences of PAs in the CF and in Manitoba are reported. The potential for the PA to be incorporated on a larger scale into provincial health care systems are considered in light of common barriers to HHR strategic implementation.

**History and roles of Physician Assistants**

PAs were developed in the United States during the mid-1960s, when it was recognized that there was a shortage and uneven distribution of doctors working in primary care. The first trainees were highly skilled military paramedics who, following Vietnam War service, had no equivalent medical role in civilian life. PAs make an important contribution to health care, and have the potential to decrease doctors’ working hours and increase their productivity. One of the significant benefits reported with the use of this provider is cost effectiveness. In various health care settings, increased patient throughput and time savings for physicians have been demonstrated.

This year, the American Academy of Physician Assistants (AAPA) estimates that 58,665 PAs in the United States are performing clinical practice. Every state has laws or regulations authorizing PAs to practice, with 49 states having enacted laws that authorize PAs to prescribe. There is an international trend towards inclusion of PAs in health care systems, as other countries contend with HHR shortages similar to Canada’s. American Physician Assistants have participated in successful trials in England, and are now employed in that country and the Netherlands as PAs under “Delegated Acts” in primary care and various specialties. Other countries are following suit: Scotland is planning a two-year pilot program to hire 20 PAs working in emergency and surgery, and Australia is investigating a PA model similar to that of the United States.

**Definition of the Physician Assistant**

Physician Assistants are clinicians practicing in a physician extender role. They are found in almost every medical and surgical area in the U.S. and are appearing in both primary and specialist care settings in Canada. They perform similar tasks to their physician supervisors, including examination, diagnosis, diagnostic testing, treatment, referrals and prescribing. Research shows PAs to be capable of giving care, comparable to that of physicians for similar services. They have improved access to health care for populations in rural, inner city and other medically underserviced areas. With their training modified as needed to integrate with local health systems, PAs are considered a viable adjunct to physicians in areas with shortages of doctors. The experience of the Canadian military supports this view, with PAs successfully providing primary care services in isolated locations without the presence of a physician.

PAs are competent in the use of critical-thinking skills in all aspects of their practice. A set of generalist technical skills are developed in training, which can be further augmented for practice-specific needs. They demonstrate the ability to comply with federal and provincial legislation, as well as effective employment within locally established policies and procedures of practice. A set of national professional standards and ethical guidelines, including the commitment to life-long learning, has been established by CAPA.

Specific tasks vary for Physician Assistants depending on area of practice and level of education; however, usual tasks will include the following:

- obtaining full health history;
- conducting triage;
- conducting comprehensive and focused physical assessments and interpreting findings;
- utilizing primary and secondary assessment results to determine required investigations;
- ordering and interpreting specific laboratory and diagnostic studies;
- obtaining specimens;
- determining and implementing treatment plans, including prescribing and minor surgical procedures such as sutures and cast application;
- monitoring patient progress;
- assisting in surgery;
• making rounds, teaching medical residents, taking call duties in hospitals and nursing homes;
• applying advanced life support and resuscitation techniques; and
• providing health maintenance education. 

Physician Assistant training

There are 136 accredited Physician Assistant education programs in the United States, 75% of which offer a master's degree. Typically 24-27 months long, these education program admission requirements usually call for at least two years of college and some health care experience. The majority of admitted students have a bachelor's degree and approximately 40 months of health care experience. Upon completion of the education program, American PAs receive National Certification from the National Commission on Certification of Physician Assistants (NCCPA). Graduates of an accredited PA program are then eligible to take the Physician Assistant National Certifying Examination (PANCE). All states require the PANCE for licensure. 

In Canada, there is currently one training program for PAs, conducted by the Canadian Forces Medical Services School (CFMSS) in Borden, Ontario. The program has been accredited by the Canadian Medical Association (CMA). It is offered to experienced Medical Technicians in the CF and comprises an initial 12 months of didactic training similar to a condensed medical education. This is followed by 12 months of clinical rotations through civilian hospital and clinic facilities. The University of Nebraska has endorsed this course as equivalent to a U.S.-accredited Bachelor's PA program. Graduating PAs of the CFMSS-PA Program are eligible for certification through the Canadian Certification Council for Physician Assistant (CCCPA) exam. A two-year civilian PA program at the master's level is planned to commence in 2007 at the University of Manitoba. 

A national standards and certification process has been developed by CAPA, similar to the U.S., which includes the definition of liability for PAs. Prequalification of candidates for training and certification is also part of the mandate of this association's allied Certification Council. This provides an appropriate definition of quality of care and safety concerns for the public, and is meant to provide a template to avoid fragmented implementation of PAs, through multiple pilot projects and varied regional definitions of the Physician Assistant.

The Canadian experience

The experience of PAs in Canada began in the Canadian Forces, where they have been trained to develop competencies similar to the U.S. generalist PA. There are 127 military Physician Assistants now practicing in numerous primary care environments, ranging from military bases throughout Canada, to ships at sea, and operational theatres in Afghanistan. Licensed Clinical Assistants in Manitoba are employed as PAs in a number of surgical services. The College of Physicians and Surgeons of Manitoba (CPSM) approves a Contract of Supervision outlining the scope of practice with regards to supervision, duties and procedures, prescription, other special privileges and practice locations. This year, Physician Assistants are also being introduced in Ontario as part of the HealthForceOntario Strategy. They will be employed by six hospital emergency departments through pilot projects, where they will assist their on-site supervising physicians in delivering clinical care. 

The COA has recently reported on a trial involving PAs, general practitioners, semi-retired orthopedic surgeons and nurses. In 2005, research was undertaken to examine the potential for orthopedic surgeon extenders to assist orthopedic surgeons in their activities, both inside and outside the operating room. By freeing up the orthopedic surgeon to concentrate on operating, greater patient surgery throughput and reduced waiting times were achieved. 

The COA research highlighted the workforce and resource crises in orthopedic care in Canada and the need for physician extenders. It concluded the following:

• having studied various models of physician extenders, the best model for orthopedics is the PA model;
• PAs improve access to orthopedic care, patient safety and retention and recruitment of orthopedic surgeons; and
• having been educated in a medical-school environment and trained by their physician supervisor, the PA's practice mirrors that of the supervising physician. PAs are equally proficient inside the operating room and in orthopedic clinic and hospital ward settings. This professional flexibility makes them true physician extenders. 

Widespread adoption of the PA model in Canada offers the potential to better utilize existing orthopedic surgeon resources, reduce patient waiting times, improve patient satisfaction and aid in the retention and recruitment of orthopedic surgeons. 

Additionally, reports from a Physician Assistant employed within a plastic surgery service in Manitoba indicate faster set-ups for all types of cases, fewer interruptions to surgery, increased volumes of patients seen at clinics, improved resident teaching about suture techniques and wound care and decreased infection rates post-op.

Discussion

Success of PAs in the Canadian Forces, early reports from civilian PA practice, and the growth of provincial initiatives suggest that PAs are emerging as a viable solution to reducing wait times, and increasing access to care in a timely, safe and cost-effective manner. Decades later, the definition, model and evolution of the PA in Canada seems to mirror the U.S. experience in many aspects. Certainly, the profession in the U.S. has become a very important and significant component of its health care system. While the Canadian experience has been limited, successful employment of American PAs in the areas of cancer, heart, diagnostic imaging and cataracts suggests that these may be viable areas of
practice for PAs in Canada. This is a reasonable consideration given similar education and scopes of practice between U.S. and Canadian PAs.

While PAs are a promising addition to the current health provider mix in Canada, defining existing barriers to implementation forms an important component in using change management principles to facilitate inclusion of this professional. Each province would need to determine how best to incorporate PAs into their health care system, and the education requirements of these professionals.

Romanow pointed to a lack of a viable mechanism for Health Human Resources planning with an emphasis on quick fixes. Recently, Health Canada sponsored a national conference entitled "Mainstreaming HHR Innovations." Held by the School of Public Administration at Dalhousie University, the conference suggested a number of barriers that appear relevant to national implementation of the Physician Assistant. The conference noted that provider-driven initiatives that generally take the form of pilot projects, implemented under current legislative and regulatory guidelines, often encounter resistance from associated health providers. Redefinition and re-emphasis of the roles of health care professionals often meet conflict due to competition between provider groups who are seeking to expand their scopes of practice. Interdisciplinary collaboration may be made more complex by the addition of another health care provider with unique skills and education. While not succinctly requiring redefinition of other providers, the introduction of this new provider as a physician extender will undoubtedly encounter resistance from other HHR professional stakeholders.

The limited number of Physician Assistants available to the Canadian health care system presents a challenge to implementing this new provider. Approximately 200 PAs are currently employed in Canada, the majority of them in the CF. There does exist a number of U.S.-certified PAs who have shown an interest in immigrating to Canada, should opportunities for similar practice evolve in this country. However, long-term sustainability of this profession necessitates support and alignment within the major reform arenas of governance, regulation, education and funding. Development of a two-year educational program appears to be a cost-effective and expedient method in remedying physician shortages. Overcoming the complex barriers in implementing innovative HHR strategies may be facilitated through effective application of change management principles. Communication with and education of both supportive and competitive stakeholders, provision of solid information about PAs may decrease resistance to implementation. Additionally, while a time-consuming and expensive proposition, participation from concerned organizations in designing strategies for change may gain wider commitment to the development of this new provider. The recent Canadian Nurse Practitioner Initiative (CNPI) sponsored by Health Canada provides a template for optimal application of change management principles.

Conclusion
Implementation of the Physician Assistant into the health care system would have a positive effect on reducing wait times, decreasing costs and increasing Canadians’ access to health care. Clear guidelines exist for PAs’ education, scope of practice and clinical competencies from both the Canadian and the international experience. PAs employed in Canada demonstrate effective, efficient delivery of care. A number of barriers, with a discussion of change management principles, have been outlined to facilitate effective implementation. The evolution, definition and the model adopted for Physician Assistants in our country mirrors the successful American experience; it remains to be seen how rapidly this profession will grow in Canada.

References