

# Patient Experience With Primary Care Physician Assistants in Ontario, Canada: Impact of Trust, Knowledge, and Access to Care

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Alexa Moschella, HBSc, MD candidate<sup>1</sup> and  
Kristen Burrows, PhD, CCPA<sup>1</sup> 

## Abstract

Physician assistants (PAs) have been integrated into primary care settings to reduce wait times and to optimize continuity of care. Though previous studies suggest that PA utilization leads to improved healthcare access, few studies have investigated patient experience with primary care PAs in Canada. The objective of this study is to explore patient perspectives on primary care PAs in Ontario. A patient survey was developed and distributed to patients seen by PAs in 4 family medicine practices across Ontario, Canada. Results demonstrate that many patients are highly satisfied with their experience including the PA's ability to address their medical needs, establish rapport, and provide fast access to care (including same-day and after-hours appointments). Despite preferring to see a physician for more complex concerns, participants felt that PAs demonstrate similar medical knowledge, competencies, and scope of practice as family physicians. Patients demonstrated a solid understanding of the PA role and recognized the collaborative PA–physician relationship. These findings describe successful patient awareness and acceptance of the PA profession, largely due to positive PA–patient interactions in family medicine settings.

## Keywords

physician assistant, access to care, clinician–patient relationship, healthcare planning or policy, patient feedback, patient satisfaction, survey data

## Introduction

Primary care serves as the foundation of healthcare systems through the provision of comprehensive care focused on preventing, detecting, treating, and managing disease across the lifespan.<sup>1</sup> As the most common point of access to the healthcare system, primary care often serves as a gateway to other health care providers, such as specialists, social workers, and physical therapists, who can further manage and mitigate chronic illness.<sup>2</sup> High-quality, patient-focused primary care is associated with better health outcomes for patients, fewer hospitalizations, decreased emergency department visits, and lowered healthcare costs.<sup>2</sup> Increasing timely access to primary care services is fundamental to enhance the efficiency of healthcare systems.

Previous studies have identified that access to family physicians across Canada is becoming more difficult due to increasing rates of disability and chronic disease, in addition to physician workforce shortages.<sup>3</sup> Canada has a larger percentage of sick adults (23%) who report waiting 6 or more

days for a primary care appointment compared to New Zealand (5%) and Switzerland (2%).<sup>4</sup> Of the Ontarians who do have a primary care provider, fewer than half (44.3%) are able to see their provider within 24 h of requiring consultation.<sup>1</sup> Limitations to primary care access have further been exacerbated by the COVID-19 pandemic, which forced many primary care offices to function at reduced capacity, impeding healthcare services for patients.<sup>5-7</sup>

The use of physician assistants (PAs) in the Canadian healthcare system provides one potential solution to increase patient access to primary care.<sup>8-10</sup> PAs are advanced healthcare professionals trained in the medical model to extend

<sup>1</sup> Physician Assistant Education Program, Michael G. DeGroote School of Medicine, McMaster University, Hamilton, Ontario, Canada

## Corresponding Author:

Kristen Burrows, Michael G. DeGroote School of Medicine, McMaster University, 1280 Main St W, Hamilton, ON, Canada L8S 4L8.  
Email: burrowk@mcmaster.ca



physician services by taking patient histories, performing physical examinations, ordering and interpreting investigations, prescribing medications, creating treatment plans, and diagnosing patients in collaboration with a supervising physician.<sup>8,11,12</sup> Civilian PAs were first introduced to Ontario in a 2006 demonstration project via a joint initiative between the Ministry of Health and Long-Term Care (MOHLTC) and the Ontario Medical Association (OMA) to increase healthcare accessibility and decrease wait times.<sup>9</sup> Canada currently has 3 PA training programs housed within university medical schools in Ontario and Manitoba.

The role of PAs in primary care settings is broad and includes supporting diverse patient age groups, maintaining continuity of care, and providing same day access.<sup>8</sup> Although PA integration in Canada is still in its infancy, enhancement of healthcare quality attributed to PA integration has already been demonstrated. Canadian literature suggests patients will consider accepting PA care over physician care in exchange for shorter wait times,<sup>13</sup> the introduction of primary care PAs leads to rapid improvements in healthcare access and enhanced work-life balance for other providers,<sup>12</sup> and that PA integration allows for comprehensive patient services, improved continuity of patient care, and increased collaborative care.<sup>8</sup> These findings are also reflected in research from the United States where the PA profession is considerably more well established, which supports the effectiveness and contribution of PAs in primary care settings.<sup>14</sup>

A key facilitator of effective PA integration in primary care settings is positive patient experiences. Previous literature has utilized patient experience to describe patient satisfaction<sup>8</sup> as a proxy for the patient's assessment of healthcare services and quality.<sup>15</sup> Patient experience is a crucial component to impactful healthcare delivery since satisfaction and a positive experience correlates with compliance, health outcomes, continuity of care, and likelihood of patients returning to the same provider for longitudinal care.<sup>16,17</sup> Hooker et al found no differences in patient satisfaction among an American geriatric population while being treated by a medical doctor (MD), PA, or nurse practitioner (NP), thus presenting evidence that upon successful PA integration, patient experience is comparable.<sup>18</sup>

Despite growing evidence that PA integration has the potential to improve primary care, few studies have explored the patient perspective of receiving care from a PA in the Canadian healthcare system. Evaluating patient experiences and current understanding of the PA profession is essential to elucidate the impact of this role on patient care. The aim of this study is to investigate patient experiences with primary care PAs in Ontario. This knowledge is a critical missing component of determining the success of PA integration. By examining primary care settings where the PA role has been utilized, this study will provide novel insight about PA role awareness and PA service quality from the perspective of Ontario patients.

## Methods

### Survey Design

The Physician Assistants in Ontario Patient Survey (PAOPS), an original 24-item survey, was created by the second author as part of a larger PA integration research project. The survey prompted patients to reflect on their understanding of the role of PAs compared to more established healthcare providers (ie, physicians, nurse practitioners, etc). The survey also inquired about patient satisfaction with recent visits, ease of access/appointment availability, and the likelihood of recommending a PA as a healthcare provider to others. Questions contained a combination of selectable responses or an option to provide their own response. Questions with write-in characteristics were analyzed qualitatively through thematic analysis. The survey was created in collaboration with a research committee.

### Participant Recruitment and Data Collection

The PAOPS survey was printed and distributed to 4 family medicine clinics across Ontario. Clinics were recruited via snowball sampling from employed, full-time PAs who participated in a parallel study focused on the experiences of family practice PAs, supervising physicians, and other administrators. All patients who saw a PA during their visit were invited to complete the survey. Participant consent was obtained via a consent form, which included information about the researchers, participant responsibilities, and confidentiality agreements. Participants were provided with a pre-stamped envelope and were invited to complete the survey after their visit, or to mail the survey from home.

### Data Analysis

Quantitative data was analyzed via descriptive statistics using Microsoft Excel (Microsoft Office 2019). To identify patterns in written, open-ended responses, a thematic content analysis was conducted across surveys which included familiarization, creating initial codes, searching for themes, reviewing themes, defining and naming themes, and generating a comprehensive report.<sup>19,20</sup>

## Results

In total, 66 patient respondents completed our survey, of which 25% were male ( $n=16$ ), and 75% were female ( $n=49$ ), ( $n=1$ , unreported) with an average age of 48.5 years ( $SD=16.4$ ). All participants were already registered patients of the participating Family Medicine/primary care settings. This study identified several themes consistent across participant responses. Patients outlined their level of understanding of the role in comparison to other providers, and highlighted several factors that impacted their experience (Table 1).

**Table 1.** Themes of PA Integration in Ontario Family Medicine Practices.

Category	Themes
Patient understanding of a PA versus physician role	<ul style="list-style-type: none"> <li>• PAs provide similar care as physicians</li> <li>• PAs work in collaboration with physicians</li> <li>• PAs are trained as generalists, while physicians are trained as specialists</li> </ul>
Patient experience with Family Medicine PAs	<ul style="list-style-type: none"> <li>• PAs provide timely access to care</li> <li>• PAs allow patients more interaction time with a healthcare provider</li> <li>• PAs establish strong rapport with their patients</li> </ul>

## Patient Understanding of PA Roles

### *PAs and Physicians Provide Similar Care*

Participants indicated that they were first oriented to the PA role by existing physician or nursing staff (42%,  $n = 28$ ) or directly through a PA booked appointment (35%,  $n = 23$ ). The majority of participants found the PA role to be most similar to a physician role (40%,  $n = 25$ ), residents (22%,  $n = 14$ ), or nurse practitioners (17%,  $n = 11$ ). Many patients described receiving the same medical treatment as they would from a physician. PAs possess similar knowledge and competencies as family physicians including being able to diagnose, perform physical exams, and prescribe medications:

I get the same treatment from both [physician and PA].

PA offers very comparable care to that of a doctor/nurse practitioner with the same end results.

They [physicians and PAs] are equally knowledgeable.

Both [physicians and PAs] fill prescriptions, both do my health checks, both do physical exams.

### *PAs Work in Collaboration With Physicians*

Participants demonstrated an understanding that the PA role is collaborative with the physician role. Patients acknowledged and appreciated that this collaborative approach resulted in favorable outcomes, such as the creation of definitive treatment plans and fostering trusting therapeutic alliances:

I have complete trust in my PA. If she doesn't know the answer or best treatment, she immediately consults the doctor. I leave with a plan.

This team-based approach to patient care not only allowed participants to feel comfortable and confident in receiving high-quality care from either a PA or physician.

*PAs are Trained as Generalists.* Many participants reported that physicians pursue more training and have more experience practicing in a particular specialty in comparison to PAs who undergo generalist training. Participants reported little confusion about the role of a PA in Canada's healthcare system (85%,  $n = 56$ ), while a small minority 14% ( $n = 9$ ) expressed confusion over PA scope of practice, PAs as medical students in training, and role overlap with other health care providers.

Within the context of PA and physician roles, there was a distinct provider preference based on the type of medical visit. Over half of participants preferred to see a PA for routine vaccinations (65%,  $n = 39$ ), annual physical exams (55%,  $n = 33$ ), and medical forms (55%,  $n = 33$ ). Preferences were comparable for visits regarding palliative care (17%,  $n = 10$  for PA; 21%,  $n = 21$  for physician), chronic disease management (33%,  $n = 20$  for PA; 40%,  $n = 23$  for physician), and new/acute issues (47%,  $n = 28$  for PA) (35%,  $n = 20$  for physician). Overall, physician care was preferred when specialty training was required or if the patient perceived their health concern to be more complex. PA care was preferred for better access, longer appointments, higher comfort with the PA (ie, gender specific care), and for routine or follow-up care.

## Patient Experience With Family Medicine PAs

### *PAs Provide Timely Access to Care*

Respondents consistently valued the timely access to PA primary care services. Patients acknowledged that the wait time to see their family physician was much longer and a barrier to receiving timely medical care:

Prefer PA. Long wait times to see a doctor. With current medical issues, wait times such as weeks can be ineffective... [patients] remain ill for longer periods of time than needed.

Appointments [with PAs] more readily available. Totally satisfied with any follow-up I have received.

Patients reported that PAs were greatly accessible and 79% ( $n = 48$ ) of respondents disclosed that their PA provided same day appointments. Participants described the process of scheduling appointments with a PA to be quick and convenient. Although participants described shorter wait times to see a PA, 45% ( $n = 27$ ) of respondents indicated that they were not able to access a PA outside of regular clinic hours.

### PA's Allow Patients More Time With a Healthcare Provider

Patients reported that the increased appointment time allowed them to have more thorough discussions about their health concerns, better understand their medical diagnoses, and receive comprehensive answers to their questions.

They [PAs] .... have time to explain your condition to you. Will answer any questions you may have.

Appointment is longer (up to 30 min allowed). Not rushed,

[PA] spends more time explaining diagnosis,

PA was available for any additional questions and concerns and took much more time/care in explaining things.

### PA's Establish Good Rapport

Across each of the family practice settings, over half (54%,  $n=38$ ) of respondents chose to see a PA for their current appointment. Patients identified having strong therapeutic alliances with their primary care PA leading to increased confidence and comfort in seeking PA care. Patients attribute the development of this relationship to the PAs ability to translate complex diagnoses into simple terms, comprehensive discussions, empathy when discussing sensitive topics, and increased time devoted to answering patient questions.

I feel very comfortable bringing my medical concerns to my PA. She is very knowledgeable and compassionate. I am always satisfied with my visits and questions are always answered.

[PA] has been so caring and takes the time to address all my concerns. She could take care of me anytime

[PA] gives easy to understand diagnosis, care instructions, and a more personal relationship

[PA] was very thorough, and answered my questions so I could understand his answers.

Patients reported that the medical knowledge and skill sets possessed by PAs further fostered a positive therapeutic alliance and allowed them to feel confident with a PA's medical diagnoses and treatment plans: "*My PA at my [Family Health Team] is very knowledgeable and confident which makes me feel comfortable with his diagnoses.*"

Overall, 98% ( $n=61$ ) of respondents found it very appropriate to see a PA for their health concerns, were very satisfied with their PA's ability to address their medical needs and would recommend a PA as a primary care practitioner to their family members and friends.

### Discussion

Assessing patients' perceptions of the care they receive from PAs is critical to the success of PA integration and understanding of patient experiences in Canada. If patients hold a negative perception of PAs, refuse to access PA services, or do not accept the profession, future role integration will be challenging. Positive PA-patient experiences are imperative to successful primary care practice since positive experiences correlate with compliance, improved health outcomes, continuity of care, and likelihood of returning to the provider for longitudinal care.<sup>17</sup>

The identified factors contributing to patient experience (access, longer appointment times, medical knowledge, and interpersonal skills) identified in this study are consistent with literature investigating PA patient experience in other jurisdictions.<sup>17</sup> Awareness of the collaborative nature of the physician-PA role was routinely identified as a factor that facilitated patient confidence and fostered positive rapport. These findings echo other studies which suggest that patients are comfortable seeing a PA given the professions collaborative relationship with supervising physicians.<sup>21</sup> Participants demonstrated an accurate understanding of the PA role: PAs are medical generalists capable of prescribing medications, diagnosing patients, and performing physical exams. In contrast, one study from the United Kingdom reported that although patients described positive PA interactions, most mistook them for doctors and did not understand PA roles or responsibilities.<sup>22</sup> Patient preference for a physician visit was observed for more complex health visits, which mirrors previous studies demonstrating that despite high levels of PA acceptance, patient confidence in the PA's capabilities declined with increasing complexity of the presenting complaint.<sup>23</sup>

Within the context of this study, our findings demonstrate that patients are highly satisfied with PAs, matching the results of international literature.<sup>17</sup> Patients felt that they received the same quality of care from PAs and MDs and were receptive to seeing a PA for any medical issue, confirming patient acceptance of the PA profession in primary care. Successful acceptance suggests promising potential for PAs to help family physicians provide high quality care in an increasingly demanding population.<sup>12</sup> The accumulating positive PA-patient encounters have the potential to propagate further successful PA integration in primary care settings in Canada, increasing accessibility and continuity of care.<sup>8</sup> Overall, patients across all 4 family medicine practices reported positive encounters with PAs that were comparable to their previous physician experiences.

### Limitations and Considerations

This study does not aim to reflect patient experiences with all primary care PAs in Ontario but is useful for establishing an understanding of patient perspectives and patient awareness of primary care PAs. This study targeted clinics where PAs had already been successfully integrated as evidenced by

full-time permanent employment, low employee turnover, and sustainable funding models. Although patient understanding of the PA role was assessed, it is important to note that all research participants were already patients of PAs and therefore had more knowledge of the profession compared to patients who have not encountered a PA. The nature of primary care settings for longitudinal patient care also allowed patients to have multiple encounters with the same PA over time, fostering more opportunity to build positive rapport. This phenomenon is described by Oliver et al who reported that patients with more contact with PAs tend to rate PAs higher than those with less contact.<sup>24</sup> This paper focused on in-person medical visits and could be replicated for virtual clinic appointments to ensure consistency across all current care delivery models.

Due to evidence presented in previous literature stating that PAs effectively decrease wait times, it was anticipated that patients would value timely access to healthcare services that PAs can provide.<sup>25</sup> Respondents emphasized the utilization of the PA role as a physician extender, which effectively increased the capability for patients to be seen in a time frame they perceive as appropriate. As a result, implementation of PAs to meet patient standards for appointment accessibility has the potential to reduce adverse outcomes related to primary care inaccessibility including patient mistrust in the healthcare system, misuse of emergency departments, missed diagnoses, and poor patient outcomes.<sup>25,26</sup>

Although patients consistently value appointment accessibility as a key element of timeliness in primary care,<sup>27</sup> they also place high importance on their assessment of the provider's technical skills and competencies.<sup>28</sup> Interpersonal skills, medical expertise, and assessment techniques have great influence on successfully fostering patient confidence in the PA profession.<sup>28</sup> Primary care PAs in Ontario successfully met these expectations, with patients reporting that their PA's assessment skills, clinical knowledge, empathetic communication styles, and the increased time dedicated to discussion were all factors that facilitated comfort and trust; however, patient awareness that PAs receive less education and less specialty training in comparison to their MD counterparts led patients to hold an MD preference for more complex health concerns. It is worthy to note that concerns identified as more complex to some patients were viewed as simplistic to others, suggesting some subjectivity. Although patient awareness of a PA's generalist training demonstrates an accurate understanding of the PA role and confirms that patient education regarding the PA profession has been effective, it also presents a barrier for patients to see a PA for more complex health concerns. However, patients voiced an appreciation for MD-PA collaboration which provided them with additional reassurance. Additional measures should be taken at clinical sites to ensure patients understand the training, role, and competencies of PAs.

## Conclusion

The results of this study demonstrate positive overall patient experiences with primary care PAs in Ontario. A number of factors contributed to this outcome including improved access to care, understanding of PA role, PA-MD collaborative relationship, and patient-provider rapport. As key stakeholders and recipients of healthcare delivery, patient experience is an important indicator of successful PA role integration that should be considered in any clinical setting looking to improve access to care or boost existing health human resources.

## Declaration of Conflicting Interests

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## Ethical Approval

Ethics approval was obtained through the Hamilton Research Ethics Board (HiREB) for McMaster University (Protocol #2270).

## Statement of Human and Animal Rights

All procedures in this study were conducted in accordance with the HiREB approved protocols (Protocol #2270).

## Statement of Informed Consent

Written informed consent was obtained from the patient(s) for their survey participation and anonymized information to be published in this article.

## ORCID iD

Kristen Burrows  <https://orcid.org/0000-0002-9003-4209>

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