

**HealthForceOntario**

# Introducing Physician Assistants in Ontario

December 2008

HealthForceOntario, Ontario's health human resources strategy (May 2006), announced a plan to introduce physician assistants (PAs) as one of four new roles in the health care system. Two and a half years later, Ontario has over 60 physician assistants working in different care settings across the province.

This report describes the steps Ontario took to implement the new PA role. This is the first in a series of reports on the roll-out of the Ontario PA initiative.

The goal of HealthForceOntario is to give the people of Ontario access to the right number and mix of qualified health providers, now and in the future.

Ministry of Health and Long-Term Care

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# Executive Summary

Physician assistants (PAs) have been employed by armed forces around the world since the mid 1800s, but they were first introduced into a civilian health care system – in the United States – in the 1960s. Over the past few years, six other countries (including Canada) have taken steps to introduce the PA role. In 2006, Ontario announced its intention to introduce PAs as well as a number of other new roles through HealthForceOntario, the government’s health human resources strategy.

Two and a half years later, Ontario has over 60 PAs working in a variety of demonstration projects and 21 students in a postsecondary PA education program. Demonstration project PAs work in hospital emergency departments; other hospital departments such as general internal medicine, orthopedics, general surgery and complex continuing care; Community Health Centres; and physician practices in diabetes care and long-term care homes across the province. The first civilian education program for PAs in Ontario accepted its first class of students in September 2008.

The Ontario PA initiative demonstrates that a comprehensive, collaborative approach can lead to the successful integration of PAs into interprofessional teams in one to two years. It also demonstrates that having PAs on interprofessional teams can have a positive impact on wait times, access to care, patient satisfaction, physician satisfaction, team satisfaction and productivity in emergency department settings. (Evaluation results from other settings are not yet available.)

The PA initiative involves a comprehensive approach, which to date has included:

- introducing PAs as unregulated providers supervised by physicians as part of a broader commitment to develop interprofessional teams
- engaging with current and future employers, educators, and professionals; building partnerships with the Ontario Medical Association, the Ontario Hospital Association and the Association of Ontario Health Centres; and establishing a collaborative steering committee to help guide the initiative
- defining the competencies and roles of PAs. PAs are expected to have the education and skills to conduct patient interviews, take histories, conduct physical examinations, counsel patients on preventive health care and perform certain controlled acts delegated to them by a physician, based on the PA’s knowledge and skills
- recruiting PAs for the demonstration sites from two streams: graduates of accredited PA programs in the US and Canada; retired PAs from the Canadian Forces; and selected international medical graduates (IMGs). IMGs accepted into the demonstration had to complete an assessment and integration program before beginning practice as PAs
- providing guidelines and compensation for supervising physicians, and addressing liability issues
- selecting demonstration sites, and providing guidelines for implementation, supports for interprofessional teams, and communication tools for all sites
- developing post-secondary education programs for PAs and providing support for PAs to be certified in Canada

- developing an evaluation framework to measure the impact of introducing PAs on quality of care and wait times, interprofessional teams, and patient and provider satisfaction.

The biggest challenge that the initiative faced in its first two years was recruiting enough PAs within the tight timelines. It often took six months or longer to find PAs and get them on the job. The evaluation of the demonstration pilot in emergency departments also revealed some resistance on the part of other team members, as well as the need for more orientation and mentorship to help the team members manage the learning curve. These issues were addressed when the initiative was rolled out to other demonstration settings and sites.

Despite these challenges, the demonstration pilot in emergency departments was a success. Having a PA on duty significantly reduced both wait times and the proportion of people who left the emergency department without being seen, and team members felt positive about the role of PAs.

An ongoing evaluation of the impact of PAs in various health care settings will continue throughout the demonstration projects. Results and feedback will be used to guide the implementation process.

The experience of the initiative to date highlights the importance of a comprehensive approach and strong stakeholder engagement from the beginning, as well as appropriate supports (e.g., training, information) for the PAs, the supervising physicians, the interprofessional teams, and the health care settings and sites.

# Background

## Looking Ahead

Over the next 10 to 15 years, three trends will have a dramatic impact on the health workforce in Ontario. First, a growing population and an increase in chronic illnesses such as arthritis, diabetes and heart disease will mean that more people will need ongoing monitoring and management of their conditions. Second, new technologies and medical advances will continue to change the way health care is delivered and the skills providers need. For example, more conditions will be managed using drug treatments and possibly gene therapies rather than surgeries. Third, with the aging of the baby boom generation, a significant proportion of Ontario's health workforce will retire. Although the province has significantly increased the number of health professionals it educates each year, it will be several years before these new graduates enter the workforce; even then, there will not be enough health professionals to replace all those who will retire.

*The number of Ontarians with a chronic disease will increase by 20% by 2015.*

To ensure Ontarians receive the care they need, the province will need a mix of providers with different skills who are flexible enough to adapt to changing health needs as well as changes in health care delivery. Ontario will also have to make the best possible use of all its health human resources. The province is already developing interprofessional teams of health care providers who work collaboratively, apply all their skills, and provide more comprehensive care for more people than practitioners working alone.

## The Opportunity

With the shift to team-based care, there is an opportunity to create new roles that will:

- provide more choices for people considering careers in health care
- complement and/or support the roles of existing health professionals in order to increase access to care.

For example, a 2006 analysis of the care provided by Canadian surgeons revealed that over half the patients seen by surgeons in clinics (53.5%) could have been safely cared for by a physician assistant. The same study also found that surgeons spent only one-quarter of their time in the main operating room – and almost half (48.7%) of their time in the minor procedure area on tasks that could have been performed by a physician assistant. Physician assistants on surgical teams could increase surgical productivity by 36.7% and reduce wait times. (Sigurdson 2006)

Creating new roles will also allow people who already have some health education to participate in the health workforce. Given that two-thirds of our population growth over the next 10 years will come from new immigrants, Ontario must be able to provide training and employment opportunities for people who come to Canada with health education and experience to enter the workforce in a timely way.

*Each year, about 1,500 immigrants arrive in Ontario with health training. With recent changes to Canada's immigration policy, that number will increase.*

## Experience in Other Jurisdictions

Physician or medical assistants have been employed by armed forces around the world since the mid 1800s, but they were first introduced into a civilian health care system – in the United States – in the 1960s. As of 2007, at least eight countries either employ or are planning to employ physician assistants (see Table 1). Of these eight countries, the United States has had over 40 years of experience with physician assistants (PAs); most of the others are in the process of introducing PAs into their health workforce.

**Table 1. Population Statistics and Numbers of PAs for Nations Developing PA Programs, 2007**

	Population	# of PAs
Australia	20,264,082	2
Canada	33,098,932	170
United Kingdom	60,609,153	26
Netherlands	16,491,461	75
Scotland	5,062,011	12
South Africa	47,391,900	0
Taiwan	23,036,087	1,400
United States	301,000,000	65,000

(Hooker et. al., 2007)

### *The United States*

The United States introduced physician assistants in the 1960s, both to compensate for shortages of physicians and to contain costs. The first PAs in the US were former military corpsmen who, with some additional education, were able to work under the supervision of doctors to provide medical care. The first education programs for physician assistants, which were provided by medical schools, were privately funded. Beginning in 1970, the US government began to fund education for both physician assistants and nurse practitioners as a way to stimulate the recruitment of minorities and to deploy more practitioners to rural and other underserved areas. (Jolly, 2008) As of 2008, there were 139 education programs for physician assistants in the US, most of which offer a masters degree. The PA curriculum in the US “resembles a shortened form of traditional medical education, and emphasizes a primary care, generalist approach”. All US programs grant a certificate, and students are required to complete national certification exams. (Jolly, 2008)

*Physician assistant is one of the fastest growing occupations in the US.<sup>34</sup> In 2007, the US had about 70,000 physician assistants, and about 5,500 new ones graduate each year.*

## *Britain*

In 2001, the British National Health Service (NHS) began to consider introducing physician assistants. Despite concerns about integrating providers who do not practice independently into a system of self-regulating professions, and despite complaints from physicians that PAs would undermine patient care, Britain introduced a two-year PA trial (Jolly 2008). In 2003, two general practices in an underserved urban area in England hired three US-educated PAs; in 2004, 12 more PAs were hired in primary and secondary care settings; and by 2007, there were about 50 PAs working in the country. (Hooker et al., 2007)

In September 2006, the Royal College of Physicians and the Royal College of General Practitioners, in partnership with the National Practitioner Programme (the Collaborative Group), recommended national education, registration and monitoring standards for PAs, and released a competence and curriculum framework to provide guidelines for new physician assistant education programs in order to produce "... professionals who have the knowledge, skills and professional behaviours to function as Physician Assistants (and to have their qualifications nationally and, potentially, internationally recognized) and the personal and intellectual attributes necessary for lifelong professional development." (Jolly 2008) Six universities, all with medical schools, have established PA education programs, and students write a common national exam for graduation. (Hooker et al., 2007)

Upon graduation from the PA education program, students complete a 12-month internship before being eligible for registration, and they are required to participate in continuing professional development to retain registration and to sit a re-accreditation examination every five years (Jolly 2008).

## *Canada*

In the fall of 2005, when staff of the Ministry of Health and Long-Term Care conducted an environmental scan for Ontario's PA initiative, there were approximately 130 PAs practicing in Canada. Most worked for the Canadian Armed Forces, which has employed physician assistants for over 30 years; a few were employed in the mining and oil sector as well as correctional facilities in Nova Scotia. Their main role was to provide first line comprehensive medical care as well as to perform intake health examinations and wellness clinics, but PAs were also expected to be the first responders in case of accident or trauma. The Winnipeg Regional Health Authority also employed a small number of PAs as "clinical assistants", who worked mainly in hospitals, assisting physicians in surgery. By 2007, the number of PAs in practice in Canada had increased to approximately 150, including some from the Ontario PA initiative.

Decisions regarding whether and how to regulate practice and education standards for health professionals are jurisdiction-specific in Canada. Unlike the US, certification as a PA is voluntary in Canada. The credentialing body for physician assistants in Canada – the Physician Assistants Certification Council (PACC) – sets exams and certification requirements for PAs. Membership in the professional association for physician assistants – the Canadian Association of Physician Assistants (CAPA) – is also voluntary in Canada. CAPA provides a voice for the profession and sets national practice standards, but does not have authority to regulate practice the way a professional regulatory college in Ontario does.

In 2005, there was only one accredited PA education program in Canada: the Canadian Forces program, which was accredited in 2003 by the Canadian Medical Association, and which graduates approximately 20 PAs per year. Individuals accepted into the armed forces program are required to have a medical assistance or paramedical background. They receive 12 months of theoretical instruction followed by a year of clinical rotations and are required to successfully complete clinical scenario-based examinations – similar to those used in medical school – prior to graduation.

In 2008, Manitoba and Ontario established two-year physician assistant education programs. As of November 2008, neither was accredited, but graduates of both programs are expected to meet competency requirements established for national certification.

Currently, Manitoba is the only Canadian province with legislation in place to allow physician assistants to register and practice. (<http://www.gov.mb.ca/chc/press/top/2008/09/2008-09-05-111800-4374.html>)

### *Why Physician Assistants?*

Information from other jurisdictions indicates that physician assistants can play a valuable role as part of an interprofessional team. The US has been conducting research on physician assistants since the 1970s, (Cipher, 2006; Hooker 2006) and study findings are similar to those from research on the impact of nurse practitioners:

- the quality of care provided by physician assistants is equal to that provided by doctors in comparable situations
- physician assistants and nurse practitioners are more likely than doctors to establish practices in rural locations and in other areas where there are shortages of health professionals
- physician assistants – particularly those working with physicians in rural and solo practices – see more patients than physicians, and alleviate the workload (and improve the income) of the doctors who employ them
- physician assistants deliver cost-effective service
- when physician assistants see the same types of patients most of the time, it is more cost-effective to employ PAs than to employ more doctors
- there appears to be no increase in liability as a result of employing physician assistants in all settings; in fact, physician assistants can reduce the risk of malpractice claims by improving communication between patients and healthcare providers.

*In the US, 42% of physician assistants work in communities with <50,000 people, and 10% work in communities with <10,000 people.*

In terms of patient satisfaction with PAs:

- patients are equally satisfied with care delivered by doctors, physician assistants and nurse practitioners
- 90% of people previously treated by a physician assistant were happy to see a physician assistant again.

According to the findings of the two-year PA trial in Britain, physician assistants had a positive impact on patient-centred health care in underserved areas and reduced the workload of other members of general practice teams. (McLeod, 2005) Supervisory relationship arrangements worked well, and patients were satisfied. The main patient concern was of waiting after a consultation with a PA to have a prescription written by a doctor. Costs were occasionally higher due to longer consultations by physician assistants than by doctors; however, this small loss in efficiency was offset by an increase in the capacity to meet patients' needs. The researchers concluded that the "PA profession has made a successful transition from the US and has effectively increased medical capacity in an under-doctored area." (McLeod, 2005)

# Ontario's Experience Introducing Physician Assistants

## Overview

HealthForceOntario, Ontario's health human resources strategy (May 2006), announced a plan to introduce physician assistants as one of four new roles in the health care system. Just two and a half years later, Ontario has over 60 physician assistants working in different care settings across the province.

This report describes the 15 steps Ontario took to implement this new role:

1. Introduce PAs as part of a comprehensive health human resources strategy
2. Define the initiative and develop an implementation workplan
3. Engage stakeholders early, and build collaborative partnerships
4. Define the PA competencies and roles
5. Develop guidelines for physicians supervising PAs
6. Resolve compensation and liability issues
7. Select demonstration project sites
8. Recruit PAs for the demonstration projects
9. Establish a PA assessment and integration program for IMGs
10. Develop implementation guidelines
11. Support interprofessional teams
12. Communicate with staff, patients and the public
13. Develop education programs
14. Help PAs obtain Canadian certification
15. Evaluate the demonstration projects and apply that knowledge.

## 1. Introduce PAs as Part of a Comprehensive Strategy

Interprofessional care is a cornerstone of HealthForceOntario, Ontario's comprehensive health human resources strategy. Interprofessional teams improve the quality and efficiency of health care. According to the Canadian Health Services Research Foundation, interprofessional collaboration results in "positive outcomes for patients/clients, providers and the system ... [including] enhanced patient/client self-care, knowledge and outcomes; enhanced provider satisfaction, knowledge, skills and practice behaviours; and system enhancements such as the provision of a broader range of services, better access, shorter wait times and more effective resource utilization." (Barrett et. al., 2007)

The province is actively working to foster interprofessional care in both the health care and the health education systems. The August 2007 report, *Interprofessional Care: A Blueprint for Action in Ontario*, set the direction for implementing interprofessional care in the health care system, in health care organizations, in education programs, in practice and in policy. Leaders in the health care system are actively promoting interprofessional care, and the province is providing funding and other support for initiatives that foster and build interprofessional teams. The introduction of PAs is part of this broader initiative.

*Interprofessional care is the provision of comprehensive health services to patients by multiple health care professionals who work collaboratively to deliver the best quality of care in every health care setting. Interprofessional care encompasses partnership, collaboration and a multi-disciplinary approach to enhancing care outcomes.*

In addition to creating interprofessional teams, HealthForceOntario includes other initiatives to support and strengthen the health workforce, including: increasing the number of health professionals educated each year, introducing other new roles that allow health professionals to work to their their full regulated scope of practice, actively recruiting people to health careers, investing in retention strategies, and improving working conditions for all health professionals. Action and investment across a number of health professions helps reinforce the importance of team-based care.

## 2. Define the Initiative and Develop an Implementation Plan

Using the 2005 environmental scan as well as updated information provided through stakeholder consultations in 2006, the Ministry of Health and Long-Term Care developed the initial objectives, considerations, and planning assumptions for the PA initiative.

### *Objectives*

The objectives of the PA initiative are to:

- demonstrate the PA role in a variety of clinical settings within the Ontario health care system
- increase the number of health professionals working in the province to deliver quality patient care
- maximize physician capacity to increase patient/client access to care
- improve physician quality of worklife
- increase physician productivity
- decrease wait times
- ensure that the people of Ontario have better access to health care services

- ensure patient/client safety and satisfaction with care.

### *Considerations*

The ministry identified a number of considerations or challenges in introducing the new physician assistant role to Ontario that must be addressed as part of implementation planning. They include:

- the importance of defining the role in a way that ensures patient safety but allows some flexibility in how interprofessional team members – including PAs and their supervising physicians – apply their respective skills
- the ability to recruit people to a new, untried role – particularly to a demonstration project when future employment opportunities are uncertain
- the need for sustainable ways to fund/support physician assistants to work in the health care system
- potential resistance on the part of health professionals who see the physician assistant as part of a cost containment or “replacement” strategy or as “a second tier of medical care”
- the importance of matching skills to needs. According to the findings of the UK trial, “like physicians, PAs contribute in a range of ways and fulfillment of a PA’s potential requires that their skills are well matched to a specific local need” (McLeod et. al., 2005)
- the education and other supports required to integrate a new provider into existing teams and practices. Practitioners are accustomed to working with colleagues from other professions in specific ways, and it requires time and the education of all team members to integrate a new provider role.

### *Planning Assumptions*

In the early planning stages, the ministry identified the following assumptions to shape the initiative and its implementation:

- a collaborative, interprofessional and structured approach will be used to introduce PAs
- physician assistants will practice as unregulated providers not covered under the *Regulated Health Professions Act, 1991*
- supervising physicians will assess PA skills and competencies. (They will assign to PAs specific duties that fall within their area of practice, based on the competencies of the individual PA. (The list of assigned duties is expected to grow as supervising physicians and PAs work together)
- controlled acts delegated to PAs will comply with the College of Physicians and Surgeons of Ontario’s policy on the delegation of controlled acts
- medical directives are effective tools for documenting controlled acts delegated to PAs but they may not be appropriate in every clinical setting or on every team

### *Ontario Physician Assistant Initiative*

- physician assistants will be employees of the demonstration project sites (e.g., hospitals, Community Health Centres), or of individual physicians/group of physicians (in the case of the physician employed demonstration project)
- demonstration project sites must have adequate comprehensive liability insurance to cover all employees
- graduates of civilian PA education programs in Ontario will have the competencies required to obtain national PA certification
- there will be one PA role but there may be multiple recruitment streams
- the HealthForceOntario marketing and recruitment agency will help demonstration sites recruit formally educated PAs
- the Centre for the Evaluation of Health Professionals Educated Abroad will help design and implement an assessment and integration process for the IMG recruitment stream.

The decision to have physician assistants be unregulated providers supervised by physicians was made for the following reasons:

- this model has worked effectively in the Canadian military, was used in the US for more than 30 years (PAs are now regulated in the US), and was the model introduced successfully in Britain
- this model recognizes that individuals working as PAs may have additional competencies (beyond those required to be certified as PA), making it possible for teams to capitalize on each PA's knowledge and skills
- it can take many years to go through the consultation, review and legislative process required to get approval for a new regulated profession in Ontario under the *Regulated Health Professions Act*, and the province wanted to be able to introduce the new role more quickly
- before any consideration can be given to regulating PAs in Ontario, the role must be thoroughly demonstrated and evaluated in a variety of health care settings. (The current initiative will provide information on whether and how the role should be regulated)
- the medical profession is more likely to be open to integrating PAs into care teams if the PAs are working in a supervised role.

Ontario's PA initiative consists of components designed to develop PAs as providers in Ontario (such as defining competencies and roles, and developing strategies to recruit, assess, train and support PAs to obtain national certification), as well as components designed to create supportive working environments for PAs (such as strategies to address compensation/liability issues, guidelines for supervising physicians and support for teams).

### 3. Engage Stakeholders Early, Build Collaborative Partnerships

Ontario consulted extensively with stakeholders before introducing the PA initiative. Once the decision was made to proceed, Ontario established a collaborative steering committee co-led by the Ontario Ministry of Health and Long-Term Care (MOHLTC) and the Ontario Medical Association (OMA).

Members of the Physician Assistant Implementation Steering Committee (PAISC) represent employers (Ontario Hospital Association, Association of Ontario Health Centres, OMA); educators; regulators and professions such as medicine (College of Physicians and Surgeons of Ontario) and nursing (College of Nurses, Nurse Practitioners' Association of Ontario); the Local Health Integration Networks (LHINs); and government. The PAISC also has representatives from the Canadian Association of Physician Assistants (CAPA) and the Canadian Forces, as well as an American physician assistant, who bring their extensive knowledge and experience of PA education and practice to the table.

The steering committee was formed in the early stages of planning the PA initiative and has been involved at each step in the project. It has established a number of working groups and subcommittees responsible for researching and designing specific components of the project.

The PAISC reports directly to the Physician Human Resources Committee, a joint MOHLTC-OMA committee. The following diagram illustrates the governance structures and reporting relationships to manage Ontario's PA initiative.

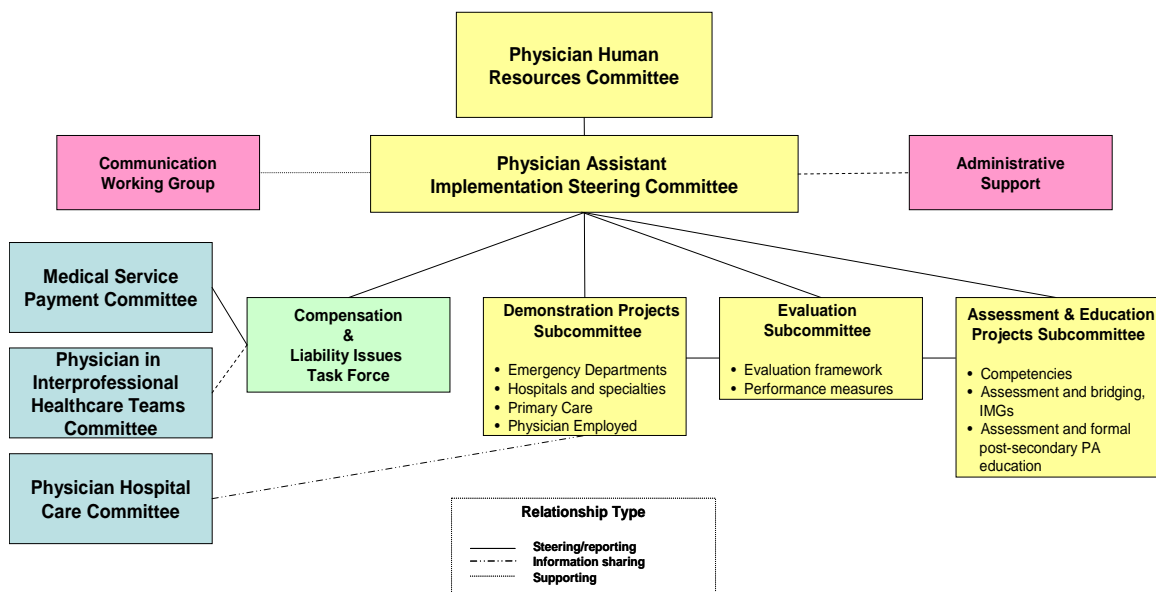
#### **PAISC Mandate**

*The Physician Assistant Implementation Steering Committee will collaboratively guide the coordinated development, implementation and evaluation of projects to integrate Physician Assistants (PAs) in Ontario's health care system.*

#### **Responsibilities**

- *develop framework, tools and information required for introduction of PAs into Ontario*
- *ensure balanced provincial perspective in PA role development projects*
- *maximize sharing and coordination of information and activities*
- *provide advice to PA working groups, project leaders, government, and others*
- *identify and resolve issues*
- *oversee evaluation of PA initiatives*
- *provide advice on future direction of the PA role*
- *guide projects to ensure deliverables are met within established timeframes.*

## Physician Assistant Initiative



### Role of Working Groups and Subcommittees

The **Assessment and Education Subcommittee** is responsible for providing advice on assessment and postsecondary education programs for physician assistants. Its tasks include defining the competencies required for a PA to practice in Ontario as well as the PA role in demonstration projects, helping to develop a process to assess international medical graduates for their ability to work as PAs, and providing advice on education program proposals.

The **Demonstration Projects Subcommittee** is responsible for establishing and overseeing the demonstration projects in the initiative. Its tasks include recruiting and selecting hospital demonstration sites, matching PAs to these sites, defining the functions of physician assistants and supervising physicians, and bridging between all demonstration sites.

The **Compensation and Liability Issues Task Force** provides advice on how to compensate supervising physicians for participating in the demonstration projects. Its members also recommended ways to address both individual and organizational liability during the project.

The **Evaluation Subcommittee** is responsible for providing advice on the framework for evaluation of the initiative as well as data collection, analysis and interpretation, and for reporting the results of the evaluation.

The **Communications Working Group** provides advice on communications for stakeholders and the general public about the activities and outcomes of the initiative. Its tasks include developing a communications plan, reviewing materials and identifying communication opportunities.

The goals of this extensive stakeholder engagement are to develop the strong collaborative partnerships that will contribute to the success of the PA initiative; and to reinforce the principle that all health professionals, regulators, educators, employers, policy-makers, patients and families have a shared, collective responsibility for the future success and implementation of interprofessional care.

*As of September 2008, over 80 organizations and 340 individuals have been involved in Ontario's PA initiative.*

The early and ongoing involvement of stakeholders – and the strong collaborative partnerships between those stakeholders – are key reasons that the initiative has been implemented so quickly across so many sites.

#### 4. Define the PA Competencies and Role

To integrate PAs successfully into the Ontario health care system, it is essential to clearly define their clinical competencies and their role on an interprofessional team. The competencies describe what PAs, as practitioners, are prepared and able to do, while the role describes how and under what circumstances PAs may practice within the health care system. The Assessment and Education Subcommittee's recommended competencies and role descriptions (Mikhael, 2007) were approved by the PAISC in April 2007, and will be reviewed after one year of use.

##### *Competencies*

Ontario's PA competency profile describes the general and specific competencies that PAs in Ontario are expected to acquire, possess and maintain throughout their careers, regardless of their specialty or practice setting.

*Physician assistants are skilled healthcare professionals, educated in the medical model, who work under the supervision of a registered physician in a variety of clinical team structures and settings.*

Ontario adapted competencies in the profile developed by the Canadian Association of Physician Assistants (CAPA), and reviewed the profiles developed in Manitoba, Britain and the US to inform this work. The province used the Canadian Medical Education Directives for Specialists ("CanMEDS") 2005 framework developed by the Royal College of Physicians and Surgeons of Canada to organize the PA competencies (i.e., clinical expert, communicator, collaborator, manager, health advocate, scholar, professional). This framework reinforces that PAs are educated and working in the medical model, and makes it easier for physicians already familiar with CanMEDS to assess PA skills and assign tasks.

By distinguishing between those competencies that PAs "must" have and those that they "can or may" have, the profile helps supervising physicians assess PAs who may have additional skills or competencies (i.e., beyond those required to practise as a PA in Ontario) that will enable them to work with physician specialists or sub-specialists.

##### *Role*

The unique working relationship between the physician and the PA will determine the extent of the PA's practice. Depending on the agreement between the physician and PA, duties may include:

- conducting patient interviews
- taking histories
- conducting physical examinations
- counselling patients on preventative health care

- performing certain controlled acts delegated by a physician.

As part of their practice, PAs are required to:

- ensure that patients are aware that the services they are receiving are being provided by a physician assistant
- obtain informed consent
- keep a record of the clinical care provided
- ensure they have the necessary knowledge, skills and judgment to perform assigned work.

## 5. Develop Guidelines for Physicians Supervising PAs

The type of work assigned to a PA and the extent of direct supervision each PA requires will depend on the supervising physician's assessment of the PA's competencies, skills and experience in the practice setting. Physicians can only assign work that is within their scope of practice. The accountability and the responsibility for the delegation of any controlled acts remain with the signing physician.

According to early feedback from the demonstration pilot in emergency departments, supervising physicians would have found it helpful to have guidelines for supervising PAs. In response, the Demonstration Project Subcommittee of the PAISC, in consultation with the regulatory colleges, developed guidelines for physicians on assessing and supervising PAs.

The guidelines recommend that:

- the primary supervising physician assess the PA's skills and abilities before the PA begins to practice as part of the team
- the supervising physician initially provide direct supervision of any clinical assessment or care provided by the PA
- the physician determine when a PA may work without direct supervision. For example, if the work is not a controlled act, then the supervising physician(s) may permit the PA to undertake the work with review by the physician when appropriate. If the work is a controlled act, then the supervising physician must comply with requirements of the College of Physicians and Surgeons of Ontario (CPSO) policy governing the delegation of the Authorized Acts of Medicine.

*The guidelines developed for emergency departments recommended that, whenever possible, PAs remain with the same physician or core group of physicians as a way to build trust between providers and a greater understanding of the PA role.*

## 6. Resolve Compensation and Liability Issues

Compensation and liability issues can be key stumbling blocks to the employment of PAs. Who will pay for the PA? How will supervising physicians be compensated? Who is responsible for the PA's practice: the PA, the supervising physician or the employer? To support the ongoing, long-term integration of PAs into interprofessional teams, issues of compensation and liability must be resolved.

### *Compensation*

For purposes of the demonstration projects, the Compensation and Liability Subcommittee recommended the following approach to physician compensation:

- the Ministry of Health and Long-Term Care provide a stipend to supervising physicians over two years, to compensate them for direct supervision time, participation and completion incentives, lost earnings and productivity
- supervising physicians receive more compensation in the first few months, when they are likely to be spending more time supervising the PA
- supervising physicians track the time they spend supervising PAs as well as lost earnings and productivity (i.e., number of patients seen)
- Ontario is the only jurisdiction that has introduced PAs that paid a stipend to supervising physicians participating in demonstration projects. The amount of the stipend varied depending on the setting and the way that supervising physicians were already paid. For example, physicians who were on salary did not lose earnings when supervising PAs so they were not compensated for lost earnings. Supervisory time as well as actual lost earnings and productivity will be reviewed as part of the overall project evaluation to inform future funding models.

### *Liability*

Based on the recommendations of the Compensation and Liability Subcommittee:

- all sites participating in demonstration projects were required to have adequate comprehensive general liability insurance, which typically covers damage to property, slips and falls, and faulty equipment
- all supervising physicians were required to have Canadian Medical Protective Association (CMPA) or equivalent professional liability insurance.

PAs who are employees of a hospital, health centre or group practice should have been covered by the site's general insurance policies for such things as damage to property, slips and falls, and faulty equipment. In some settings the insurance would also cover professional liability for employees. For physician-employed PAs, the physician employers were required to obtain additional liability coverage for their PA employee if their own comprehensive insurance did not cover it.

PAs were not required to obtain their own professional liability insurance; however, certified PAs do have the option of obtaining their own coverage through Willis Insurance.

## 7. Select Demonstration Project Sites

### Settings

PA demonstration projects were implemented in three types of health care settings: hospitals, Community Health Centres (CHCs) and physician practices.

Within hospitals, PAs were recruited to work in emergency departments, general internal medicine, orthopaedic surgery, general surgery, complex continuing care and rehabilitation.

In the Community Health Centres, PAs are working in primary health care teams providing health examinations, preventive care, and chronic disease management services. Two of the five sites serve minority populations: a northern/rural francophone community and an urban CHC that serves Aboriginal/indigenous peoples. (Most CHCs serve populations that have difficulty accessing other primary care services.)

In Physician Employed Physician Assistant (PEPA) sites, the PAs are employed directly by a physician or group of physicians. They are either working in diabetes care clinics, where they are supervised by endocrinologists, or in long-term care homes, where they are supervised by family physicians.

The settings were chosen because of existing human resource/physician pressures (e.g., emergency departments) or because of anticipated future demand for services (e.g., diabetes care). In all settings, interprofessional teams that include PAs have the potential to fill gaps, reduce wait times and improve access to services.

For each of the three types of settings, the demonstration projects were led by the appropriate stakeholder organization: the OHA in hospitals, the Association of Ontario Health Centres in CHCs, and the Ontario Medical Association in the PEPA project.

### Sites

Sites within each setting type were selected to meet the following criteria:

- a mix of rural and urban settings
- in the case of hospital sites, a mix of small, community and teaching hospitals
- distributed across the province
- their ability to match a particular PA's skills with the population health needs
- willingness to participate in the initiative
- ability to serve special populations (e.g., Aboriginal, Francophone)
- no overlap between settings (i.e., all PAs who were part of the PEPA project were employed by physicians who provide care in ambulatory settings, rather than inpatient hospital settings, to avoid overlap with the hospital demonstration project).

*The goal was to have a diverse mix of sites across the province and to learn whether PAs are more effective in some settings than others.*

While criteria were similar, the process for selecting sites varied by project. For example, the pilot emergency departments were selected from a short list prepared by the Ministry of Health and Long-Term Care. For the other hospital sites, the OHA issued a call for proposals from hospitals interested in participating in the demonstration project. Fifty applied and 24 hospitals (25 sites<sup>1</sup>) were approved to recruit PAs. The Association of Ontario Health Centres went through a less formal process than the OHA to choose its demonstration sites and focused more on geographical distribution and skills matching. The PEPA practice sites were selected by the OMA, which focused more on specialty area than on geography. The OMA originally recommended that PEPA include physician assistants working with orthopedic surgeons, but, to avoid overlap with hospital projects, this component was not approved.

The following table shows the distribution of PAs by LHIN and by site as of December 15, 2008.

Local Health Integration Network	Site Type	Number of Working PAs
<b>Erie St Clair (1)</b>		
Endocrinology and Metabolism Clinic (Windsor)	PEPA Site	1
Hotel Dieu Grace Hospital (Windsor)	Hospital Site	2
<b>South West (2)</b>		
London Health Sciences Centre	Hospital Site	2
Strathroy Middlesex General Hospital	Hospital Site	2
<b>Waterloo Wellington (3)</b>		
Cambridge Memorial Hospital	Hospital Site	1
Guelph General Hospital	Hospital Site	1
<b>Hamilton Niagara Haldimand Brant (4)</b>		
Grace Vila Long Term Care Home	PEPA Site	1
Macassa Lodge	PEPA Site	1
Hamilton Urban Core Community Health Centre	CHC Site	1
North Hamilton Community Health Centre	CHC Site	1
<b>Mississauga Halton (6)</b>		
Credit Valley Hospital	Hospital Site	5
<b>Toronto Central (7)</b>		
LMC Endocrinology Centre (Toronto)	PEPA Site	1
Anishnawbe Community Health Centre	CHC Site	1
Bridgepoint Hospital	Hospital Site	1
Baycrest Centre for Geriatric Care	Hospital Site	1
Toronto East General Hospital	Hospital Site	5
University Health Network	Hospital Site	5
<b>Central (8)</b>		
Markham Stouffville Hospital	Hospital Site	3
<b>South East (10)</b>		
Speciality Care Trillium Centre (Kingston)	PEPA Site	2
Brockville General Hospital	Hospital Site	1
Quinte Health Care - Trenton Site	Hospital Site	1
<b>Champlain (11)</b>		
Somerset West Community Health Centre	CHC Site	1
Pembroke Regional Hospital	Hospital Site	3
The Ottawa Hospital	Hospital Site	3
Hawkesbury General Hospital	Hospital Site	1
St. Francis Memorial Hospital	Hospital Site	1
<b>North Simcoe Muskoka (12)</b>		
Royal Victoria Hospital	Hospital Site	5
<b>North East (13)</b>		
Le Centre de santé communautaire de Temiskaming (Kirkland Lake Satellite)	CHC Site	1
Sault Area Hospital	Hospital Site	3
Kirkland & District Hospital	Hospital Site	1
Timmins & District Hospital	Hospital Site	1
<b>North West (14)</b>		
Thunder Bay Regional Health Sciences	Hospital Site	3
<b>Total Working PAs</b>		<b>62</b>

<sup>1</sup> One teaching hospital had two sites.

*Geographic Location of PA demonstration sites*

The following map shows the location of the current PA demonstration sites across the province.



## 8. Recruit PAs for the Demonstration Projects

Because of the limited number of practicing PAs in Canada, the Ontario PA initiative recruited from two streams:

- graduates of accredited PA education programs in Canada and the US, and retired PAs from the Canadian Forces
- selected international medical graduates (IMGs).

Physician assistants for the demonstration project were recruited using a number of different strategies including:

- presentations at annual meetings
- advertising through the professional associations (Canadian Association of Physician Assistants, American Academy of Physician Assistants) and US education programs
- presentations to IMGs
- use of the HealthForceOntario website.

*Of the 64 PAs recruited by March 2008:*

- 25 were formally educated PAs .
- 39 were recruited from the IMG stream.

Despite these efforts, recruitment was difficult. As of March 31, 2008, almost one-third of the PA positions were unfilled. It often took six months or longer to find PAs and get them on the job. For example, hospital emergency departments began recruiting in the summer of 2006, but the first PAs were not hired until January 2007, and none of the five were in place until March 2007.

## 9. Establish a PA Assessment and Integration Program for IMGs

The PA initiative provided eligible IMGs with an opportunity to pursue an alternative career path and integrate into the Canadian health workforce relatively quickly (compared to the requirements to become licensed as a physician in Ontario).

Ontario's recruitment, assessment and integration program for IMGs was designed to attract people who would build a career as a PA, rather than see the role as a step on the way to becoming a physician. To be considered for the PA initiative, IMGs had to meet rigorous requirements.

To be eligible to participate, IMGs had to have:

- successfully completed Canada's national medical exams required for all medical graduates
- scored at the first year medical residency level or higher on an Ontario clinical examination for IMGs, conducted by the Centre for the Evaluation of Health Professionals Educated Abroad (CEHPEA).

About 800 IMGs met these criteria and were invited to apply for the PA positions. A standardized scoring process was used to rank the 250 IMGs who applied, and the top 85 candidates were invited to a standardized central interview process designed to assess whether their clinical skills and attitudes were the right "fit" for the PA role (i.e., were they serious about a career as a PA?). Fifty-six IMGs scored above

70% on the central interview and were invited to interview with the demonstration sites. A comprehensive process was then used to match each of the 44 successful IMGs to a particular demonstration site, based on his/her previous education, strengths, skills and interests. Of the 44 IMGs who received job offers from the sites, 42 accepted positions.

IMGs offered employment by one of the demonstration sites were required to complete the PA Integration Program before starting clinical practice as PAs. The four-month program was developed by CEHPEA under the guidance of the Assessment and Education Subcommittee of PAISC. It consisted of two months of didactic instruction and assessment at the CEHPEA Toronto training facility (i.e., six weeks of classroom sessions, one week for a written examination and Advanced Cardiac Life Support Course, and one week of orientation and administration) followed by a two-month clinical rotation at the employment site so IMGs could consolidate their learnings before completing final written and clinical exams.

Of the 42 IMGs who entered the integration program, three voluntarily withdrew from the program, while 39 completed it and began practice as PAs in the demonstration sites. As of September 2008, three of the 39 IMG PAs had withdrawn from practice.

## 10. Develop Implementation Guidelines

To assist with implementation and team integration, each of the sponsoring organizations – the Ontario Hospital Association, the Association of Ontario Community Health Centres and the Ontario Medical Association – developed implementation guidelines or “toolkits”.

Implementation guidelines include: recruitment and staffing strategies, communications materials and templates, staff education and team development materials. “Toolkits” include the following:

- an overview of the project
- role descriptions for the PA and supervising physician
- delegation of controlled acts – including sample PA medical directives
- a discussion of the liability issues and how they are being managed
- how to integrate the PA into the interprofessional care team
- how to introduce and orient the PA to the hospital, unit or practice, including a team building program
- guidelines for performance management
- an evaluation framework and the requirements for data collection and reporting
- communications tools and templates for use within the site, with patients and the public, and with the local media
- how the project will be funded.

## 11. Support Interprofessional Teams

The delivery of safe, effective patient care depends on a highly qualified, high functioning interprofessional team of health care providers. All teams involved in the initiative participated in “team integration” activities appropriate to their setting, including:

- participating in team-building sessions to discuss how the ideal team would function; to set team goals; and to define the roles of team members and general protocols for working together
- developing a team charter that set out the “rules of the game” when PAs were part of the team
- holding regular on-site meetings to resolve any issues
- completing pre- and post-team effectiveness surveys to assess the impact of the activities.

All members of the team had to learn a different way of working. Experience to date indicates that it is extremely important for all team members to understand each other’s role, to know where their competencies overlap, and to know where they are unique. To this end, the PA Implementation Toolkits include “team building” guidelines. The PAISC is also working closely with regulatory colleges and professional associations, asking them to encourage their members to be actively engaged in the team building process.

## 12. Communicate with Staff, Patients and the Public

Effective communication is essential to integrating PAs into interprofessional health care teams and to fostering acceptance of the PA role. The Physician Assistant Implementation Steering Committee provides high-level direction on internal and external communications about the initiative. The PAISC Communications Working Group provides practical advice and helps develop materials stakeholders can use to communicate with target audiences.

Communication materials are reviewed both by the Communications Working Group and by project stakeholders, including the Ministry of Health and Long-Term Care, the Ontario Hospital Association, the Ontario Medical Association, and the Association of Ontario Health Centres. The goal is to ensure consistency in the messages used to describe the PA initiative and, at the same time, give stakeholders some flexibility in developing their communication materials to reflect the unique needs of their respective communities.

Communications tools developed to date include a communications strategy and key messages document, fact sheets, backgrounders, frequently asked questions, staff/patient handouts, media relations tips, and communication templates that sites can customize. These materials have been adapted and distributed by stakeholders; some also appear on the HealthForceOntario website.

The ministry is currently developing an e-newsletter project update for project participants and stakeholders.

### **13. Develop Education Programs**

As of September 2008, there is only one accredited education program for PAs in Canada: the program run by the Canadian Forces for its PAs. To meet expected future demand for PAs in Ontario, the province recognized the need to establish its own accredited civilian PA education programs.

As part of the PA initiative, the MOHLTC gave all Ontario medical schools an opportunity to submit expressions of interest to establish PA education programs. Proposals were submitted by McMaster University in Hamilton and by the University of Toronto (in collaboration with the Northern Ontario School of Medicine and the Michener Institute) to develop PA education programs.

McMaster University's 24-month PA education program, which will lead to a Bachelor of Health Science (Physician Assistant), began in September 2008. The first class of 21 students was selected from 259 applicants. The highly diverse group of students ranges in age from 20 to 49 years, comes from 16 different educational backgrounds, and includes current students and a variety of working professionals such as an engineer, a health journalist and a social worker. In 2009, the program is expected to expand to 30 students.

As of September 2008, the University of Toronto, the Northern Ontario School of Medicine and the Michener Institute continue to work collaboratively to develop a second civilian PA education program in the province, with the start date yet to be determined.

### **14. Support PAs to become Canadian Certified**

The Physician Assistants Certification Council (PACC) is an independent council that administers and maintains the PA certification process in Canada. Certification ensures that the PA meets the standard set out in the Occupational Competency Profile (OCP) for the Physician Assistant profession. Currently, this is the only PA credential offered in Canada.

Although the PA certification exam is relatively new (as of 2008, PACC had held only three sittings) and participation is voluntary, Ontario would like to see all PAs working in the province obtain certification. Individuals who are eligible to take the certification exam include CAPA members who are graduates of the Canadian Forces education program or holders of American certification by the National Physician Assistant Certification Council. As part of the PA initiative, Ontario worked with the PACC and CAPA to enable PAs from the IMG stream (who successfully completed the four month physician assistant integration program and also participated in demonstration projects) to take the certification exam.

Of the 64 PAs hired for demonstration projects, eight held Canadian PA certification at the time of hire. The MOHLTC sponsored all PAs in the project who expressed interest, and were not yet certified, to take the July 2008 certification exam. The majority of the eligible PAs accepted the financial incentives and exam preparation materials offered by the Ministry and registered to take the exam.

## 15. Evaluate the Initiative and Apply the Knowledge

The PA demonstration projects are at different stages of implementation. The emergency department demonstration pilot (first phase) is complete, while the demonstration projects in the other settings are still underway. The education portion of the initiative is just beginning: the first intake of post-secondary PA students occurred in September 2008.

Ontario launched the PA initiative, knowing that PAs have been shown to be effective in other jurisdictions in reducing wait times and improving patient/client satisfaction. The focus of Ontario's evaluation is to assess where in the health care system PAs can be used most effectively.

All components of the PA initiative will be evaluated against the objectives (see page 10). All demonstration projects will use the same evaluation framework, which was designed to be able to assess, among other things: impact on quality and quantity of care (e.g., access, wait times), team and patient satisfaction, and team recruitment and retention. Questions were developed to measure each impact. The Evaluation Subcommittee identified or developed a number of instruments and sources to collect evaluation data, including:

- a team effectiveness survey
- team focus groups
- a patient satisfaction survey
- physician interviews
- physician assistant interviews
- administration interviews
- administrative data
- HealthForceOntario Marketing and Recruitment Agency recruitment data
- project recruitment and retention data.

### *Key Findings to Date: Successes and Challenges*

A report from the evaluation of the (first phase) demonstration pilot in emergency departments was submitted to the Ministry at the end of 2007. Although it did not include a full evaluation of the quality of care, the report did indicate that physician assistants and nurse practitioners were a valuable addition to the emergency departments. The PAs and NPs helped to increase access to services, capacity and productivity. There was generally good acceptance of the new roles within the emergency departments, and an increase in "team" awareness and understanding of different roles. Feedback from patients was positive. There was also an increase in physician satisfaction, retention and revenue (i.e., billings increased because more patients were seen). Key findings of the emergency department evaluation include:

- having a PA or NP on duty significantly reduced the

*When a PA or NP was involved in a patient's care, the patient was more likely to be seen within benchmark wait times and spent significantly less time in the emergency department.*

- proportion of patients who left the emergency department without being seen
- when a PA or NP was involved in the patient's care, the length of stay in the emergency department was significantly shorter than when they were not involved
  - when a PA or NP was involved in a patient's care, the patient was significantly more likely to be assessed within the benchmark wait time for his/her acuity level (i.e., wait time from triage to initial assessment by a physician)
  - team members were more likely to agree that the flow of patients into, through and out of the emergency department was efficient, and that service delivery was integrated and coordinated (with the new team members)
  - team members were more satisfied with their team's partnerships, communications and overall functioning
  - team members were positive about the roles of the PAs and NPs and about their contribution to addressing core issues in the emergency department such as overcrowding and long wait times.

In terms of challenges, PAs, NPs, emergency department managers and educators mentioned some resistance on the part of physicians, nurses and former colleagues to the new providers, as well as the learning curve for new providers and a lack of mentorship. The increase in productivity also led to an increased workload for some other staff.

For physicians, the main challenges were lack of a formal orientation/training process for the supervising physician and PA, as well as concerns about ongoing sustainability of the project. Physicians also noted that, if additional human resources were added to deal with the increase in patient volumes, most sites would have physical space issues.

Based on the positive results of the demonstration pilot, Ontario provided funding to extend emergency department PA positions for another two years as part of the larger hospital PA demonstration project.

## Conclusion

Ontario's PA initiative has demonstrated that a comprehensive, collaborative approach to introducing the physician assistant as an unregulated provider supervised by a physician can lead to the successful integration of PAs into interprofessional teams in a relatively short time (i.e., one to two years). The experience highlighted the importance of strong stakeholder engagement from the beginning, as well as appropriate education and other supports for the PAs, the supervising physicians, the interprofessional teams, and the health care settings and sites. It also demonstrated that having PAs on interprofessional teams can have a positive impact on wait times, access to care, patient satisfaction, physician satisfaction, team satisfaction and productivity in emergency department settings. Evaluation results from other settings are not yet available.

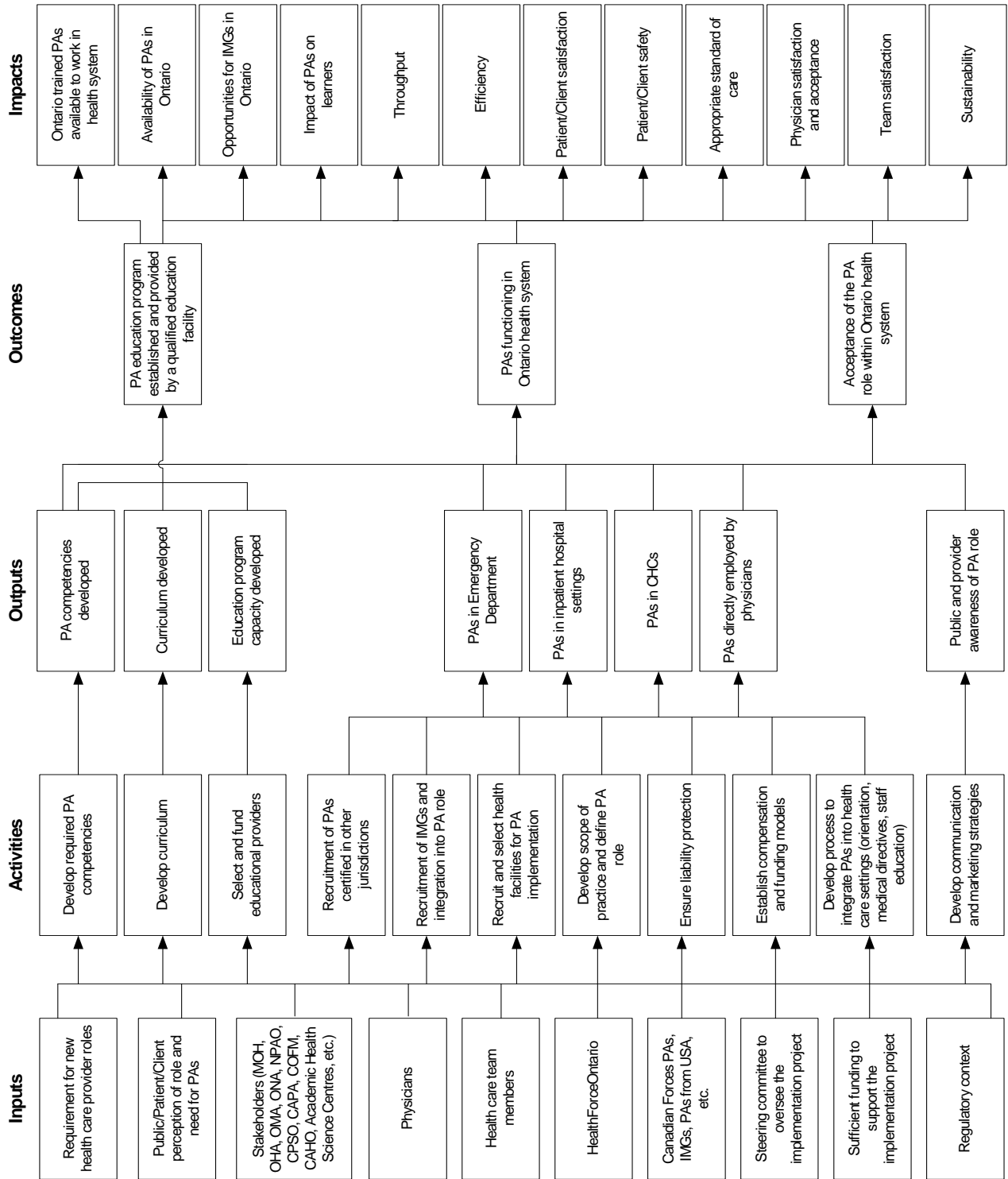
The experience also reinforces the need to continue to develop strategies to address barriers to the more widespread use of PAs, including creating ongoing mechanisms for compensating PAs and supervising physicians, changing attitudes, building effective teams, and overcoming the reluctance of individuals to enter education programs or apply for a new role whose future is still somewhat uncertain.

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*In addition to these published sources, this report used information from a number of unpublished ministry documents as well as interviews with key informants.*

Appendix: Project Logic Model



Note: PA refers to practitioners functioning in the PA role in the Ontario demonstration projects

