

# **Physician Assistants in Primary Care: Making an Impact in Manitoba**

**Sheryl Kirwan BSc, PhD, PA-Student**

[kirwans@myumanitoba.ca](mailto:kirwans@myumanitoba.ca)

**Supervisors:**

**Rodney Clifton PhD, Fil.dr.**

**Lisa Moore BA, MPAS, CCPA**

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**ABSTRACT:**

Physician Assistants (PAs) are being employed in various sites in Manitoba, and in several specialties and subspecialties including primary care. This study aimed to describe the work PAs in primary care are doing, explore the demographics of their patients, assess their job satisfaction, and examine their contributions to healthcare.

Several questionnaires were constructed and distributed to PAs who graduated from Master of Physician Assistant Studies at the University of Manitoba and are currently working in primary care. The questions that were asked were divided up into: the reasons the PAs specialized in primary care, their practise environment, patient population, schedules, job satisfaction, professional concerns, and their contributions to healthcare.

The results of the primary care PA survey show that in Manitoba primary care PAs generally chose to enter primary care for the breadth and challenge of the practise. They are happy to remain in this speciality, and they are working in a variety of settings. Many of the PAs have variation in the numbers of physicians they report to and the type of patients they serve. The demographic data shows that PAs are generally dealing with patients of both genders and from a wide spectrum of minorities and socioeconomic levels. Overall the job satisfaction of the PAs is exceptional, and their satisfaction with their patients, supervisory physicians, and other staff and health care providers is outstanding.

## **INTRODUCTION**

Primary healthcare is the backbone of the health care system. In fact, more than half of the Medical doctors in both Canada (51.9%) and Manitoba (52.1%) are Family practitioners (1). Even so, there are several million Canadians and many patients in Manitoba who are unable to find family physicians or who cannot access immediate care for minor health problems (2). Primary care is the day-to-day healthcare given by health care providers. The objective of primary care is to promote health, prevent illness, care for common illnesses, and manage ongoing chronic problems in a cost-effective manner (3). Typically, primary care providers act as the first contact and principal point of continuing care for patients within a healthcare system, and they coordinate other specialized care that patients need.

An adequate supply of primary care providers can lead to better health outcomes for these people who are often not receiving the care they need. There are, however, many rural areas and small communities across Canada and in Manitoba that are simply too small and too isolated to support general practitioners (GPs). Some communities, of course, may be able to support one physician, but they are too small to support an entire team of physicians.

One solution has been the introduction of alternate primary care providers such as, Nurse Practitioners and Physician Assistants, who can help fill the need of providing care to people. Physician Assistants (PAs) are licensed medical practitioners who provide care under the supervision of a physician and are authorized to obtain medical histories, perform physical examinations, order and interpret diagnostic studies, prescribe medications, provide therapeutic procedures, and provide consultations on health care (4,5). PAs were first created in the United States in the 1960s in response to medical shortages and have been an established profession for

several decades working in many different medical specialties (6). In Canada, the Canadian Forces was the first institution to train and employ what are now known as PAs (7,8).

Recently, in the United States, increasing numbers of outpatient care visits have been shown to be performed by PAs suggesting that the primary care physicians have been augmented by PAs in primary care settings (9). Studies have compared the degree of patient care provided by PAs and GPs which have concluded that primary care PAs are able to perform over 85% of the services provided by GPs (10,11). The types of patients in primary care that GPs and PAs treat have been shown to be similar with comparable patient complexity, treatment, and outcomes (10,12). Not surprisingly, PAs have been shown to have comparable rates as GPs in referrals to specialists, prescription of medication, and ordering of diagnostic tests (13). Primary care PAs have been shown to use specialist referrals appropriately and therefore have generally been accepted by specialist doctors in taking referrals of PAs (14). Several reports have examined the beneficial contributions of PAs in primary care and importantly, patients can expect similar medical care outcomes with a PA in comparison to that of a GP (10,13,15).

In 2014 a qualitative study examined the benefits and barriers of PA employment by physicians in the Ontario health care system (16). In this Canadian study, PAs were shown to improve patient care, improve physicians' quality of life, decrease waiting times, increase patient numbers, and financially benefit medical offices (16). Other studies have shown that primary care PAs can increase practise list size and scope, and significantly shorten wait times to follow-up appointments (17–19). Adding PAs to family practises has been shown to be beneficial in other ways including decreasing physician burnout by sharing workload, enhancing meaningful patient relationships, and positively influencing healthcare teams with better communication with patients (16,20,21).

Across Canada, the Canadian Association of Physician Assistants (CAPA) reported in the 2015 CAPA census that 47% of PAs in Canada are practicing family medicine where as the 2017 CAPA census reported approximately 30% of PAs in Canada are practicing family medicine (22). However, in Manitoba, it is estimated that less than 15% of the PAs are working in primary care practises (unpublished data, Ian Jones). There are several sites in which primary care is delivered with support by PAs in Manitoba (20). A report in 2014 outlined the final implementation phase and evaluation of introduction of PAs into primary care at various sites in this province (23). There is, in fact, great diversity in the various populations in Manitoba; for example, there are significant differences between urban and rural areas, differences between Indigenous and non-Indigenous citizens, as well as significant differences in socioeconomic levels.

The purpose of this study is to identify and catalogue the tasks performed by PAs in various primary care sites with diverse patients in Manitoba. Valuable information can be gathered from surveying PAs in a variety of settings. In order to attract more PAs to primary care and promote the PA profession for government bodies and public concern, it is critical to identify the contributions that are being made by PAs, who are working in primary care, in rural and urban environments, identify what populations they are working with, and support the work that they do in our changing health care.

## **RESEARCH PROBLEM**

PAs have been and continue to work in primary care in various settings in Manitoba. Although there is a general understanding, by word of mouth, of the kind of care these PAs are providing, there has been *no* formal study that documents the role of the primary care PA in various settings other than one paper evaluating strategies of introducing PAs to various sites (20). This study aimed to examine and catalog some information concerning patient demographics, to highlight the role of the PAs in various settings and determine their overall impact and job satisfaction.

## **METHODS**

### Compiling the Questionnaires

Multiple qualitative methods were included for formulating and gathering the questions including individual semi-structured focus groups, document review, and observational methods. Qualitative methods are quite appropriate in areas like this where little information has formally been gathered. Discussions were carried out with PAs in primary care, PAs in other specialties, and members of the MPAS program. Additionally, a review of literature looking at what PAs are doing in family practise in other parts of Canada and the US were examined. This helped to determine the type of relevant questions to be included in the survey that would help capture their work.

I took the information gathered from these discussions and from the literature review and compiled a long list of questions that PAs could address. The questionnaire was then circulated to a small sample of Manitoba primary care PAs, who provided feedback in several rounds of focussed discussions; the conclusion was that the scope of the questionnaire was too ambitious, so it was decided to pare down the questionnaire. PAs are very busy at their places of employment and I had to be careful not to add too much work to their already busy schedules. This was important because there are a small number of PAs practising in primary care and I needed to ensure I would have good response rates to the questionnaire. Therefore, I wanted to focus some of the questions on patient demographics to highlight the kinds of patient the PAs are seeing in family medicine. I tried to minimize the number of questions so that completing the questionnaire was relevant to their work but not too time consuming for the PAs.

I reviewed all the information gathered during the initial survey and identified emerging topics and comments. I used some of that information to formulate follow-up questions to examine some key areas that were in a follow-up questionnaire.

To conduct this study, ethics approval was obtained from the University of Manitoba Health Research Ethics Board. Advice on how to conduct the study was given by my research project supervisors. Participation was voluntary, and no incentives were offered to anyone.

### Participants

A list of 15 University of Manitoba MPAS graduates who are working in primary care was obtained from Ian Jones, the Coordinator of the Program at the University of Manitoba, and invitations to participate in the study were emailed to all these PAs. Each PA was given a unique ID code that they would use to identify themselves, and I would be the only person to know the code numbers. The surveys were created online (using SurveyMonkey software) and the data was collected using the anonymous setting; therefore, no identifying personal information were recorded, except for the unique ID code for which I was the only person who had access to. All information was guaranteed to remain confidential.

Of those 15 PAs:

- 1 is no longer working as a PA; and
- 2 did not respond to several attempts of contact them, and therefore presumably chose not to participate in the survey;

This brought the total number of survey participants to 12. Of note:

- 8 were MPAS graduates working in primary care in Winnipeg;



- 3 were MPAS graduates working in primary care in Manitoba, but not in Winnipeg (specifically Niverville, Thompson, and Beausejour); and
- 1 MPAS graduate was working in primary care in another province (Alberta), but participated in the survey.

Although the information was collected individually, due to the small number of the total survey participants (n=12) to keep complete anonymity, no information will be provided concerning differences in responses based on their location.

Follow-up questionnaires were answered by 9 of the 12 participants. Importantly, two of those participants were unable to answer some of the follow-up questions because of absence or having a reduced patient load for several reasons. The participants were transparent about how their answers were atypical and provided reasons why they thought the answers were generalizable. Given this information and using reasonable judgement, I decided which collected answers would be appropriate and which would be excluded. For example, if a participant was on leave from work, they were unable to track how many patients they saw in a given week or how many issues those patients had, and thus this section of the survey was excluded for them. However, that same survey participant would be able to indicate how satisfied they are with the continuing medical education opportunities that are available to them and their answers for this question was included.

### Survey Questions

Many questions were asked in the various surveys that were used in this study. They can generally be divided up topically into seven groups, which I label as A to G:

A) Factors in Choice of Specialty: Looked at the PAs' motivation of entering primary care instead of another specialty and if they had any future intention of moving to another specialty.

Questions included:

- Why did you choose to go into Primary Care instead of a specialty?
- Have you ever worked in a different specialty? If yes, please comment about what benefit(s) you see working in family practise compared to a specialty.
- Do you think you will move from Primary Health care to a specialty in the future?

B) Practise Environment: Looked at the kind of practise in which the PA works, which included the makeup of their healthcare team, whether home and hospital visits are carried out, and the process of patient assignment/selection to the various providers. During a follow-up survey, further details are asked about the patient issues managed at the location of their providers.

Questions included:

- What is the main patient setting where you work?
- How many other PAs work with you at your workplace?
- How many Physicians do you work with and report to?
- Is your workplace part of an Interprofessional Team where you have access to other professionals, such as a dietician, pharmacist, or counsellor?
- Do you make home visits to patients?
- Do you provide any inpatient care or visit patients in hospital?
- How do you and the Physician decide who sees which patient?
- A follow-up survey question was: In your clinic, is there a limit to the number of issues that a patient may address with you per visit? If yes, please comment.

- Another follow-up question was: In your estimation, in comparison to a MD in your place of work, do you deal with more issues per patient, the same number of issues that the MD deals with, or fewer issues per patient that the MD deals with?

C) Patient Population: Looked at some demographics of the PAs' patients and the most common type of patient visit, be it new patients, acute issues, or follow-up for chronic issues they have. In a follow-up survey some of this information was tracked.

Questions included:

- On average, how many patients do you see daily?
- What age group do the majority of your patients fall into?
- In your estimation, do you have more Male or Female patients?
- Do you have any Transgender patients?
- Are any of your patients considered to be one of the following minorities: Indigenous, Recent Canadian Immigrant, Physically disabled?
- What is the socioeconomic status of the majority of your patients?
- Which is the most common type of visit you have in a typical week? (Chronic or Acute)
- How many new patients do you see in a typical week?
- A follow-up question was: Over this past week, how many patients did you see on each of the days? On each of those days, what was the range in number of issues those patients had? That is, the fewest number of issues compared to the greatest number of issues. (Just use a range, like "1-4" would mean a patient only had 1 issue whereas a different patient had 4 issues).

- On each of those days, did you deal with New patient visits, existing patients with acute issues, or existing patients with chronic disease management issues? (you can use multiple checkboxes for each day if needed)

D) Schedule: This part examined the time structure of their work day and week.

Questions included:

- How many hours do you typically work per week?
- How many hours do you work per day?
- How many days do you work per week?
- Do you ever work in the evenings (after 6 pm)?
- Do you ever work on weekends?
- If there is an emergency in your workplace, are you responsible for the care of the patient that may require you to extend your working hours?
- Do you have built-in lunch and/or coffee breaks in your typical day?

E) PA Job Satisfaction: This part examined the satisfaction of the PAs in different aspects of their professional lives and in various professional relationships.

Questions included:

- How satisfied are you with current professional life and workplace?
- How satisfied are you with opportunity to use your skills to their full extent?
- How satisfied are you with balance between personal life and professional commitments?
- How satisfied are you with your relationships with your patients?
- How satisfied are you with your relationships with supervising physician(s)?

- How satisfied are you with your relationships with administrative staff in your workplace?
- How satisfied are you with your relationships with other healthcare professionals in your workplace?

F) PAs' Professional Concerns: A few topics were mentioned in the preliminary survey which were addressed in a follow-up survey.

Questions included:

- How satisfied are you with the availability and accessibility of Continued Medical Education to you?
- How important is it to have the flexibility and opportunity to move across provincial boundaries to work (that is, work outside of Manitoba)?

G) PA Contributions to Healthcare: This part examined the contributions the PAs personally made and the feedback they received from patients and supervisory physicians.

Questions include:

- What benefit or contribution do you perceive you have made to your workplace?
- What benefit or contribution do your patients indicate you have made to your workplace?
- What response is provided by your physician(s) when asked what benefit they have most noticed since adding a PA to their practise?

## **RESULTS**

**A) Factors in Choice of Specialty:** This part examined the PAs' motivation behind entering primary care instead of another specialty and if they had any future intention of moving to another specialty.

When the PAs were asked their reasons for choosing primary care, a common theme was that the training is quite general and broad. It seems to be an appropriate fit after completing PA school to enter an area where general knowledge could be reinforced and expanded upon; the challenge associated with the daily diversity of entrance complaints and breadth of the family medicine experience drives the desire to keep a wide knowledge base. Another common theme included the importance to the PA of developing a deeper ongoing relationship with patients and their families, continuity of care (“cradle to grave”) where they enjoy the opportunity to see many patients and monitor them over time. Other answers for reasons for choosing primary care include personal preference for working in a clinic over working in a hospital, the work-life balance, hours, and the level of interprofessional collaboration.

Figure 1: PA Previously in Specialty

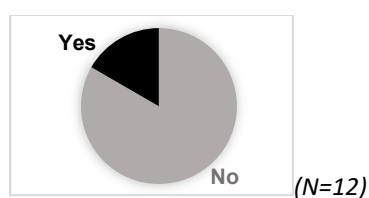
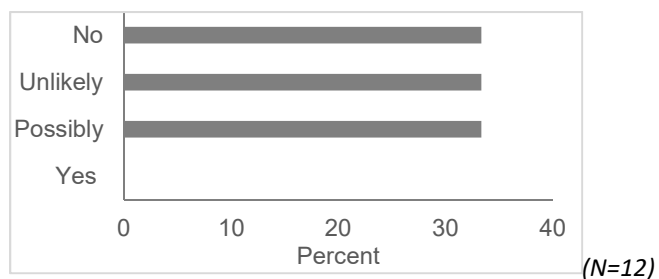


Figure 1 shows that for the PAs surveyed, only a minority (2 PAs or 17%) had been in another specialty before moving to primary care. They were asked what motivated the change to primary care and their responses included leaving because they became bored, unchallenged, and not expanding their knowledge after a few years since their practice was highly specialized.

Other responses included that the new job in primary care was attractive for the both the challenge as well as the improved hours and benefit package that was offered.

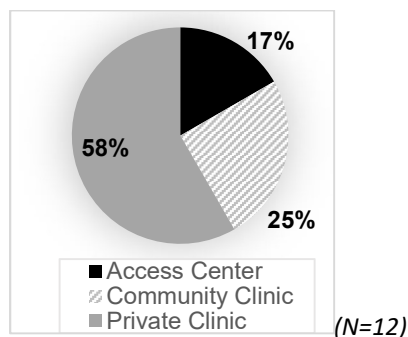
Figure 2: Considering Future Move to Specialty



When asked about the possibility of moving to a specialty in the future from primary care (Figure 2), the answers were equally split between No, Unlikely, and Possibly. Interestingly, there were not any definitive “Yes” responses.

**B) Practise Environment:** This question examined the kind of practise in which the PA works, which included the makeup of their healthcare team, whether home and hospital visits are carried out, and the process of patient assignment/selection to the various providers. During a follow-up survey, further details were asked about the patient issue set managed at their location by providers.

Figure 3: Type of Workplace



The CAPA 2017 census indicated an increase in the number of PAs working in private offices and academic health centres (22). Figure 3 shows that in Manitoba there is a mix of where the primary care PAs are working with 7 PAs (58%) working in private clinics, followed by 3 PAs (25%) working in Community Clinics, and 2 PAs (17%) working in Access Centers.

Figure 4: Providers at Workplace

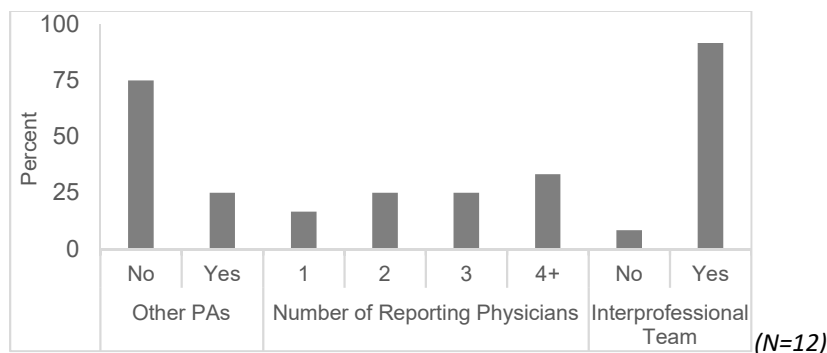
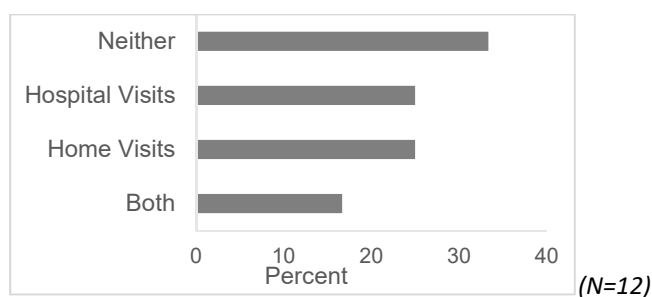


Figure 4 shows that 75% of the PAs do not work with other PAs. There is a range to the number of supervisory physicians that the PAs work with; specifically, 16% work with 1 physician, 25% work with 2 physicians, 25% work with 3 physicians, and 33% work with 4 or more physicians. These results show that most of the PAs are part of an Interprofessional team at their workplace.

Figure 5: Perform Home and/or Hospital Visits

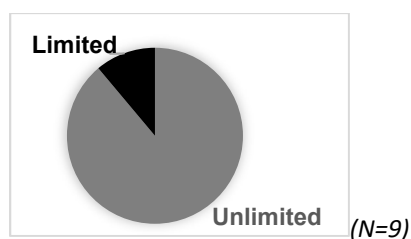


There was some variation to whether PAs perform home or hospital visits as reported in Figure 5. In fact, 33% of the survey participants perform neither home or hospital visits while 67% perform either one or both home and hospital visits.



When asked, how do you and the physician decide who sees which patient, the PAs answers varied, including: Some PAs have their own schedule and the patient calls in and books directly with them; PA and Physician have different schedules so the PA reviews with their supervisor when needed (emergency or second opinion needed) and on a weekly basis; Simply based on access and schedule availability when needed; Sometimes case or entrance complaint based, level of general health, complexity of care; Some are patient preference where they make the request; One PA stated that generally they see patients that need to be seen in less than a month and the physician sees the less urgent follow ups, because their schedule is typically full a month in advance; some patients have adopted their PA as their primary care provider based on interaction and trust. Generally, any patient the physician can see, the PA can see. Bookings are based on acute need and availability.

Figure 6: Numbers of Issues per Visit



Some clinics are thought to have a limit to the number of issues a patient can discuss per visit. This issue was asked to the PAs in a follow-up survey and the results showed (Figure 6) that for the majority of clinics, a patient can discuss an unlimited number of issues during a visit. The only limitation that the PAs mentioned was that visits may be limited by time allotted for an appointment. One PA mentioned that although there is no strict limit to the number of issues addressed, they try to keep it to a maximum of 3 issues since it can get confusing if there are too many issues addressed at once. During the follow-up survey tracking the number of issues that

PAs dealt with daily showed that per visit, PAs typically dealt with a minimum 1 issue to a maximum 5 issues.

Figure 7: Comparing Number of Issues Dealt in Single Visit by Provider

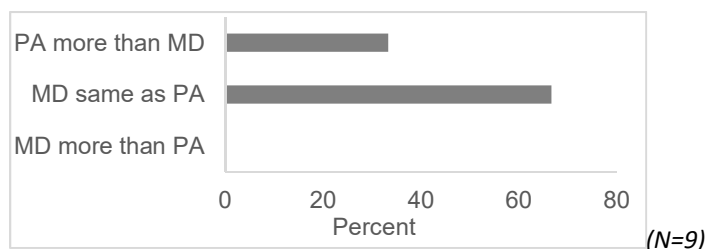


Figure 7 shows that, in general, physician and PAs deal with the same number of issues (67%); however, in some practices (33%) PAs deal with more issues than the physician largely because they have more time with patients.

C) Patient Population: Looking at some demographics of the PAs' patients and the most common type of patient visit, be it new patients, acute issues, or follow-up for chronic issues they have. In a follow-up survey this information was gathered.

This section addressed the basic demographics of the patients. The PAs were asked about how many patients they see daily and the ages and gender of most of their patients.

Figure 8: Estimated Number of Patients Seen Daily

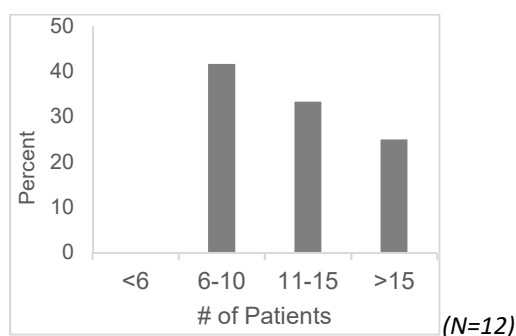
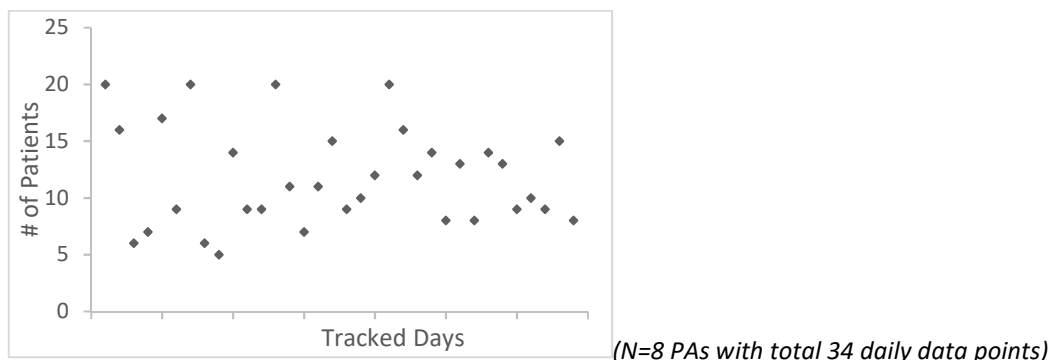


Figure 8 shows that the PAs see at least 6 patients daily in a typical week; 42% report seeing between 6 and 10 patients daily, 33% PAs see between 11 and 15 patients daily, and the remainder (25%) estimate that they see more than 15 patients daily.

Figure 9: Number of Patients seen during the Tracked Days



During a follow-up survey, the PAs were asked to monitor how many patients they had seen. The number of patients seen on those days are shown in Figure 9. All together the average number of patients seen daily was 11.8, with a range from a minimum of 5 to a maximum of 20.

Figure 10: Ages of the Majority of Patients

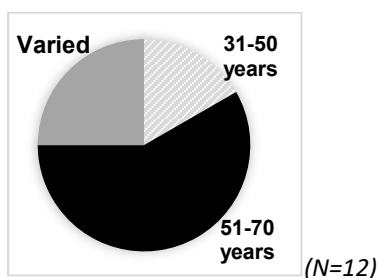


Figure 10 shows the PAs reported the age range of most of their patients. The highest reported grouping of patients fell into the 51-70-year age group (58%), followed by 31-50-year old (17%). A few PAs were unable to estimate the age group that most of their patients were in probably because their patients were quite diverse, including one PA who reported patients that ranged from newborns to 105 years of age.

Figure 11: Patient Gender

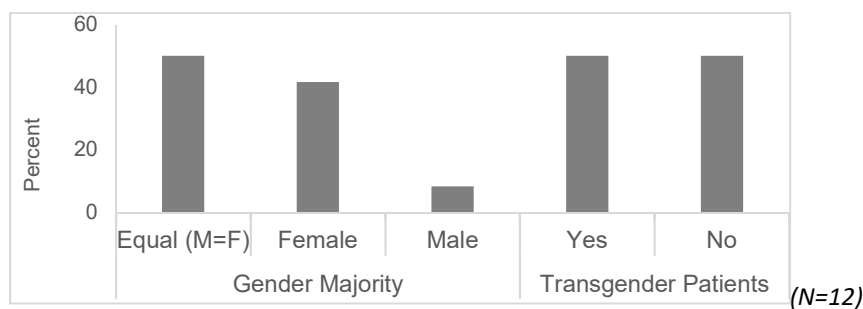


Figure 11 shows that 50% of the PAs found that they had equal representation of male and female patients. Interestingly, 42% of the PAs said that they had a majority of female patients, and 8% said that they had a majority of male patients. 50% of the PAs reported having at least one transgender patient.

Figure 12: Minority Patients

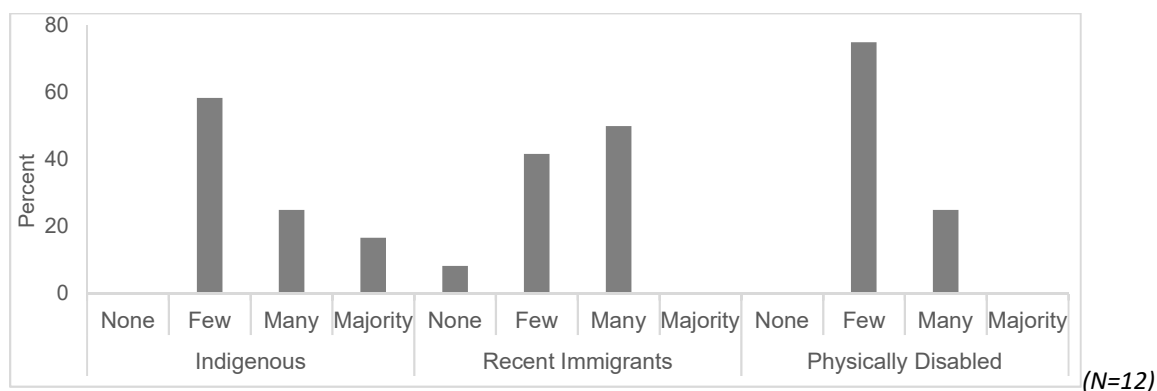


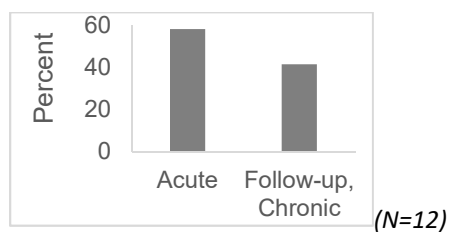
Figure 12 shows the frequency of minority patients that the surveyed PAs see. Notably, all PAs report having at least a few Indigenous patients (58%), 25% report having 'many', and 17% report that most of their patients are Indigenous. Similarly, 50% of PAs report having many recent Canadian Immigrants as patients, but only 8% report having no recent Immigrants as patients. All PAs report having a few (75%) or many physically disabled patients (25%).

Figure 13: Socioeconomic Status of Patients



The socioeconomic status of the patients varied significantly depending on the PAs' workplace. Figure 13 shows that 33% of PAs surveyed have patients who are of mixed upper and middle socioeconomic class. Surprisingly, no PAs work exclusively with patients in the Upper socioeconomic class.

Figure 14: Common Visit Type



PAs report dealing more commonly (58%) with acute issues in comparison with follow-up or chronic issues (42%) as reported in Figure 14. This question was included in the follow-up surveys, where very similar results were reported (data not shown).

Figure 15: New Patient Visits per Week

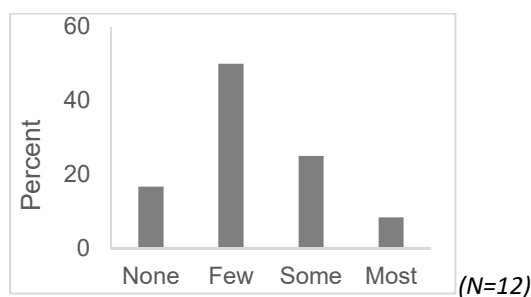


Figure 15 shows that PAs most commonly (50%) report seeing at least a few new patients in a typical week. Only 8% report having most of their visits being new patients in a typical week and 17% report seeing no new patients in a typical week.

D) Schedule: This part looked at the way the PAs structured their work day and week. The results of these general questions concerning the PAs work week are summarized in the following figures.

Figure 16: Time Worked per Day and Week

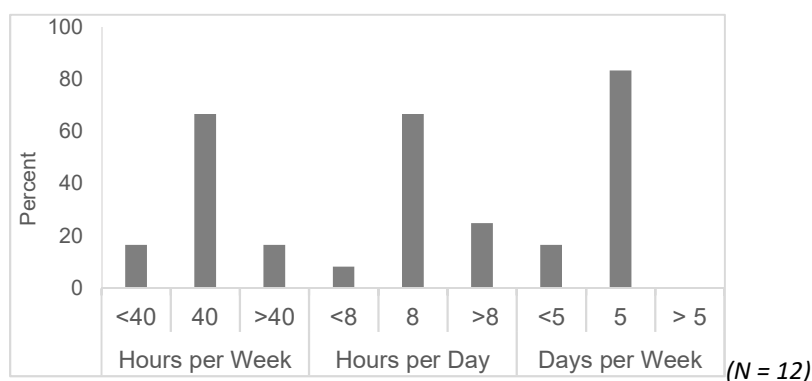


Figure 16 shows the typical work week for the Primary Health Care PAs. Most PAs work 40-hour weeks (67%), 8 hours per day (67%), and 5 days per week (83%). Of note, *no* PAs (0%) worked more than 5 days a week. Importantly, all participants (100%) indicate that they have lunch and/or coffee breaks scheduled in a typical day. (data not shown)

Figure 17: Weekend, Evening, and Extended Work

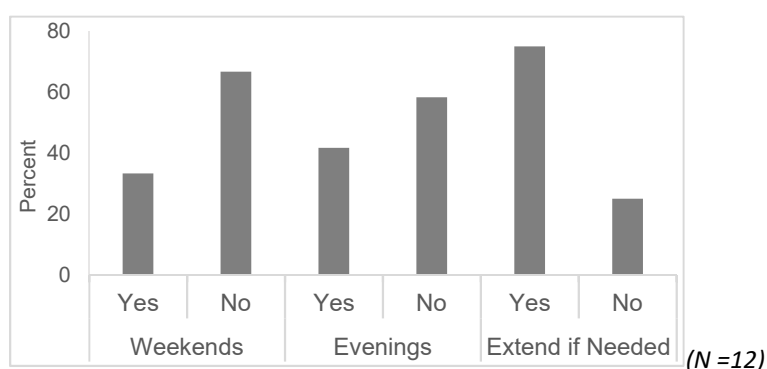


Figure 17 shows that most participants do not work during evenings or on weekends. In fact, 67% report that they never work on the weekends and 58% report that they never work during the evenings (after 6 pm). However, 75% of the participants indicate that in an emergency they would be responsible for caring for patients which could extend their working day. In comparison, the remaining 25% reported that they never had to extend their working hours, even in emergency situations.

E) PA Job Satisfaction: This part examines the current satisfaction of the PAs in various aspects of their professional lives and in various professional relationships.

Figure 18: Current Satisfaction by PAs in Various Aspects of Their Professional Life

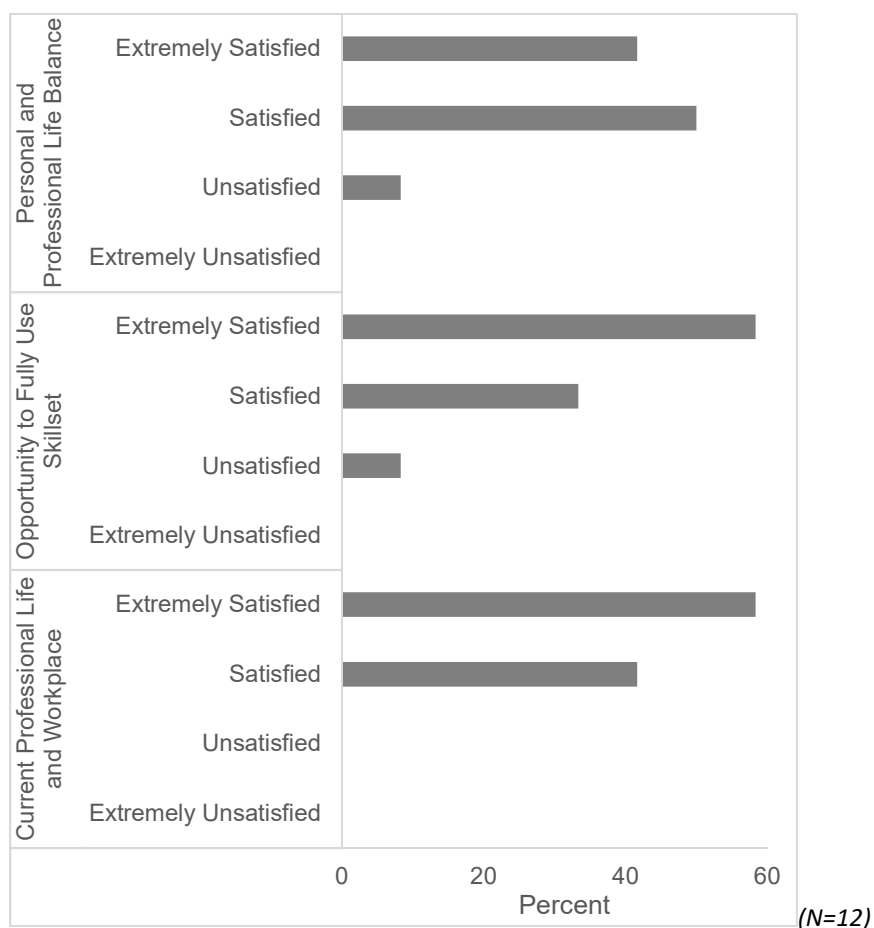


Figure 18 shows the overwhelming degree of satisfaction these primary care PAs have with: i) the balance between their professional commitments and their personal lives, ii) the opportunities they have to use the skills they gained in their training, and iii) their current professional life and workplace satisfaction. In all cases, very few of the PAs were unsatisfied with these aspects of their professional lives.

Figure 19: Current Satisfaction by PAs in Various Professional Relationships

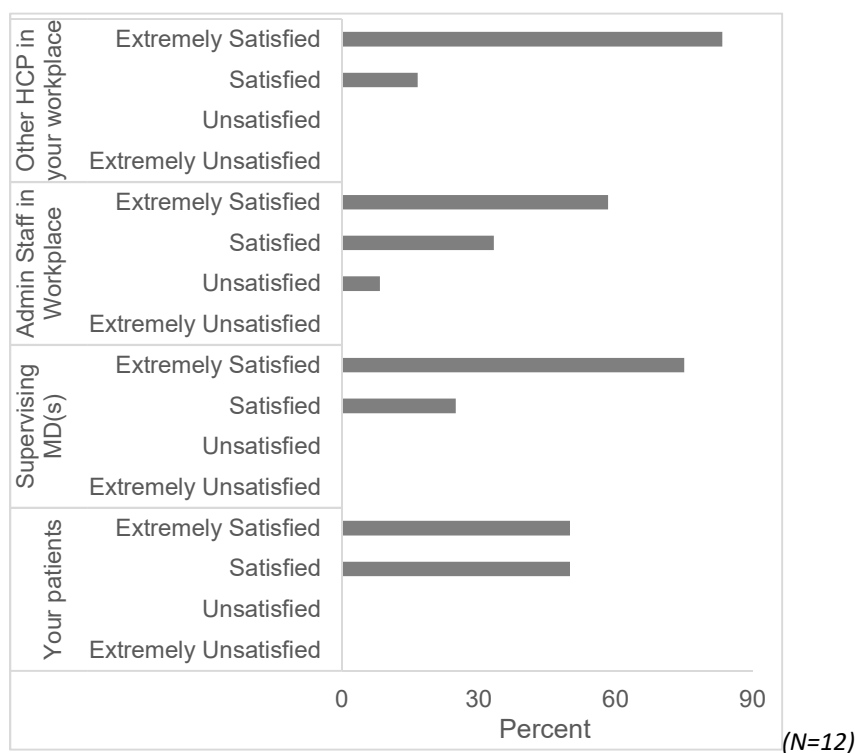


Figure 19 shows the positive satisfaction the primary care PAs have in their relationships with their: i) patients, ii) supervising physician(s), iii) administrative staff in their workplaces, and iv) other Health Care Providers (HCP), such as pharmacists and social workers. Impressively, most PAs gave the highest rating to their relationships with their Supervising Physicians (75% Extremely Satisfied) and other HCP in their workplace (83.3% Extremely Satisfied).



F) PAs' Professional Concerns: A few other topics were mentioned in the preliminary survey and these topics were addressed in a follow-up survey.

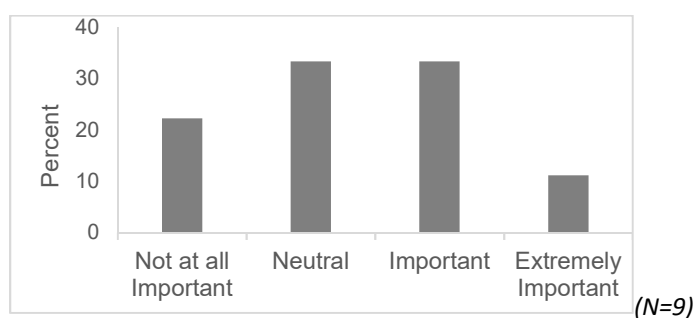
A requirement for maintaining Canadian Certified PA standing is that PAs must participate in professional development and Continuing Medical Education (CME) courses. This is, of course, critical for maintaining and developing their knowledge, skills, and professional acuity so they serve their patients in a professional manner.

Figure 20: Satisfaction with the Availability of Continuing Medical Education



Figure 20 shows that there is generally a great deal of satisfaction amongst the participants concerning CME opportunities (89% combined Satisfied and Extremely Satisfied). Written comments about continuing education suggest that most opportunities are directed at physicians and not at PAs. The PAs were concerned, however, about the out of pocket expenses associated with the CME opportunities that were available.

Figure 21: The Importance of Opportunities to Work Outside of Manitoba



When the survey participants were asked how important it was to have the flexibility and opportunity to move across provincial boundaries to work, the results varied (Figure 21). Several participants thought that it was important or extremely important (44% combined) to have this opportunity, and comments were made about potential challenges in moving from Manitoba to other provinces. These issues do not seem to be primary care specific, but rather a general Canadian PA issue.

## **DISCUSSION**

The results of the primary care PA survey demonstrate that primary care PAs in Manitoba generally chose to enter primary care for the breadth and challenge of the practise. They are happy to remain in this area instead of specializing in other areas. Primary care PAs are working in a variety of settings and have some variation in the number of physicians they report to and the type of patient population they serve. The demographic data shows that PAs are generally dealing with patients of both genders and from a wide spectrum of minorities and socioeconomic levels. This is important because it represents the diversity of people that are present in the province, and indeed in Canada.

Primary care PAs have a fairly standard schedule that is not necessarily available in other PA specialties and, in fact, not available for most Physicians. Overall the job satisfaction of the PAs in this study is generally exceptional, and satisfaction PAs have with their patients, supervisory physicians, and other staff and health care providers is outstanding. (This degree of satisfaction is much better than I was expecting when starting this project.)

In the methods section of this report, I indicated that a final section (G) would be addressing the contributions the PAs thought they made to healthcare in the province, and the feedback they received from patients and supervisory physicians. Information gathered from these questions is discussed here.

One of the main themes of PA contributions is the increased timely access to care. Having a PA in a primary care clinic is repeatedly mentioned as resulting in shorter wait times for patients. In fact, the PAs report that patients can see a provider much quicker when they are in the office because there is an extra set of hands in the office. Also, when physicians are overbooked, or a patient takes more time than the scheduled appointment time, PAs can often

take care of the overflow patients. This was noted as decreasing the stress physicians experience. As well, this was also indicated to decrease the stress the front desk staff and receptionists experience as they often feel pressure from patients who urgently need to be seen. Patients reportedly express to PAs how thankful they are that they have someone at the clinic to see them. Presumably it helps these patients because they do not need to go to Emergency rooms, Urgent Care centers, or walk-in clinics where they would see providers unfamiliar with them.

Another main claim of PAs is their contribution to increased care to community members and the education they provide to the patients. PAs often have more time to spend with patients since many schedule longer appointments with patients which allows more things to get done in one visit. Patients have noted to their PAs that they appreciate the extra time, so they don't feel rushed with their appointments. Patients also appreciate the education they receive from PAs. This is reassuring to Physicians, PAs report, because they increase the opportunity for improved quality of care in ways that would not be possible without them. In fact, the PA-physician team model is often critical to providing excellent care. Along the same lines, in clinics where there are several part-time physicians, there is greater continuity of care when fulltime PAs are working because they are often more familiar with the population of patients. Patients are often reassured when they see a familiar person in a clinic. In some clinics, PAs promote comfort on the part of patients because they act as a liaison between the doctor, other team members, and outside professionals. Finally, the increased care to patients is exemplified by a smoother transition from clinic to hospital and back home for patients who may take this route; again, PAs are often called on to provide continuity of care for patients under stress.

A third theme that several participants mentioned was that their presence added a degree of diversity to the clinic which is thought to provide a certain amount to comfort to some

patients. Examples of this include having a female PA provider in a clinic with a male physician; there are several circumstances where a female PA would be more reassuring to a patient, for example in women's health issues and gynecological exams. This example was mentioned as being helpful specifically for young female patients and for patients from certain ethnic backgrounds. Having a female PA perform certain procedures was mentioned by a few respondents as breaking down barriers between patients and medical professionals and in promoting more open communication about sensitive issues to some patients. In some clinics, PAs are thought to increase patients' satisfaction; in fact, patients comment that the PAs often have excellent listening and support skills which helps them deal with difficult issues, such as mental health concerns. Physicians have been noted to tell their PAs that they are impressed with their approach to patients with mental health problems.

Finally, the participants mentioned that their major contribution is as a backup to the physician; the PAs in this study say that this is a very important role. Physicians depend on their PAs for a variety of different reasons including: i) providing follow-up in the timely management of chronic diseases so that the important weekly, monthly, or yearly requirements receive the needed attention and they do not "fall through the cracks"; ii) making home visits or phone calls when sound medical advice and care is needed; iii) having a detailed understanding of community resources available to patients; iv) allowing physicians to be more focused on more serious issues ensuring their workdays are shorter. In fact, one physician was asked by the PA to answer this question: "What response is provided by your physician(s) when asked what benefit they have most noticed since adding a PA to their practise?" The physician's response was: "Allows for patients to be seen more urgently. Not worried that a patient is getting subpar care --

care is consistent with how I practice. Patients seem more satisfied seeing their ‘provider’ and are adapting well to the new idea of a PA.”

In conclusion, the PAs in primary care survey clearly demonstrated that primary care PAs are satisfied in their work and career choice. They have excellent professional relationships, good work-life balance, and they make a difference in their patients’ lives in providing quality care and they help improve the physicians’ clinics. I can only imagine that in the future, there will continue to be an increased need for primary care PAs in Manitoba and in Canada.

### Limitations

There were many limitations to this project. An obvious limitation, of course, is that there is a small number of participants in the study; this could not be helped because there are currently only 13 PAs working in primary care in Manitoba (out of a total 113 PAs). Another limitation includes the choice of having the PA to comment about what the patient or physician feels or would say to certain questions. Of course, it would be more appropriate to ask patients and physicians directly what they thought. Although this would be possible in future research, it is beyond the scope of this project.

Finally, there are several questions about the number of patients a PA saw in a day and the number of issues a patient brought to their attention. Collecting information on these things would provide better data but it still does not address the complexity of the concerns patients often have during a medical visit. Perhaps fewer questions and more detailed analyses would be more appropriate. In the future, greater emphasis needs to be placed on tracking how PAs deal with multiple complex medical issues from patients. Tracking the medical issues addressed by PAs during each visit would provide more robust data on what these medical professionals are

doing, but this type of research would be quite time consuming for the practising PA who is already quite busy.

To further quantify the importance of primary care PAs and to overcome some of the limitations of this study, there are several future projects that could be carried out. These include:

- i) The cost savings of adding a PA to a medical clinic;
- ii) The health outcomes of patients when a PA treats patients, in comparison to when a physician treats them;
- iii) The return rate of patients to PAs in comparison to the return rate to physicians;
- iv) Improvements in access to health care when PAs are on staff; and
- v) The impact on patient satisfaction of adding PAs to clinics.

Addressing some of these issues will potentially demonstrate the important role that primary care PAs can make in the healthcare of our province and country.

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