

PROFESSIONAL, PRACTICAL AND POLITICAL OPPORTUNITIES: OPTIMIZING THE ROLE OF ONTARIO PHYSICIAN ASSISTANTS IN FAMILY MEDICINE

KRISTEN BURROWS, PH.D., MSC, BHSC-(PA), CCPA
ASSISTANT DEAN PHYSICIAN ASSISTANT EDUCATION PROGRAM
MCMASTER UNIVERSITY

JULIA ABELSON, PHD, MSC PROFESSOR, HEALTH RESEARCH METHODS,
EVIDENCE AND IMPACT MCMASTER UNIVERSITY

PATRICIA MILLER, PHD, MSC, PT ASSOCIATE PROFESSOR, SCHOOL OF
REHABILITATION SCIENCE MCMASTER UNIVERSITY

MITCHELL LEVINE, MD, MSC, FRCPC, FACP, FISPE, PROFESSOR, HEALTH
RESEARCH METHODS, EVIDENCE AND IMPACT MCMASTER UNIVERSITY

PATRICIA MILLER, PHD, MSC, PT ASSOCIATE PROFESSOR, SCHOOL OF
REHABILITATION SCIENCE MCMASTER UNIVERSITY

MEREDITH VANSTONE, PHD ASSOCIATE PROFESSOR, DEPARTMENT OF
FAMILY MEDICINE MCMASTER UNIVERSITY

ABSTRACT

Objective: To identify that facilitators and barriers that influence Physician Assistant (PA) role optimization and success in family practice settings. *Setting:* Rural and urban family practice settings in Ontario that had employed a PA for a minimum of two consecutive years.

Participants: Six family medicine clinics in Ontario represented by seven family medicine Physician Assistants, eight Family Physicians (seven supervising physicians, one physician/administrator), and one clinic manager. *Method:* To identify the factors that influence role success and barriers which prevent PA role optimization, we conducted an exploratory single case study with embedded

subunits of analysis. Data consisted of semi-structured interviews with 15 participants and analysis of documents (medical directives, job announcements, and communications).

Main findings: Barriers and facilitators to PA integration and role success can be categorized into professional, practice based, and political factors. Professional factors that facilitate role optimization include the professional relationship between the PA and physician, level of comfort with autonomy, trust, rapport and PA competencies. Practice factors that optimize the role include appropriate administrative support /organization, investment in PA training and patient satisfaction. Barriers include employer knowledge of medical-legal risks,

communication around the PA role and accessibility of funding. Political factors that limit role optimization and success include billing practices, absence of consistent funding models and lack of regulatory oversight. *Conclusion:* Most of the barriers identified relate to enduring policy legacies, which continue to limit the sustainability and stability of PAs in Ontario. Successful Family Physician-PA teams

have created individualized solutions to these barriers and describe their partnership as increasing patient access to care, improving work-life balance, expanding comprehensiveness of services, and advancing team-based collaborative care.

Keywords: physician assistant, family practice, qualitative, case study, health services research

Introduction

Physician Assistants (PAs) were first introduced to Ontario in 2006 by HealthForceOntario, with the first PA education program launched at McMaster University in 2008 (1). PAs were one proposed solution to help increase patient access to care, decrease wait times and to provide a flexible addition to the Ontario healthcare system (1, 2). PAs are trained in the medical model as generalists to extend and support clinical services within a formalized PA-MD relationship. The role of PAs includes obtaining medical histories, conducting physical examinations, ordering and interpreting diagnostic tests, diagnosing, performing or assisting with procedures, prescribing medications, patient education, counseling and health promotion (3). Research evidence from jurisdictions where PAs have a long history, such as in the United States, supports the effectiveness, safety, patient satisfaction, and contribution of PAs to primary care settings (4-6).

The PA profession is still quite new to the Canadian healthcare landscape, with variable uptake across provinces; the history of PAs in Ontario is presented in Table 1 (7). For example, a centralized funding model and a more deliberate approach to PA introduction has provided a strong foundation for the profession in Manitoba, with relatively recent expansion of PAs into primary care settings. In Ontario, government stakeholders and various organizations have proposed the use of PAs as one potential solution to primary health care priorities (2).

In their 2011 position statement on physician assistants, the College of Family Physicians of Canada identified a number of issues to consider when planning PA participation in family practice including: delegation of medical acts, remuneration issues, capacity and infrastructure, liability insurance, and impact on access to care, continuity of care in meeting patient and community needs (8). These issues were echoed in a 2013 Ontario study that examined the benefits and barriers of employing a PAs, including recruitment and retention, importance of regulation, funding, and lack of understanding about the PA role (9). In Manitoba, a 2016 study found that with appropriate provincial planning, site preparation and optimized PA-physician teams, the PA role can be successfully introduced to primary care settings (3).

Significant human resource and finances have been invested into the PA profession in Ontario, but tensions exist around issues of role optimization, sustainability and funding models (1). Despite these challenges, there are numerous family practice teams in Ontario that have successfully integrated PAs. In these settings, ingenuity, various workarounds, and employer support have

created opportunities for PAs to contribute to healthcare delivery by providing faster access, extending physician care, and augmenting primary care services.

In this project, we aimed to learn from these sites, asking how the PA role was optimized within family medicine settings by identifying barriers and facilitators to role implementation through an exploratory qualitative case study. This knowledge contributes both policy and practical suggestions for operationalizing PAs in a way that improves access of Ontarians to comprehensive primary care. Given the existing literature and evidence from other jurisdictions, we were attuned to issues of supervision, organizational features, personal factors, and policy implications as potential study propositions. This study captures feedback and reflections from practicing family medicine PAs, their supervising physicians, and administrators. By examining family medicine settings where the PA role has been successful, increased awareness of facilitators and barriers to PA role optimization will help explicitly identify where provincial stakeholders can continue to build on the investments already made in the PA profession, and where family physicians/employers can strengthen PA integration within their own clinics.

Material and Methods

Study design:

We conducted an exploratory case study with embedded subunits of analysis.⁽¹⁰⁾ This qualitative case study approach facilitates the investigation of a phenomenon within its context using a variety of data sources, ⁽¹¹⁾ including semi-structured interviews and documents (medical directives, communications regarding the PA role, stakeholder reports, etc.). Each case was defined as an Ontario family practice setting that had employed the same PA for a minimum of 2 years and where the position was deemed ‘successful’, as demonstrated by full-time permanent positions, low employee turnover, and ongoing funding.

Participant Recruitment

Certified (Canadian or US) PAs that had been working in a family practice setting for two years were recruited for the study, through the Canadian Association of Physician Assistants (CAPA) email distribution list, the Ontario PA Facebook page and Ontario Family Medicine PA Facebook group. Eligible participants had worked in their current primary care setting for a minimum of two years, in order to ensure sustainability of that role. Interested PAs were asked if other members of their health care teams would be interested in participating, which led to snowball recruitment of supervising physicians, clinic managers, and other administrators.

Data Collection

Using a semi-structured interview guide that included questions about the implementation and the acceptance of the PA role in each setting, we conducted interviews with PAs, supervising physicians, and other clinic staff at each of the 6 included sites. Participants were given the option of phone or in-person interviews. Interviews typically lasted 30-45 minutes and were conducted by the first author (KB), except when the participant had a professional relationship to the first author

K. Burrows Optimizing the Role of Ontario Physician Assistants in Family Medicine

JCANPA ISSN 2562-6841 Vol. 1; Ed.4; Feb 2020

[HTTP://JCANPA.CA](http://JCANPA.CA)

and a conflict of interest may be perceived to exist. In these instances, the interview was conducted by the second author (MV) or a research assistant.

Table 1: Timeline of Events, Proposals and Policies relating to PA Integration in Ontario

Date	Activity
2004	The College of Physicians and Surgeons of Ontario (CPSO) proposed the introduction of PAs as one potential human resource solution to ensure that future needs of Ontario patients could be met (29).
2006	The Ontario Ministry of Health and Long Term Care (MOHLTC) announced Ontario's provincial health human resources strategy, HealthForceOntario. One component of the strategy was the creation of four new healthcare provider roles, including PAs (30).
2007	PAs in Ontario first introduced through pilot projects in community health centers and direct physician employment models.
2008	McMaster University accepts first cohort of PA students in the Bachelor of Health Sciences, Physician Assistant program.
2011	The College of Family Physicians of Canada released a position statement on physician assistants and interprofessional care. Under the direction and supervision of a family physician, PAs were among those professionals with the potential to augment access to family practice services and primary care (21).
2015	The Ministry of Health and Long Term Care released their “Patients first: action plan for health care”, which included a goal to “provide care that is coordinated and integrated, so a patient can get the right care from the right providers” (31).

Data Analysis

Interviews were transcribed verbatim and data analysis was managed through N-Vivo (version 12). Data were analyzed by case (individual practice group) in order to identify categories specific to each case, and to identify cross-cutting themes across all family medicine settings (PA, Physician, and organizational factors). The primary investigator (KB) coded each transcript, and a non-clinician research assistant coded a random sample of interview transcripts to contribute a different perspective and to ensure data congruency. Thematic content analysis was conducted within and across each interview transcript, providing a flexible approach to identifying patterns and themes (12). Analysis moved through six phases, including: orientation to the data, generating initial codes, searching for themes, reviewing themes, defining themes, and producing a summary report (13, 14). In addition, research triangulation (between research team and research assistant) and ongoing contributions to a memo book helped ensure transparency.

A document analysis was also conducted, including the collection of site-specific documents, both archival and active, such as medical directives, job descriptions, and inter-department communications around the PA role alongside policy documents such as

communications and position statements from the Ontario Medical Association (OMA), Ontario Hospital Association (OHA) and HealthForceOntario (HFO). Document analysis was used to understand the specific context of provincial stakeholder initiatives, and PA integration at each individual site. These documents help support the narrative describing the PA role and how they were integrated into their work setting.

Researcher Reflexivity

The primary author is a physician assistant and a PA educator, and was familiar with PA roles, challenges, and was well positioned to know where colleagues are employed. Given the small number of PA programs in Canada and relatively small network of practicing PAs, the authors were cognizant of potential biases and took steps to ensure data collection and analysis was rigorous. However, having access to a PA network was helpful in study recruitment and in gaining the trust of research participants. As an important component of quality criteria in qualitative research, reflexivity was achieved through a number of strategies, including reflecting on personal assumptions and preconceptions, and how each of these may influence research decisions if not mitigated by optimizing trustworthiness (15).

Strategies for Achieving Trustworthiness

The design of case studies can help support the validity and reliability of research findings, in addition to the consideration of design principles relating to credibility, transferability, dependability and confirmability (15-18). Reliability was supported through strict adherence to the case study protocol, creation of interview guides, and a document database. Validity and credibility, in terms of accurate representation of participant experiences, was reinforced through the triangulation of multiple sources of evidence, using multiple researchers to code transcripts and address emerging themes, and through member checking. Participants could opt to receive a copy of the study findings to ensure recognition of their own experience(s) in the study results.

Transferability was achieved through the use of descriptive explanation building, ensuring that experiences were closely linked to the context in which they were experienced (15). Finally, dependability and confirmability were supported through careful documentation and journaling to maintain an audit trail that describes the research steps and decision-making process used throughout the case study.

Ethics

This study received ethics approval from the Hamilton Integrated Research Ethics Board (HiREB) for McMaster University (Protocol #2270) and verbal and written consent was secured from participants.

Results

Six case sites were included in this study, encompassing eight physicians, one clinic manager and seven physician assistants (Table 2). PA participants included certified Canadian (civilian and military) and United States trained PAs, with 2-9 years of family medicine experience and an average of 1-4 supervising physicians.

This study identified factors that impact role success and optimization from the perspective of family physicians and PAs across family practice settings and provided a clear description of each practice setting (Table 3). Participants informed us of challenges that could be ameliorated by clear pathways from a government agency or health professions regulatory body and highlighted personal and practice factors that have allowed for the provision of patient centered care. Each theme was classified under three overarching categories (Table 4):

1. *Professional* factors include the professional relationship between the PA and physician, level of comfort with autonomy, trust, rapport and PA competencies;
2. *Practice* based factors include administrative support, patient access to care, patient acceptance, and knowledge of medical-legal risks;
3. *Policy* factors include billing practices, absence of consistent funding models and lack of regulatory oversight.

In addition, the review and analysis of collected documents supported the experiences and perceptions verbalized by the study participants and are therefore threaded throughout the relevant overarching categories.

Table 2: Characteristics of Study Participants

Location & Practice Setting	Participants	Site experience with PA
Family practice settings included a mix of urban and rural settings, and academic (i.e., medical school affiliated) and non-academic sites.	<p><i>Physician Participants:</i> 8 Physicians participated, including 7 family physicians (current PA supervisors), and 1 Physician/Administrator.</p> <p><i>PA participants:</i> 7 PAs participated, including: United States trained & US certified, Canadian (military) trained, Canadian (civilian) trained & Canadian certified PAs</p> <p><i>Clinic Manager:</i> 1 clinic manager/administrator participated</p>	Site experience included: previous experience with International Medical Graduate PA, current PA employment experience, and multiple PA employment models.

Table 3: Embedded Case Site Characteristics

Embedded Cases	Practice setting	Practice type & supervision	Embedded Case Description
Site 1	Urban	Academic Usually 1 physician	Busy academic teaching centre. PA has heavy workload due to patient care, physician coverage, and administrative roles within the clinic. PA interested in teaching, but little update from supervising physicians/clinic administrators. PA known for specific expertise in well baby/well women exams and procedures. PA dissatisfaction with salary (has remained unchanged). Remuneration less than other non-physician colleagues who provide identical services.
Site 2	Urban	Academic 1 physician per PA	Busy academic teaching centre. PAs responsible for providing patient care to a diverse range of age groups. Significant physician investment in PA satisfaction and role integration. Variation in how PAs are funded. Male/female provider balance verbalized by participants (i.e. hiring opposite gender to ensure patient care needs are met). PAs also provide considerable teaching support to medical students, residents, PA students, etc. Support of same day access/same day appointments important part of PA role.
Site 3	Urban	Non-academic 4 physicians	Only site where PA cycles between 4 different supervising physicians, and can also be required at different sites. PA must adapt to various practice styles. Broad generalist role, responsible for patient care of all ages and genders. Male/female provider balance verbalized by participants (i.e. hiring opposite gender to ensure patient preference is considered).
Site 4	Urban	Academic 1 physician	Busy academic teaching centre. PAs responsible for providing patient care to a diverse range of age groups. PA dissatisfaction with salary (has remained unchanged). Must supplement income with additional contract work in another setting.
Site 5	Rural	Non-academic 1 physician	PA had considerable experience prior to entering family practice setting. Support of same day access/same day appointments important part of PA role. Significant community impact as patients can access care locally and often don't have to wait for referrals outside of the region. Male/female provider balance verbalized by participants (i.e. hiring opposite gender to ensure patient preference is considered). PA dissatisfaction with salary (has remained unchanged).
Site 6	Rural	Academic 1 physician	Most rural of all settings. PA very valued by physician (entire family health team) and by community. PA provides extensive community support and outreach (unique to other cases). Has had significant impact on physician quality of life. Very collaborative patient care. Male/female provider balance verbalized by participants (i.e. hiring opposite gender to ensure patient preference is considered).

Table 4: Facilitators and Barriers to PA Role Optimization in Ontario Family Practices

Level	Facilitators	Barriers
Professional & partnership factors between service providers	<ul style="list-style-type: none"> ▪ Trust and rapport between PA and Physician ▪ Physician investment in PA training, orientation and continuing medical education ▪ Nurturing PA interests and expanding scope of practice ▪ Physicians motivated to stay “up-to-date” ▪ PA trained in medical model which facilitates PA-MD communication and collaborative practice ▪ PA level of independence & role autonomy ▪ Improved work-life balance for physician ▪ Physicians previous experience with/knowledge of PAs 	<ul style="list-style-type: none"> ▪ Not using providers to full capacity or maximizing skill set ▪ PA dissatisfaction with salary (i.e. no incremental pay increase,) or benefits
Practice / Site factors	<ul style="list-style-type: none"> ▪ Clinic familiarity with and acceptance of PA role ▪ Improved efficiency ▪ Clinic investment in PA training, orientation and continuing medical education ▪ Well defined measures of success: from clinic, patient, and provider perspective ▪ Opportunity for PA to take on mentorship or teaching roles ▪ Improved gender balance (i.e. male physicians with female PAs – well women visits) ▪ Building in “review time” to provider schedules ▪ Patient satisfaction ▪ Collaborative approach to medical learners ▪ Agreement around medical directives 	<ul style="list-style-type: none"> ▪ Billing restrictions ▪ Understanding of liability insurance ▪ Resistance from other providers (i.e. NPs, Nursing staff, other allied health, other physicians in practice group) ▪ Knowledge of medical-legal-regulatory considerations ▪ Pharmacy resistance to filling PA prescriptions ▪ Failure to collect data or variables of interest to track impact ▪ “Death by medical directive” – too restrictive, limiting PA role and clinic efficiencies
Policy / Provincial factors	<ul style="list-style-type: none"> ▪ Career start grants that encourage uptake and integration of PAs ▪ Investment and support of PA education programs ▪ Growing awareness of role potential of PAs in Primary Care settings 	<ul style="list-style-type: none"> ▪ Lack of updated legislation, title protection and regulation/registry of Physician Assistants (Ontario) ▪ Lack of permanent funding models or sustainable Provincial funding plan for PAs ▪ Limited funding streams for PAs in Family Health Teams ▪ PA salary remains unchanged (i.e. starting salary is same salary 5-10 years later)

Professional Factors

Relationship, Rapport & Trust

PAs and physicians emphasized the importance of trust and collaboration as significant facilitators in optimizing the PA role. Many of the interviewed participants detailed personality characteristics, skill sets and competencies that promoted a strong working relationship between the PA and MD: “We have a very collegial and collaborative relationship. It is very respectful. I honestly trust her and I know she honestly trusts me as well. I think it’s a very efficient one as well because we have similar thinking processes.” (MD)

Autonomy & Independence

The physicians, administrators and PAs acknowledge that the PA role functions with a very high degree of autonomy in terms of patient care:

“She’s very autonomous, she has a lot of experience, she knows her limitations, and she knows when to ask for help. She’s been great in that regard. And she’s highly efficient.”
(MD)

Flexibility of the supervisory relationship allows the PA to function efficiently and to make the greatest impact on patient care. The level of required supervision is dynamic, and directly related to trust, rapport, experience and skill set. This relationship directly impacts how much autonomy or independence is granted to the PA. Physicians spoke to the benefits of PAs being trained in the medical model, and the benefit of approaching patient care in a similar fashion. Physicians recognized that their PA experience was highly influenced by the personality characteristics and the emotional intelligence of the PA.

In some settings, the PA was employed and supervised by one physician, but in other clinics, multiple physicians supervised the PA. Although the PAs acknowledged the learning curve required adapting to different physicians’ practice styles, one PA reported that, *“I appreciate and enjoy [different practice styles] and I think it’s nice that it allows me to be able to see all kinds of styles and create my own.”* (PA)

Experience & Investment

Each family physician had variable previous knowledge or experience in relation to the PA role, including exposure to international medical graduates initially recruited to the Ontario PA pilot project, employment of Military PAs or familiarity with the PA role through academic affiliations. Many of the physicians recognized the initial investment required to train a PA for the needs of their clinic, describing the importance of this investment in establishing a collaborative working relationship that would allow the PA to function with maximum efficiency:

“I think the integration into primary care and family medicine has been very logical, very natural, and very progressive. I think our ability to use the skills of a PA is very obvious. I think there’s a lot of room and areas for [PAs] to come in.” (MD)

PAs and supervising physicians both felt as though the broad scope of practice and generalist training of the PA significantly benefits their patients, the clinic, and community. Generalist PA training provides opportunity to expand their skill set depending on PA interest, physician needs, and patient needs. One physician described his PA as a *“true primary care provider in the broadest sense”*. Physicians vocalized their dependency on the PA role, and how different their work life would be if the PA were no longer part of their practice.

Professional Barriers to Optimization

Physician knowledge around PA funding and salary support was highly variable. Some physicians were not aware of how their PA was paid or how the salary was supported, while others were very knowledgeable or had devised a funding system of their own. Many PAs were not happy with their current salary and reported no salary pay scales or pay increases despite increasing years of experience. Some PAs felt that their other non-physician colleagues are paid more to see fewer patients, but recognized that physician/clinic support of the PA role was partially dependent on the appeal of being more efficient while costing significantly less than other providers.

Practice Factors

Patient Acceptance

Across each of the family practice settings, both the physicians and PAs felt as though the PA role was now well accepted by their patients. Both physicians and PAs recognized that strong communication skills and earning patient trust are integral to patients accepting the PA role. Physicians recognize their role in introducing the PA to patients, and the impact this introduction has on role acceptance and integration. A few of the clinic sites provided examples (i.e., digital screens in the waiting room displaying information about the healthcare team) of how patients were introduced to the PA role. In some geographical areas, local media documents (i.e., newspaper article) highlighted the addition of a PA to the community/health team. Patient acceptance was strongly attributed to increased access and flexibility of appointments (i.e., same day appointments), increased availability of services and length of appointment time:

“I think it’s easier for patients to get in and get a same day or next day appointment with me working here... I feel like I get a lot of time to get to know my patients, which when working in a small community is really important.” (PA)

Reasons for PA Employment

Reasons for hiring a PA were variable across all sites depending on physician exposure, previous experience, funding sources, or clinic need. From the physician perspective, having a PA in their family practice setting was beneficial based on an improved work/life balance for the physician, the presence of the PA allowing for development of different expertise or skill sets (skill extension), increased patient satisfaction (i.e., better access to care, or hiring a PA to fill a gender gap), and better continuity of care for patients in their practice. PAs described success through improved continuity of patient care, developing a relationship with patients, being able to improve access to care, and the benefits of working in a collaborative practice setting.

Practice Barriers: Role uncertainty and limitations

At the practice/organizational level, challenges included initial uncertainty around the PA role and pushback from other health professionals. Pushback usually occurred around overlapping scopes of practice, and confusion on how controlled acts could be delegated.

Each of the interviewed PAs carries private liability insurance but reported they have rarely been asked to submit proof to their employer, and their employers did not cover this annual expense. Interestingly, only one physician was aware that his PA carried independent liability coverage. The majority of physician employers were not aware of how their PAs are insured, or made assumptions about clinic or other coverage for the PA:

“In fact, I don’t know details of [liability coverage], but I’ll tell you the assumption I make is that anything a PA sees, a patient of mine, I’m responsible for overseeing that care...”(MD)

A review of professional liability documents from the Canadian Medical Protective Association (CMPA) and documents accessible to practicing PAs from CAPA highlights the disconnect between liability knowledge and practice (19, 20). Guidance was provided by CMPA almost 8 years after PAs were introduced into the Province, and only recently have PA employment toolkits contained information regarding professional liability insurance.

Many PAs expressed an interest in teaching PA or MD students, but the physician or clinic employer didn’t always see this as an appropriate for the PA. There was some physician resistance on using experienced PAs to teach undergraduate or resident trainees, and significant variation existed on how learners, when present, were introduced to the PA.

Policy Factors

Funding & Billing

Some physicians were not aware of how their PA was paid or how the salary was supported, others were very knowledgeable or had devised a funding system of their own. Many of the PAs were initially supported by the Ontario Ministry of Health and Long-Term Care’s “career start grant” which provided fifty percent of the PA’s first year of salary. Physicians and PAs both voiced concerns about long term planning in regards to ongoing funding, and funding across all sites was quite variable. Many PAs were not happy with their current salary and reported no salary pay scales or pay increases despite increasing years of experience.

This was confirmed in the document analysis by a lack of formal or informal salary pay scales, outdated contracts, and vague job descriptions. Some PAs feel that their other non-physician colleagues were paid more to see fewer patients, but recognized that physician/clinic support of the PA role was partially dependent on the appeal of being more efficient while costing significantly less than other providers. In addition, physicians felt limited by current billing practices that don’t allow the physician or PA to bill for PA visits, even at a lower rate: *“The current billing framework from the Ministry... it’s a huge challenge; it’s a huge barrier” (MD)*. A review of Ministry guidelines regarding OHIP billing standards, audit requests and overall absence from PA employment toolkits further supports employer and PA concerns around funding and billing.

Health Professional Regulation

Many PAs are not sure what the future holds for regulation, and the physicians were generally not aware of current regulation issues or its impact on PA role optimization. A number of

K. Burrows Optimizing the Role of Ontario Physician Assistants in Family Medicine

JCANPA ISSN 2562-6841 Vol. 1; Ed.4; Feb 2020

[HTTP://JCANPA.CA](http://JCANPA.CA)

sites explained the various workarounds they have adopted in order to maximize the role of an unregulated health professional. The document analysis provided many examples of these strategies, such as the presence of broad medical directives, agreements with community pharmacies to accept PA prescriptions, and position statements from various stakeholders (i.e., College of Family Physicians of Canada position statement (21)) in order to provide role clarity despite lack of regulation.

Discussion

Summary of Key Findings

The identified factors, facilitators and barriers around role integration and optimization are consistent with collaborative care literature, nurse practitioner (NP) implementation literature, and PA integration literature from other jurisdictions (3, 9, 22-27). The positive influence of collaborative personal relationships was prevalent across each of the case study sites. Implementation studies in Manitoba echoed this finding, and identified the most critical factor for PA role success in primary care as a good relationship and “fit” between the PA and the supervising family physician (3). Participants from each of the family medicine case sites identified various facilitators and benefits, and proposed professional, practice based or policy solutions to barriers and gaps in PA role optimization (Table 5).

Strengths and Limitations

The case study approach does not aim to reflect all PA roles in family practice settings but is useful for establishing an understanding of PA role optimization in Ontario Family Medicine settings. This study targeted settings where the PAs were deemed successful, as demonstrated by full-time permanent positions, low employee turnover, and sustainable funding plans.

Attempts were made to interview other health professionals, NPs, and administrative staff in these settings in order to understand the impact of the PA role on other clinic personnel in family practice settings. Unfortunately the research team, even with the support of study participants, was unable to recruit additional staff or clinician participants. Although physicians, PAs and administrators expressed their own perceptions of patient acceptance of the PA role, patients were not directly interviewed as part of this study but are one of the biggest stakeholders in provincial healthcare initiatives.

Interpretation and Implications

Successful collaboration in health care teams can be attributed to numerous elements, including interactional determinants (personal /partnership factors), organizational determinants (practice/ site factors) and systematic determinants (policy/provincial factors).(27) It was anticipated that the funding element would determine the type of patient (or reason for visit) directed to the PA, but instead distribution of work was based on other factors (patient’s gender preference, etc.). With the widespread push for collaborative care models, determining the optimal

scopes of practice is an essential element – unfortunately, current systems in place for determining and regulating scopes of practice preserve the status quo more than promoting change (28).

Broad factors that impact role implementation include a lack of legislative and regulatory authority for the role, no established funding mechanisms, lack of mentorship and knowledge of role, opposition from other medical professionals, lack of administrative support and inadequate organization of care (3, 22-24, 26). Systematic issues that contribute to the credibility of the role, such as legislation and regulation, have not been addressed in Ontario, which hinders PA role implementation and practice. Provincial health departments and health system stakeholders need to work together to address identified barriers at the provincial level if optimal results are to be achieved (3). This may include long-term policy planning, support from professional associations and role standardization in order to support skill mix in primary care (24).

Multiple factors influence the success of the introduction of any new professional role. In one setting, a factor may act as a barrier, and in another setting, the same factor may facilitate the process (27). This was particularly evident across the family practice case sites through the discussion of medical directives. Medical directives can facilitate the process of integration and allow the PA to practice with significant autonomy, thus improving efficiencies and patient access. In other settings however, medical directives can be a barrier if they are too restrictive, or if they don't appropriately reflect the PA's scope of practice and clinic needs. Interpretation of qualifiers within integration and PA role optimization research needs to be sensitive to "best fit" for each particular setting, PA-MD relationship, and clinic needs.

The balance between policy and professional/practice factors was evident across each family medicine site. The findings of this research support many of the key principles laid out in the 2011 College of Family Physicians of Canada position statement on physician assistants, including using a team-based approach to maximize the skill set of the professional in the primary care/family health practice team in a complementary manner, and the role of PAs as a resource within family practices (8). A stable funding platform and government support sets the foundation upon which the professional and practice factors can build. In busy healthcare environments, it is difficult to work with one in the absence of the other, but also difficult for exceptional professional factors to truly overcome the policy gaps. The gaps in billing and funding policies limit non-physician health care providers, such as NPs and PAs, from optimizing their contribution to the health care system. The extensive use of workarounds, although successful in many settings, leaves physicians and PAs feeling vulnerable. Family practice sites across Ontario reflect this balance and tension, and these challenges are likely to be echoed in other provinces looking to introduce PAs without a strong policy framework.

Conclusion

The success of PA role optimization is dynamic and multi-factorial. Collaborative relationships, personal experience, negotiation of autonomy, opportunities for growth and mentorship, patient satisfaction and mutual trust were repeatedly identified by both family medicine PAs and physicians as key determinants of successful PA role integration. Barriers to role success and optimization included PA dissatisfaction with salary and benefits, physician/employer knowledge of liability insurance requirements, and funding/billing challenges. The success of the included cases reflected the motivation from the clinic (practice), PA, and physician to create a collaborative team practice, improve patient access to care, and to work around the identified barriers.

Stakeholders and policymakers need to consider multiple factors in order to ensure the continued success of PA role implementation across Ontario. This research was limited to examining the role of PAs at the clinical setting level, but study participants also identified a number of systems and organizational level factors that influence role success. Although data is slowly emerging regarding the impact of PA implementation from the perspective of those most closely involved, benefits (access to care, continuity of care, efficiency) have been openly acknowledged at local and national levels with little movement on the overarching barriers (lack of regulation and sustainable, consistent funding models) that would optimize sustainability and future role development.

With the increased interest in putting patients first through coordinated services and prominence of collaborative care literature, health system stakeholders should revive provincial efforts to create a sustainable program that optimizes the role of PAs in health care delivery. In the interim, family physicians should be reassured that the addition of the right PA can have a positive impact on increasing patient access to care, improving work-life balance, expanding services, and advancing team-based collaborative care.

Table 5: Practice & Policy Gaps and Proposed Solutions

Identified Gap	Contextual Information & Proposed Solutions
Salary gaps and sustainable funding models.	<p>PA base salary was initially proposed 10 years ago, with no increase or living wage considerations. Employers should consider years of experience, retention bonuses, or the creation of a graded pay scale to ensure they are remaining competitive as the profession expands across Ontario and other Provinces.</p> <p>Government stakeholders should consider allowing physicians to bill for PA work/patient care at a lower rate, allowing for more flexibility around funding streams for non-physician care providers, and the collection of indicators to support the cost-effectiveness of the PA role.</p>
PA interest in education or mentorship roles	<p>PAs can take more ownership of personal interest in teaching and mentorship. Employers can then provide opportunities for PAs to take on various learners (when appropriate, and based on PA comfort and patient care experience).</p>
Continuing Medical Education (CME) support and Canadian Certification (CCPA) status	<p>Canadian PAs (CCPAs) must complete a minimum of 40 credits annually to maintain their certification status, and log a total of 400 credits over a 5-year cycle. Credits are logged through the Royal College of Physician and Surgeons MAINPORT ePortfolio (32). PAs and their employers should be aware of these requirements, and continue to seek opportunities for CME/CPD (33).</p>
Understanding of liability Insurance	<p>Supervising physicians and employers should request annual documentation of liability insurance to ensure their PA is covered. Although each PA clearly stated they carried their own liability insurance, employers were less certain about how they were covered when supervising a PA. PAs can carry professional liability insurance through Reid & Bradley Associates Insurance (20).</p>
Regulatory status	<p>Lack of health professional regulation for PAs continues to be identified as a barrier to role optimization and patient safety in the Province. Models from other provinces, such as Manitoba, have demonstrated that the College of Physicians and Surgeons provides the best framework for regulatory oversight given the nature of the supervisory relationship between PAs and MDs.</p>

References

1. Vanstone M, Boesveld S, Burrows K. Introducing Physician Assistants to Ontario. Health Reform Observer. 2014;2(1).
2. HealthForceOntario. Physician Assistants: Government of Ontario; [Available from: http://www.healthforceontario.ca/en/Home/Health_Providers/Physician_Assistants.
3. Bowen S, Botting I, Huebner L-A, Wright B, Beaupre B, Permack S, et al. Potential of physician assistants to support primary care. Evaluating their introduction at 6 primary care and family medicine sites. 2016;62(5):e268-e77.
4. Hooker RS, Everett CM. The contributions of physician assistants in primary care systems. Health Soc Care Community. 2012;20(1):20-31.
5. Grzybicki DM, Sullivan PJ, Oppy JM, Bethke AM, Raab SS. The economic benefit for family/general medicine practices employing physician assistants. Am J Manag Care. 2002;8(7):613-20.
6. Bagley B. Health outcomes among patients treated by nurse practitioners or physicians. JAMA. 2000;283(19):2521; author reply 4.
7. Jones IW, Hooker RS. Physician assistants in Canada: update on health policy initiatives. Can Fam Physician. 2011;57(3):e83-8.
8. College of Family Physicians of Canada. Position Statement: Physician Assistants 2011 [Available from: https://www.cfpc.ca/uploadedFiles/Resources/Resource_Items/Health_Professionals/CFPC%20Position%20Statement_Physician%20Assistants_FINAL%20ENGLISH.pdf.
9. Taylor MT, Wayne Taylor D, Burrows K, Cunningham J, Lombardi A, Liou M. Qualitative study of employment of physician assistants by physicians: benefits and barriers in the Ontario health care system. Can Fam Physician. 2013;59(11):e507-13.
10. Yin RK. Case Study Research Design and Methods. 5th ed. Thousand Oaks, CA: Sage; 2014. 282 p.
11. Baxter PJ, S. . Qualitative case study methodology: study design and implementation for novice researchers. The Qualitative Report. 2008;13(4):544-59.
12. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005;15(9):1277-88.
13. Nowell LS, Norris JM, White DE, Moules NJ. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International Journal of Qualitative Methods. 2017;16(1):1609406917733847.
14. Aronson J. A pragmatic view of thematic analysis. The Qualitative Report. 1994;2(Spring):1-3.
15. Korstjens I, Moser A. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. European Journal of General Practice. 2018;24(1):120-4.
16. Lincoln Y, Guba E. Naturalistic Inquiry. Newbury Park: Sage Publications; 1985.
17. Noble H, Smith J. Issues of validity and reliability in qualitative research. Evidence Based Nursing. 2015;18(2):34-5.
18. Anney V. Ensuring the quality of the findings of qualitative research: looking at trustworthiness criteria. Journal of Emerging Trends in Educational Research and Policy Studies. 2015;5(2):272-81.
19. Canadian Medical Protection Association. Working with physician assistants: collaborating while managing risks 2016 [Available from: <https://www.cmpa-acpm.ca/en/advice-publications/browse-articles/2016/working-with-physician-assistants-collaborating-while-managing-risks>.
20. Canadian Association of Physician Assistants. Professional liability insurance 2019 [Available from: <https://capa-acam.ca/practicing-physician-assistants/liability-insurance/>.

K. Burrows Optimizing the Role of Ontario Physician Assistants in Family Medicine

JCANPA ISSN 2562-6841 Vol. 1; Ed.4; Feb 2020

[HTTP://JCANPA.CA](http://JCANPA.CA)

21. The College of Family Physicians of Canada. Position statement Physician Assistants. 2011.
22. Sangster-Gormley E. How case-study research can help to explain implementation of the nurse practitioner role. *Nurse researcher*. 2013;20(4):6-11.
23. Sangster-Gormley E, Martin-Misener R, Downe-Wamboldt B, Dicenso A. Factors affecting nurse practitioner role implementation in Canadian practice settings: an integrative review. *J Adv Nurs*. 2011;67(6):1178-90.
24. Drennan V, Levenson R, Halter M, Tye C. Physician assistants in English general practice: A qualitative study of employers' viewpoints. 2011;16(2):75-80.
25. van Soeren MH, Micevski V. Success indicators and barriers to acute nurse practitioner role implementation in four Ontario hospitals. *AACN Clin Issues*. 2001;12(3):424-37.
26. van der Biezen M, Derckx E, Wensing M, Laurant M. Factors influencing decision of general practitioners and managers to train and employ a nurse practitioner or physician assistant in primary care: a qualitative study. *BMC Fam Pract*. 2017;18(1):16.
27. San Martin-Rodriguez L, Beaulieu MD, D'Amour D, Ferrada-Videla M. The determinants of successful collaboration: a review of theoretical and empirical studies. *J Interprof Care*. 2005;19 Suppl 1:132-47.
28. Nelson S, Turnbull J, Bainbridge L, Caulfield T, Hudon G, Kendal D, et al. Optimizing scopes of practice: new models for a new health care system. Ottawa, ON; 2014.
29. The College of Physicians and Surgeons of Ontario. Tackling the doctor shortage: a discussion paper. Toronto, ON; 2004.
30. Ardal S, Abraham C, Olsen D, Lalani H, Kamal A. Health human resource toolkit. HealthForceOntario; 2007.
31. Ministry of Health and Long Term Care. Patients first: action plan for health care. Toronto, ON 2015. p. 1-16.
32. Royal College of Physicians and Surgeons of Canada. MAINPORT ePortfolio [Available from: <http://www.royalcollege.ca/rcsite/cpd/moc-program/about-mainport-eportfolio-e>].
33. Physician Assistant Certification Council of Canada. PACCC CPD policy: Canadian Association of Physician Assistants; [Available from: <https://capa-acam.ca/paccc/continuing-professional-development-cpd/paccc-cpd-committee-cpd-policy/>].