### MANITOBA INTRODUCING PHYSICIAN ASSISTANTS INTO PRIMARY CARE

### SUMMARY IMPLEMENTATION EVALUATION REPORT: JUNE 2014

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#### TABLE OF CONTENTS

KEY POINTS	iii
SECTION 1: INTRODUCTION	1
Purpose of Report	1
How Report is Organized	1
Background of Initiative	1
Summary Description of Evaluation Sites	
Summary of Related Action (Sept 2013-May 2014)	3
Methods	5
Ensuring Data Quality	6
SECTION 2: KEY FINDINGS	7
Overall Experience with Initiative	7
Recruitment, Selection and Hiring Process	7
Logistics of Implementation – Site Level	9
Logistics of Implementation I – System Level	10
Tracking and Facilitating PA Practice	
Professional/System Awareness	
Integration of PA into PC Team	14
Patient Acceptance	16
Ongoing Challenges	18
Newly Identified and Potential Challenges	18
Issues related to fee-for-service settings	18
Potentially emerging issues	19
Issues related to fee-for-service settings	18
Potentially emerging issues	19
Issues related to PA education program	19
Issues related to 'innovation effect'	20
Integration of PAs	20
Number of physicians supported by one PA	21
Reported Impacts of PA Introduction	22
Improved quality of care	22
Increased patient access	22
Increased patient attachment	22
Enhanced work/life satisfaction of physicians, providers	23

Improved Evidence Placemen	I patient flow communication, documentation on greatest impact of PA placement t characteristics potentially affecting impact ns of mechanisms of impact	23 24 25
SECTION 3: CO	NCLUSION AND RECOMMENDATIONS	28
Implications for S	Steering Committee	28
	earning from the pilot	
	g to enhance stakeholder engagement	
	action plan to address identified issues	
	or PA education	
EMR capa	acity to generate needed information	31
	ation of innovation description, evaluation findings	
Broader p	atient assessment	32
Implications for t	he PA Profession	32
Implications for C	Other Jurisdictions	32
Planning for Futu	Ire Monitoring and Evaluation	33
Recomme	endation 1: Ensure ongoing monitoring mechanisms	33
	endation 2: Ensure focused evaluation of outstanding iss	
	endation 3: Ensure capacity for outcome evaluation	
	endation 4: Integrate PA evaluation	
Conclusion		36
APPENDICES		37
Appendix A: Intr	oducing Physicians into Primary Care • Steering Committee Membership	
	Implementation and Evaluation Committee M	
Appendix B:	Descriptions of Pilot Sites	
Appendix C:	Focus Group/Interview Guide	
Appendix D:	Patient selection Criteria; Interview guide	43

#### SUMMARY IMPLEMENTATION REPORT: INTRODUCING PHYSICIAN ASSISTANTS INTO PRIMARY CARE

#### **KEY POINTS**

- Acceptance of the PA role by supervising family physicians, patients, and site staff appears to be very high: there is strong enthusiasm for the initiative by those with direct experience with it.
- There is also strong support for PA roles that support the full scope of family medicine (e.g. providing inpatient hospital care, nursing home visits): roles that were not included in the initial evaluation planning.
- A critical factor in successful placements was identified as the relationship and "fit" between the PA and the supervising physician. This confirms findings in the broader PA literature.
- A broad range of positive impacts of PA introduction into primary care in the Manitoba sites have been identified. In addition to impacts on patient attachment and access, enhanced quality of patient care, and contributions to overall system functioning were also identified. However, strategies to quantify these identified impacts, and to determine the impacts specifically attributable to the PA role, are needed.
- No concerns about patient acceptance or quality of care were identified. Initial reports identify patient perceptions of significant improvement in access; enhanced patient responsiveness; and greater satisfaction with the care experience.
- Challenges to PA role implementation at the *site level* were fewer than expected; the collaborative planning for PA introduction may have minimized challenges at this level.
- There is increasing frustration about seeming *system* inability to address challenges and frustrations to optimal functioning of PAs. Critical challenges at this point in time are to address larger system issues related to diagnostic services, and ability to track system impacts of PA introduction. Aligning workforce planning with education; more proactive communication with the health community; and greater engagement with the fee-for-service physician community were also highlighted.
- Recommendations are offered for action by the IPAPC Steering Committee, and for consideration by other jurisdictions. Recommendations for shifting the evaluation focus to ongoing monitoring and targeted evaluation activities are also outlined.

#### **SECTION 1: INTRODUCTION**

#### Purpose of Report

This is the final report of the implementation phase of evaluation of the Introducing Physician Assistants into Primary Care initiative. It includes both key findings from Phase 3 (the final phase of the implementation-focused evaluation), and a summative conclusion of all implementation evaluation activities.

#### How this Report is Organized

This report is divided into 3 sections: a) Introduction (including background on Introducing Physician Assistants into Primary Care in Manitoba, a brief description of the pilot sites and associated PA roles, a summary of key activities conducted during this phase of the initiative, and a description of evaluation methods used in Phase 3); b) Key findings; and c) Conclusion and recommendations.

#### **Background of Initiative**

Manitoba has long been a leader within Canada in the training, education and employment of Physician Assistants. Until recently, these roles were limited to acute care settings, but in 2011, Manitoba Health Workforce Strategies initiated the introduction of PAs into Primary Care as part of its efforts to retain new graduates and to support the rapidly evolving interest in primary care renewal (PCR) within in the province. Within the next year, Manitoba Health adopted a more comprehensive PCR strategy, which included several strategic actions for supporting Interprofessional Practice in Primary Care (e.g. Primary Care Networks), along with a key promise that by the year 2015 every Manitoban who wished one would have access to a Family Physician.

In 2012, the Winnipeg Regional Health Authority (WRHA), which had been responsible for implementation of PAs within practice, took a leadership role under the direction of the *Introducing Physician Assistants into Primary Care Steering Committee* (current membership list can be found in Appendix A) in seeking support for a robust implementation evaluation. Evaluation was felt to be of great importance, given the limited experience in implementing PA roles in primary care in Canada. The WRHA was successful in obtaining funding from the Manitoba Patient Access Network (MPAN) to support both the implementation and evaluation of the new positions, and contracted with Dr. Sarah Bowen, University of Alberta, as Evaluation Consultant.

In May 2012, a half-day planning meeting was held between members of the IPAPC Steering Committee, the planned implementation site, and the evaluation consultant to clarify evaluation approach and questions. The lack of Canadian experience with PAs in primary care roles, the rapidly evolving context of primary care renewal, the diversity of stakeholders, and concern about premature attempts to measure outcomes before ensuring appropriate implementation of the innovation, led to interest in designing an evaluation that was *developmental* in purpose (i.e. the intent was to support further development of the innovation in a rapidly evolving context), and *utilization-focused* in approach (i.e. adopting strategies to make the evaluation relevant to decision-makers, and encourage use of findings). It was also decided that the initial evaluation activities should have an *implementation* focus, and prepare for eventual outcome evaluation.<sup>1</sup> The overall evaluation plan recognized the importance of assessment of the objectives of increased patient access and attachment while maintaining quality of care. However, it adopted a *'goals-free'* orientation (i.e. the evaluation focused on learning about the actual impacts of the initiative, and was not limited to measuring achievement of specific goals). At the time that baseline interviews were conducted, key stakeholders (including members of IPAPCSC) identified a number of impacts (in addition to increasing patient attachment and access) that they were interested in exploring.

An evaluation plan (outlined in the Baseline evaluation report) was developed based on this workshop, circulated for additional input to the IPAPCSC, and subsequently approved by this committee.

At the time this evaluation plan was approved, there was much interest in implementing PA roles in Community Health Centre settings: one such site had been selected for PA placement. The evaluation context, however, rapidly became more complex: by January 2013, there were three sites included in the pilot evaluation (see Table 1, page 3): the roles of the PAs in these sites were all quite distinct. More support and funding were made available for implementation of inter-professional roles in fee-for-service settings. This included the supporting inter-professional practice in primary care initiative, where additional providers from a number of backgrounds (e.g. primary care nurse, Nurse Practitioner, PA) could be added to a primary care team. Primary Care Networks (formalized partnerships between the regions and fee-for-service practices) and the enhanced family doctor connection program were two other strategic actions that influenced implementation of the PA's in Primary Care. As the evaluation sites were funded for PAs at different times, and under different strategies, there were varying expectations and requirements for roles and deliverables at the evaluation sites.

The evaluation, which was funded only to address the implementation of PAs in primary care, was not involved in evaluation of these larger primary care renewal

<sup>&</sup>lt;sup>1</sup> Bowen, S. (2012). *A Guide to Evaluation in Health Research*, Canadian Institutes of Health Research, Available at: http://www.cihr-irsc.gc.ca/e/documents/kt\_Im\_guide\_evhr-en.pdf

<sup>&</sup>lt;sup>2</sup> Since this report was drafted, the team has learned that this proposal was not successful.

<sup>&</sup>lt;sup>3</sup> A structured evaluation of the draft Implementation Handbook, to be conducted at all six sites, will also be integrated with evaluation findings: however, results were not available at time of

initiatives. Recognizing the potential risks of addressing issues related to PA introduction in isolation, the IPAPC Steering Committee stayed intact, but expanded its focus from the Winnipeg region to a provincial orientation.

More detailed background on the original evaluation plan can be found in the Baseline Report; while findings related to the initial implementation of three pilot sites (Aikins Street Community Health Centre-a direct funded site of the Winnipeg Regional Health Authority, a community fee-for-service family practice, and a family medicine role within the Concordia Hospital) can be found in the Phase 2 Evaluation report. The focus of Phase 2 evaluation activities was to identify facilitators and barriers to effective implementation, and develop specific guidelines that could be incorporated into a draft Implementation Handbook intended to support implementation of Physician Assistants (PAs) in other sites in Manitoba.

Phase 3 activities continued with this focus, and expanded to include three additional sites that integrated a physician assistant in 2013. However, while like the Phase 2 report, this summary report provides specifics on findings related to the evaluation phase, it is also intended to serve as a summary report for the three implementation evaluation phases.

#### Summary Description of Evaluation Sites

The table on the following page (Table 1) summarizes the six evaluation sites; a more complete description can be found in Appendix B.

#### Summary of Related Action September – May 2014.

The interest in PA's in family medicine and primary care settings continued to expand, with three additional sites (described above) added in fall 2013 (two as a result of the Interprofessional Teams Demonstration initiative and one within the context of Primary Care Networks in Winnipeg). While there were fewer direct implementation supports for these new sites, the draft Implementation Handbook (developed as the result of Phase 2 evaluation activities) was made available, and new sites were invited to participate in all evaluation activities.

The Implementation and Evaluation Committee, with responsibility for monitoring and guiding implementation and evaluation activities, continued to meet monthly. (see Appendix A for Committee Membership lists). A working group was also struck to address issues related to quantitative data collection. Supplementary data collection tools (e.g. a supervision tracking sheet) were developed by the program to be integrated into ongoing data collection. In addition, results of a preliminary assessment of patient experience with PA care, integrated as part of overall quality improvement activities, informed this phase of the evaluation. Three detailed memos were prepared by the evaluator for the Program Director responsible for coordinating the Steering Committee. These memos focused on topics felt to require timely feedback in order to support planning: a) the hiring/selection process; b) emerging evidence on impacts; and c) recommendations for ongoing monitoring and evaluation. In addition, a draft dissemination plan was prepared, supported by input from a small working group.

Site	Description	PA Start Date	PA Role Summary
Aikins Street Community Health Centre	WRHA direct funded primary care site (community health centre, "Alt- funded" physicians)	Jan 2013	Primary care, mental health, methadone patients, home visits; PA carries responsibility for assigned patients
Concordia Hospital	In hospital family medicine role	Dec 2012	Supports in hospital care of one family medicine physician with community based and in-patient practice, and unassigned patients accepted for care by this physician under Doc-of-the-day program
Fee for Service practice	Well-established single physician practice (not part of the Interprofessional Team Demonstration Initiative (ITDI)	Nov 2012	Support for full scope family practice, including home, long term care and hospital visits
CW Wiebe Clinic, Winkler	Large independent physician practice (family practice and specialists) Part of the ITDI, which has built-in attachment incentives	Oct 2013	Provides support for practices of a team of 3 physicians; mainly clinic-based
St. Boniface Clinic	Large multidisciplinary practice (family medicine, specializations) Part of the ITDI, which has built-in attachment incentives	Nov 2013	PA associated with 2 supervising physicians; focus on facilitating access, vacation coverage
Seven Oaks Inkster PCN	Primary Care Network: Fee-for- service community practices. Starting point located within SOGH (Prairie Trail at the Oaks), but now supports several practices.	Nov 2013	Both clinic-based (full range of PC practice) and hospital based. One main supervising physician (clinic); PA also provides in- hospital care to patients of 3 additional physicians from 3 clinics.

 Table 1 Summary of Evaluation Sites

A major accomplishment, supported by the CIHR Planning Grant received in 2013, was the collaborative development and submission of a funding proposal to the CIHR *Partnerships for Health System Improvement* competition (November 2013).<sup>2</sup>

Based on the expanded mandate of the evaluation (e.g. the initial proposal to MPAN had proposed in-depth implementation evaluation of only one site and was funded in November 2012), an application for additional funding was submitted to MPAN early in 2014. Confirmation, in principle, that this application had been successful was received in April 2014.

#### Methods

A summary of the initial evaluation plan can be found in the Baseline Evaluation report (Appendix A): while updated following each phase of the evaluation, objectives and planned methods remained consistent.

This evaluation phase integrated findings from six activities:<sup>3</sup> a) focus groups conducted with affected staff at five of the six sites; b) individual key informant interviews with Physician Assistants and supervising physicians, c) interviews with Steering Committee members; d) analysis of a documents (including a process log maintained throughout the implementation process, supervision tracking forms), e) participant observation of Steering Committee, Implementation and Evaluation sub-committee meetings, and participation with the data collection working group; and f) data from patient interviews conducted as part of a quality improvement activity.

A total of 45 individuals participated in focus groups and individual semistructured telephone interviews (supervising physicians, PAs and Steering Committee members). Six focus groups were conducted, including groups based in two community hospitals (26 individuals) along with19 individual interviews. Written consent was obtained from all participants in provider interviews and focus groups. A copy of the interview/focus group guide can be found in Appendix E. Focus groups took place in February 2014, interviews in Februaryearly May 2013. In addition, 29 patients at five sites were assessed via telephone interviews for which verbal consent was obtained. Patients were selected based on criteria found in Appendix F, which also includes the patient interview guide. A larger number of individuals provided direct or indirect input through participation in meetings, or feedback on evaluation activities.

<sup>&</sup>lt;sup>2</sup> Since this report was drafted, the team has learned that this proposal was not successful.
<sup>3</sup> A structured evaluation of the draft Implementation Handbook, to be conducted at all six sites, will also be integrated with evaluation findings: however, results were not available at time of writing. It is expected that findings from this evaluation report, and subsequent planning by the Steering Committee will (along with handbook evaluation results) inform revisions to the next iteration of the Implementation Handbook.

#### Ensuring data quality

Findings of this report are strengthened by

 a) Triangulation of Sources (i.e. having five different perspectives on the questions asked: 1) patients, 3) supervising physicians, 3) PAs, 4) interprofessional and administrative staff involved with PA service provision; and 5) IPAPC Steering Committee members (representing Manitoba Health, WRHA and University of Manitoba).

Of the individual sites, five provided input from all four solicited perspectives (patients, supervising MD, PA, and affected staff). One site provided input from only two perspectives: the limited data from this site was taken into account in data analysis.

b) *Collaborative review of draft findings.* Consistent with the collaborative approach used throughout the evaluation, the draft summary report was circulated for review by the *Implementing Physician Assistants into Primary Care Steering Committee* and the *Implementation and Evaluation Committee*.

#### **SECTION 2: KEY FINDINGS**

Key findings are summarized under the following headings:

- a) Overall experience with the initiative
- b) Recruitment, selection and hiring processes
- c) Implementation logistics site level
  - **a.** Integration of PAs into primary care teams
- d) Implementation logistics system level
- e) Challenges
  - a. Ongoing challenges
  - **b.** New and potential challenges
- f) Reported impacts
  - a. Proposed mechanisms of impact

#### **Overall Experience with Initiative**

The level of enthusiasm reported during this round of interviews and focus groups appeared to be at least as positive as the reports received from the initial three sites in summer of 2013. New sites also gave generally highly positive reports: there appeared to be no major differences in satisfaction with the PA role between initial and newer sites. The initiative was reported to have exceeded the expectations (both related to implementation experience and observed benefits) of many; others – who began the initiative with high expectations – reported that their expectations were met. Some were unsure what to expect from the initiative: these individuals also provided positive reports. However, some reported that the system challenges were not anticipated, and this aspect had been more difficult than expected.

There were no significant differences in experience identified between urban sites and the one rural site participating in the evaluation.

#### **Recruitment, Selection and Hiring Processes (2013 hires)**

While there was general agreement from those interviewed that the *results* of the hiring process had been very positive, a number of suggestions were made about the hiring process itself. These findings were summarized into a memo intended to support action, which were circulated in early May 2014.

From a planning perspective, there was strong interest, especially given the limited number of graduates each year from the Manitoba PA Education program, by government in supporting the retention of new graduates by guaranteeing placement directly after graduation, and making graduates aware of the possibility of positions in primary care. To achieve these objectives of graduate retention and recruitment into Primary Care positions quick action was needed, creating timing challenges. Many evaluation participants recognized that as a new initiative, some administrative issues needed to be addressed: many also

commented enthusiastically on the thought that had been put into making the placement positive for each PA.

Some participants, however, reporting from all perspectives (Steering Committee, physician, PA), identified a number of concerns and frustrations about the process itself. Key issues identified are summarized below:

• Process was not felt to reflect key principles of the PA/MD role

A major concern was the perceived inconsistency between what is known and assumed about creating successful PA placements in primary care and the hiring process. Several participants discussed in depth the importance of having a positive "match" between the supervising physician(s), the practice, and the PA. The process of generally selecting a PA and offering them a position when the supervising physician was unknown was seen to violate this principle.

I think it is bizarre to say the least. As a PA, the relationship with the physician is so important, ... it flies in the face of what we know about how a PA works best.

• Process was experienced as stressful

Some participants experienced the process as stressful. Some of this stress resulted from what was experienced as a long time period from the initial application to actually working at the site. While timing of the recruitment, need to write certification exams and need to obtain registration with the College were recognized as key factors in this delay; some also felt that the time could be used more efficiently (e.g. beginning orientation to the program and the site before the start date at the site).

However, some experienced the process as unnecessarily frustrating, "daunting" or anxiety producing. In addition to concerns about being interviewed for an 'unknown' position, other aspects of the process also contributed to this stress. For example, even after being offered the job, some PAs did not for some time where they would be placed, creating concerns about possible lack of fit.

Some PAs, physicians and Steering Committee members also raised concerns about the transparency of the process: that graduating PAs were not informed openly about options, and not well treated by the process. There was also some negative response to the impression that the process was planned by only a few people rather than engaging the larger physician/PA community in problem solving.

I felt a bit disrespected.

The screening panel making the decision feels elitist... that the region "knows" what people will need. ..... Paternalistic, seems like a control issue.

• Interview process, from participants' perspective, did not focus on the 'right' things.

Many Pas felt that they were not prepared for the type of questions posed in the initial interview, and would have appreciated more opportunity to learn about the sites, or for the interview panel to learn about them and their strengths and interests.

Questions were much different than I expected – lots of questions focused on fairly abstract thinking about PAs and integrating PAs, frankly questions I had not put much thought into.

It was observed that, although the end results in specific sites were seen as a good fit, the hiring process may not have contributed much to this, and in some cases may have even worked against goals of the initiative.

I think we lost some excellent candidates last year because of the process.

As previously identified, the short time frames and need for fast action to attract PAs into these new roles contributed to a less than ideal planning environment. Many of the issues identified around the first group recruitment process are already being addressed: participants also had a number of concrete suggestions of how to make the hiring better. In addition to increased transparency, recommendations included a) timing of recruitment activities to align with course completion, b) ongoing and more comprehensive recruitment efforts, c) greater participation from affected parties, and d) interview/introduction activities that allowed greater opportunity for both physicians and PAs to determine an appropriate fit.

#### Logistics of Implementation – Site Level

The three new sites reported few difficulties in site-level implementation, and good support from site staff; while, as reported in the Phase 2 evaluation, the three initial sites continued to report a positive experience.

That is not to say that there were not ongoing issues requiring adjustments and 'workarounds' at the site level. Several issues were identified at all six sites: logistical issues (e.g. front desk scheduling) requiring planning and ongoing adjustment; (in larger practices) efforts to "offload" what were seen as less desirable appointments to the PA; and also the anticipated challenges of adding a new interprofessional team member to an existing team.

I can't say it wasn't a stressful or bumpy road – we were so set in our ways. So to add someone else.. it was scary.

Most of it is pressure from individual physicians who are trying to siphon off their patients..... on-going education for them and front desk staff....

Several sites noted that adjustments to procedures were needed – many of which were not anticipated. However, some sites also identified upsides to this adjustment: that adding the new role had contributed to a re-examination of established processes, or created the 'push' to integrate new efficiencies.

...Self reflection on why you do things the way you do, it pushes you to update.... Gives ability to operationalize innovations.

Impact on other staff was experienced as variable – with some sites reporting greater workload for administrative staff, and some less. The PAs also appeared to provide encouragement/support to greater technology use (e.g. helping MDs learn how to text to provide instant communication, development of data collection templates, etc.).

It was also noted that in some larger clinics, the Clinic Manager appears to have played a key role, perhaps minimizing some of the logistical impacts of the introduction on other clinic members, and facilitating PA integration.

Clinic "geography" (where the PA is located in relation to the supervising physician, and the proximity of other clinic physicians/staff) also appears to have an impact on both physician supervision style, and speed at which other physicians and staff understand and support the PA role.

While challenges at the site level were identified, *they appeared to be experienced as the natural result of change, and not requiring additional supports*. All sites reported that these challenges were being managed well by the sites themselves.

This (perhaps unexpected) ease of implementation may be attributable to several factors:

- **a.** early participation of stakeholders, including their input into identifying potential challenges,
- **b.** dedicated resources to support implementation at the initial sites,
- **c.** attention to learning from early experience and sharing it via the Implementation Handbook, and
- **d.** (perhaps most importantly) the fact that initial sites and supervising physicians were highly motivated "early adopters".

All of these factors should be considered in future expansion of the initiative: it should not be assumed from this generally positive experience that site level challenges will not be experienced if there is not adequate preparation.

#### Logistics of Implementation - System Level

As identified in the Phase 2 report, several (largely unanticipated) challenges were identified at the system (provincial, regional, health professional

organization) level. In general these challenges were experienced as more problematic and long lasting than the site level challenges.

The three newer sites reported generally fewer frustrations around some of the initial logistics of implementation (e.g. confusion about PA payment), suggesting that some of the needed administrative adjustments identified in the Phase 2 report may have been addressed: the role of Clinic Managers in facilitating these adjustments also needs to be considered. However, as noted below, a number of issues continue to create concerns. Because these concerns have been previously identified (but there was a sense they were not being addressed in a timely manner), the level of dissatisfaction is, among many, higher than identified in the previous evaluation report. The "*disjunction*" between perceived site needs compared to system response was described as a '*temporal disconnect*'. Steering Committee members also expressed awareness and concern about this issue.

The concerns are not about the people trying to do the job.... It's the overall system. I'm not seeing any system support of what we are trying to do, the workforce issues and planning is still adhoc from the provincial level and only slightly better from a regional level.

We are proving yet again how slow moving we are.... It's extremely frustrating for those who have responsibility of care.. it would be easier if it was just one person – but it is cultural.

Makes it more frustrating for introduction of PAs, creating more work for everyone else.

Some of the ongoing issues are described in more detail below.

#### Tracking and Facilitating PA Practice

The absence of a an "ID number" for PAs was identified in the Phase 2 report as creating a number of inefficiencies and potential patient safety risks due to inappropriate or delayed routing of patient results. (It should be noted that the term "ID number" is used to differentiate the concept from that of "billing number". Participants understood that PAs, as physician extenders funded under this program would not bill; but felt that a 'unique identifier' was needed for the tasks they performed, both for general management of patients, and for eventual determination of PA roles and contributions).

PAs, supervising physicians and managers identified lack of an ID number as contributing to difficulties in two areas: a) inefficiency, and b) potential patient safety concerns. It should be noted, however, that it is not clear to what extent the issue is simply one of having an "ID number" for PAs; and how much is due

to ongoing lack of clarity and/or consensus on the role and mandate of a PA. This issue is discussed in more detail on page 13.

#### a) Inefficiency

The most commonly identified concern related to inefficiencies created by delays in having lab/test results routed to the physician when the PA may be the first point of contact. While attributed by some evaluation participants to the lack of a PA identifier, this issue may also be related to perceptions among some health system leaders that only the supervising physician can order and sign off results, and therefore, workflow cannot be organized around the PA. Whatever the contributing factors, results were identified as: a) additional work for the physician, as he/she would need to sign for even routine tests (that the PA was authorized to order), b) denial of requests (some orders were not accepted and needed to be resubmitted by the physician), c) resulting time delays, d) confusion and delays in accessing and following up on results (as these would go to the physician rather than the PA). Participants talked of the need to "double-check" and "manually transfer" data; and to develop time-consuming "workarounds". This was seen to add to the workload of the PA, the physician, and to administrative staff.

It is creating more work, duplication... it prolongs things.

this is what really really upsets me about (PA name) role – somewhere in (his/her) day has to take away from patients, to do stats, saw this kind of patient, that kind of patient. It would be so much easier, and (he/she) could see 3 or 4 more patients in a day. It's a completely ridiculous thing. That's my biggest pet peeve. Its not rocket science.

#### b) Potential patient safety risks

Because the current system was reported to lead to occasions where test results may not be seen and responded to as quickly as they should be, some participants also viewed the situation as potentially contributing to risks to patient safety and quality of care.

A third issue was identified by the research team preparing the PHSI grant.

#### c) Challenges to evaluation and research on PAs.

It was unclear whether the research team would be able to generate the knowledge needed by decision-makers, were an "ID number" not available.

The Phase 2 report identified issues related to lab/imaging and pharmacy as of greatest concern. At the time of writing, this issue has not been resolved: sites continue to report ongoing difficulties, particularly with lab/imaging results. As the initiative has matured, additional challenges have also been identified related to cervical cancer screening, MIMS (Manitoba Immunization Monitoring System),

special orders such as orthotics, and also third party payers (e.g. WCB, insurance). From the perspective of some participants, there is also a question about whether the failure to address the issue is creating a situation where PAs are prevented from working to the full scope of their practice.

In addition to ongoing issues of frustration/inefficiencies, and potential impact on quality of care/patient safety, questions have also been raised about whether this situation may inadvertently create situations that promote double billing.

For example, it was reported that data could only be entered into MIMS with a billing number. If true, this would mean that\_only a physician with a billing number can enter data into this system: if the PA does the immunization either a) the physician would have to claim (meaning s/he would be paid for the service even though s/he had not performed it) or b) it would be necessary to develop a paper-based "work-around" (which requires additional time and is more error prone).

Although it is clear that managing lab results is an important issue, there may be several underlying factors that may need to be distinguished and dealt with separately in defining a solution. It may be that a solution other than adopting an "ID number" may address the concerns about inefficiency and safety, as well as to ensure that appropriate monitoring, evaluation and research could be conducted on the interprofessional initiative.

In any case, it appears that at present sites are dealing with these concerns and frustrations independently: there appears to be a need for enhanced communication and joint problem solving. Much of the frustration appears to stem from a common impression that this is an issue that can be easily resolved – that there was no reason why ID numbers could not be provided – combined with a need for clearer communication between Manitoba Health and the sites.

I don't understand Manitoba Health thinking – NPs get a number. They say they don't have enough, but it is 4 digit number! What happens if a new doc comes in? The reasoning defies logic.

#### Professional/System Awareness

This issue appears intertwined with the previous issue of perceived need for an "ID number". In some ways acceptance of PAs by other systems appears to have improved somewhat, although this appears to be the result of individual PA/site efforts (e.g. in educating individual pharmacies with which they work) rather than any system-wide strategy to raise awareness. It appears that much of the work of educating providers on PAs and their role and scope of practice/authority rests with the individual PA.

Lab/Imaging. However, the challenges appear to be more than an issue of simple awareness. Reports of a recent meeting with Diagnostic Services Manitoba

identified questions about whether PAs were allowed to receive test results. This suggests that there may be different perceptions of the scope of PA practice that will require clarification or renegotiation. While it is clear that PAs and MDs identify barriers that may prevent optimal efficiencies and full scope of practice to the PA role; it may be that there are, in the Canadian context, regulatory barriers to the vision of full scope of practice within the primary care setting. It will be necessary to clarify this issue; determine what strategies can address them, and, if necessary, undertake structural intervention as the initiative matures.

*Prescription of Pharmaceuticals.* The Manitoba Pharmaceutical Association has posted information on prescribing authority of PAs on its website. Some sites report referring pharmacists to this site when they have encountered obstacles, as there appear to still be many pharmacists who are unaware of their Association's position or the legislated scope of practice of a PA. In addition, some of the limits on PA prescribing (e.g. no more than 3 months supply) have been identified as creating unnecessary additional visits in some cases (e.g. well-controlled blood pressure), and ongoing confusion regarding prescription of 'controlled substances' is reported.

Several hospital staff who interact with PAs stated a need for more information about the roles of PAs generally, and the specific roles of individual PAs. There are also reports of difficulty in coordinating services with other services (e.g. home care).

#### Integration of PA into a PC Team

Issues explored in this category included the supervising Physician/PA relationship; the length of time needed for the PA to function independently; and acceptance of the PA role at the site level (by patients, staff and other professionals).

#### PA/MD relationship

An extremely high level of satisfaction was identified about the "fit" between the individual PAs and the supervising physicians. PAs spoke in highly positive terms about their supervising physicians and the effort that was put into supporting their learning and integration into site operations, and ensuring their job satisfaction.

My doctor wants me to have a broad experience – pays attention to the junk to joy ratio.

The majority of both PAs and MDs, as well as several other participants, also commented spontaneously on the critical nature of the relationship between supervising physician and PAs in ensuring success of any placement: this factor appears critical to successful placement.

#### Developing PA independence

Steady growth in independence was reported at all sites: these reports are supported by early results of implementation of the supervision tracking sheets. Greater confidence and comfort of both physicians and Pas was reported over time.

The majority of physicians found the actual training and supervision phase shorter and easier than anticipated, and that PAs became independent more quickly than expected. However, a minority found the supervision initially more anxiety-producing than expected.

Some physicians described the initial supervision of PAs as similar to supervising medical residents, and reported a similar process of, and strategies for, increasing independence as competence was demonstrated.

However, some concerns were identified about whether all physicians were allowing PAs the appropriate independence (after the appropriate period of orientation and training), and the implications of this for system efficiency. Nor was it clear what level of supervision was identified by physicians as requiring billing by the physician.

#### Acceptance of PA by other staff

Although acceptance of the PA by other professional staff was identified during the baseline as a potential challenge, this has not turned out to be the case. Evidence from all sites indicates a high level of acceptance and, very often, *active* support for the new roles. Some of the strongest support was identified from hospital-based staff (especially nurses), who emphasize the contribution of the PA in primary care role to both quality of patient care, and to staff workloads and individual job satisfaction.

#### Introduction or Integration

As indicated in the summary above, acceptance of the PAs into primary care roles appeared to be much more positive than originally anticipated. This welcoming atmosphere, however, speaks to the success of their *introduction*; rather than their *integration* into primary care practice. Assessing integration of interprofessional roles, like successful implementation of such roles, poses challenges within our current system.

There are additional considerations in assessing integration of PA roles – in large part because they are specifically designed to be *extensions* of a specific physician's practice. For this reason it is unclear that the goals of "integration" would be the same as integration of roles that are not so directly responsible to, (and responsive to) an individual physician practice. However, in both focus groups and interviews, many participants spontaneously commented on the

increased interprofessional collaboration that was observed resulting from introduction of the PA roles.

#### Patient Acceptance

All sources reported a highly positive response from patients regarding the PA introduction. PA, site staff, and supervising physician reports were extremely positive, and only a few examples (from all sites combined) were given of patients indicating concerns about being seen by a PA.

Patients absolutely adore (PA). (clinic staff)

When Dr. X is away, the patients I see smile when they see me, a familiar face even though it is in the hospital (PA).

Direct patient assessment provided reports that, if anything, were even more strongly positive than that of staff. While a significant minority reported no change in care received, the majority felt their care had improved. Patients assessed PA care as equivalent to that of the physician, while providing the added benefits of much speedier access (mentioned by the majority of patients), less waiting room time and greater time and attention in the actual appointment. (In interpreting this sense of equivalent care it is important to consider both a) the appropriate selection of patients, and b) patient knowledge/experience of direct physician back up).

(my) first experience with a PA; so far it has been more than adequate. Same level of care as a MD

I can get in the same day to see (name). Otherwise, I wait months to see Dr. X. I'm relieved someone can see me quickly. I get in faster once I'm there (less waiting time waiting room).

Some patients reported a generally more positive experience with the PA than physician: this appeared in part to reflect time available for the appointment (and of sometimes getting more information), as well as personality factors. Also mentioned by some patients was the fact that they felt more comfortable and less intimidated talking to a PA:

I feel more comfortable asking questions; have a fear of taking too much Dr. time

(The PA) is awesome. It's an increased positive experience

My experience is, it's is a great idea. The PA puts me at ease; I am comfortable to ask questions, whereas I feel like I am taking too much time with the doctor so don't ask the questions.

Interestingly, patients also seemed aware of, and valued, the line of accountability between physician and PA: they knew their physician was available to them if their condition warranted it. This appeared to contribute to patient confidence and sense of continuity.

(it's a) fantastic idea. The PA and MD work so well together. Great situation for us as patients.

PA is totally competent; appropriate mentorship is available for PA should s/he need it; I can get in (to see MD) any time I need to.

It is also important to note that many of the positive comments about PA introduction related to the interpersonal and professional skills of the *individual* PA.

S/he is phenomenal; excellent communication

Great idea, especially if they know as much as this PA.

Some patients also observed differences to the overall system of care. It's a good thing; the doctor can spend more time with those who are more ill

(It's) a good idea; there is such a need for physicians in the rural area. PAs allow the doctor to take more patients, which we really need. I know the clinic has been able to take on many in my community who didn't have a doctor. Because they have a PA.

.....the PA does a lot of the recording, etc. It frees up the doctor to do more serious things, especially since there is a lack of family docs. It relieves the doctor. Patients need someone to listen to them and the doctor doesn't have the time but the PA does.

(It's) working really well: the doctor can spend more time on important things, the PA can do things the doctor doesn't need to spend time doing.

#### Cautions in Interpretation of results.

Caution is advised in interpreting results from such a small preliminary and heterogeneous sample, (sample bias cannot be ruled out). This initial assessment did not identify any concerns about either quality of care, or patient acceptance of these roles. However, in interpreting these results it should also be noted:

• Of the patients responding to the assessment, only two had experienced delivery of hospital-based services by a PA. Additional strategies to capture the experience of hospital-based patients (often frail elderly) and their families are needed.

- Some of the additional benefits of PA care (e.g. decreased waiting room time) may be a function of the early stage of the initiative and not maintained as the PAs become fully utilized.
- Much of the positive response reflects confidence in the individual PA, and appreciation for their interpersonal skills
- The extent to which benefits noted are due to having an additional provider (rather than a PA specifically) cannot be determined from this evaluation.
   While (as discussed in "Perceived Mechanisms of Impact", page 21), there appear to be some characteristics of the PA role that contribute to early positive benefits, it would be inappropriate to conclude that all benefits noted by patients were due to the new provider being a PA.

This assessment activity also confirms the importance of obtaining input on not only patient satisfaction (in this initial activity, very high), but patient *experience*, as the direct interview method allowed identification of patient awareness of PA roles, and perceptions of the specific contributions appreciated by patients.

#### **Ongoing Challenges**

Findings from this phase of the evaluation suggest that some of major challenges outlined in the Phase 2 report are yet to be addressed; these challenges relate to the need for system-level action in response to identified problems. Issues related to the perceived need for a PA ID number are described earlier; as is the need to remove other structural impediments to optimal functioning of the PAs: issues related to ordering and receiving lab/diagnostic results remained of major concern, along with ongoing challenges to clarifying the role and mandate of the PA generally. While it was recognized by the majority of evaluation participation that the "speed" of response was not specific to PAs but typical of large systems, a number of suggestions were made of simple, concrete steps to promote a speedier response. These included:

- a central point of responsibility
- firm targets for action, with monitoring of progress
- mechanisms for joint problem solving between sites and Manitoba health and the regions.

These issues will be reviewed in more detail in Section 3:Implications for Steering Committee.

#### Newly Identified and/or Potential Challenges

#### Issues related to fee-for-service settings

An additional concern identified during this phase of evaluation was the presence of some tensions related to agreements between the province, region, and feefor-service providers. There remain a number of questions and concerns regarding the accountability of PAs when placed in Fee-For-Service settings (are they accountable to the site, the region or to Manitoba Health?). In addition, both physicians and decision-makers expressed some concern and tension about both expected deliverables of funded PA positions, and the remuneration models employed (including payment of 'overhead' costs other than PA salaries). Concerns were identified by some physicians around perceived lack of consistency around deliverables expected of individual sites: decision-makers identified the challenges of determining 'fair' deliverables given the diversity of models and contexts in which PAs were practicing.

There was appreciation of the improving relationship between FFS providers and the province and the WRHA. However, as the program matures, it will be important to ensure that there are open and effective processes for discussing and continuing to evolve strategies for addressing issues of remuneration and appropriate deliverables. While the absence of an established PA program in Canada means that there are no clear answers for these challenges, it will be increasingly important to have mechanisms for collaborative problem solving, and strategies to determine the strengths and limitations of various funding models.

#### Potentially emerging issues

While this phase of the evaluation focused on issues related to initial implementation; some preliminary evidence emerging through the evaluation activities points to issues that may potentially increase in importance over time:

- 1. Issues related to *PA education program.* This issue had several components.
  - a. <u>System support for PA Education</u>. Several participants were concerned about the lack of system support for PA training in family medicine and primary care: within the course structure, in provision of primary care placements, and in overall system commitment to training (recognizing that PAs also required orientation and some specialized education related to the placement with a specific physician). This was seen to be a structural issue requiring immediate attention and creative problem solving.
  - b. Adequate coverage of primary care issues in the PA curriculum. This issue is related to the previous, and like the issue of site placement opportunities, has been identified as a concern since before the initiative began. PAs and supervising MDs at the evaluation sites varied in their perspectives on this issue: some felt Pas were well prepared; others felt that there were gaps in current preparation (e.g. talking to families, transitions, other roles in system). More investigation of this question is required.
  - *c*.<u>Current program capacity</u>. There was some concern that if the demand for PAs in primary care continued to grow there will likely not be enough graduates to meet demand (especially given the level of demand in acute settings). The need for integration of provincial workforce planning with the educational program was highlighted.

#### **2.** Issues related to the "Innovation Effect"

Planners and managers must also be attuned to the innovation effect. In spite of some system challenges, the initial placements are taking place under near "ideal" conditions:

• Participating sites were carefully selected and motivated: they should be considered "early adopters", who are committed to the concept, and prepared to invest in the innovation.

## ...high level of supervisor commitment to making my position interesting .... I'm having fun.

• Most of the PAs are "new grads". Many participants commented on the enthusiasm that the PA brought to their work (*"joy*" was a term often used), and how motivating this was for other staff.

They are so excited to be in practice. It makes a happy workplace... in the hospital sector there is a lot of cynical, jaded people. They (PAs) bring a new attitude, more positive, bring a joy of work. This impacts other providers.

As the program matures, it can be expected that some of the intense enthusiasm of new grads may wane. It will be important to monitor PA job satisfaction and develop and implement strategies that continue to support this "uplifting" atmosphere.

• Several participants also commented on the benefit of having an 'evaluation lens' on the activity.

Doing (the evaluation) assisted the implementation – it forced us to think through some of the issues.... It also gave more credibility with the funder and physicians themselves – we didn't have all the answers, we thought it was a positive thing, but exactly how we should do it..... weren't 100% sure. The evaluation, the optic, was really helpful, gave people more comfort going into it, knew we were prepared to make changes, lessened their anxiety about making commitment.

Resources to support evaluation were possible because it was a new area of focus and investment, and because of leadership commitment to finding additional funding to support it. If there is not the benefit of ongoing monitoring and evaluation activities, some of the continued attention (and ongoing reflection on issues arising from the innovation) may be lost.

#### 3. Integration of PAs within the primary care initiative

Some participants have identified tensions around accountability and expectations of PA roles. Care is needed to ensure that PAs are not 'caught' between differing expectations and lines of authority – these should be addressed in order that PAs are enabled to conduct their work efficiently. The fact that PAs are salaried employees working (often) with FFS providers, also presents a potential tension, as some are receiving conflicting messages about expected hours of work; and caught between patient needs and system expectations of set hours. This may lead PAs, through a sense of professional responsibility to be contributing unpaid (even undeclared) overtime, risking future burnout. Systems for monitoring these issues are needed. Issues related to unionization of PAs are currently being discussed: as PAs are considered a relatively 'new' profession in the Canadian context, and remain a small group of providers, ongoing attention to the challenges, and needed supports are required.

#### 4. Number of physicians supported by an individual PA

A question first identified in Phase 2 of the evaluation is that of the optimal/maximum number of physicians that could be supported by one PA. One of the underlying principles of PA care is that a PA is an extension of the supervising physician(s): i.e. she or he is directly accountable to the supervising physician, is intimately involved with the overall practice style, and knowledgeable of practice demographic, and preferred practice style and treatments.

The majority of pilot sites have experimented with, or now have in place, a model that has more than one supervising physician.

Both PAs and supervising physicians discussed this issue. Most felt that there was inadequate knowledge to guide decisions in this area; highlighting the principles around which PA roles were based – an intimate and responsive role between the PA and supervising physician (*"joined at the hip"*). Some PAs were concerned about the stress of learning the preferred practice style and treatment preferences of several physicians, and juggling between different expectations (*"being pulled in different directions"*). This issue of balancing workload becomes more difficult as the PA takes on responsibilities for supporting a greater number of practices. Determining the number of physicians to be supported by a PA was also of concern to some supervising physicians. It was noted that having more than one supervising physician could exacerbate existing challenges to efficient functioning (e.g. lab requisitioning and results). Generally, it was felt that 2, or perhaps 3 physicians should be the maximum for one PA, even when conditions were ideal:

• I think 3 is the upper limit and it would need to be a particular group of 3, in most cases 1 or 2 would be the maximum.

Criteria suggested for assigning a PA to more than one supervising physician included:

- Established history of physicians working as a team
- Excellent communication among supervising physicians
- Similar practice styles, approaches to clinical problem solving
- Mechanisms for monitoring, addressing potential problems
- Gradual, evaluated expansion in the number of physicians supported by each PA, associated with confidential opportunities for evaluation.

#### **Reported Impacts of PA introduction**

It was not the purpose of this phase of the evaluation to assess impacts of the introduction of PAs into primary care. Nor is there an attempt in this section to assess the extent to which specific program objectives have been met. However, evaluation activities identified a number of reported impacts: these reports should be considered in the next evaluation phases, as well as in designing monitoring systems. At the same time, it is important to remember that while these findings provide useful direction for ongoing data collection and monitoring, a) very few of the reported benefits can be quantified at this time; and b) it is not apparent to what extent observed changes are the results of having an additional provider (of any background), or to the "innovation effect" discussed earlier.

#### Improved quality of care

Enhanced quality of care for patients emerged as the greatest perceived impact of introducing PAs into primary care, from the perspective of all sources (patients, physicians, staff, and PAs). Mechanisms of impact appear to be not only increased access (timely care), but also: time spent with families in explaining conditions; enhanced continuity of care; lessened patient anxiety when physician unavailable; enhanced documentation; and faster follow up (response to patient condition, test results, discharge planning, etc.).

#### Increased patient access

Introduction of a PA appears to result in a rapid improvement in patient access, even during the initial training/orientation phases. All sites (hospital, community) report improved access: some – within a few months – report having eliminated wait times. Increased access is reported by some sites to result in

*a.* Decreased ER visits, walk-in clinic visits, and hospitalizations While this impact is directly related to patient quality of care, it also has important implications for overall system costs. (ER visits are more expensive than clinic visits; walk in visits often result in duplicate appointments, and avoided admissions are a significant cost saving).

b. Increased responsiveness to provider/patient phone calls was often emphasized, along with the associated staff/patient satisfaction and quality of care / safety issues.

#### Increased patient attachment

Some practices did report greater numbers of new patients. It appears, however, through the limited information available at this time, that there may be a more immediate impact on access than attachment. Attachment can be difficult to measure, although there are processes in place to measure growth in attachment over time. If, in fact, it is discovered that there is less impact on attachment than access, it may be due in part to a) the predicted "ramp up" time that would initially require greater physician training and supervision time, thereby limiting the ability of practices to initially accept new patients; and b) the placement of PAs in over-

paneled practices. It may also result from the fact that the evaluation design is better able to gather feedback (reports from patients, direct or indirect) as it relates to improved access.

Increased coverage of unattached patients

One site also reports significantly greater numbers of unattached patients provided coverage in hospital by a PA supporting a family physician (some of whom progress to being attached patients).

#### Enhanced work life satisfaction of physicians and other providers

There were reports from all sources of increased satisfaction of supervising physicians (less stress, better work-life balance, greater opportunity to adopt innovations).

Patients tell me (name of MD) seems less stressed. Now I can see how the profession can extend the life of a family practitioner (provider)

Tell the minister I am in full support of this; best investment they can make in healthcare. I think everyone is better served if they did this more. A big difference in the doctor – (name of MD) seems less stressed and happier. It has made a world of difference for him, I can tell (patient).

Personally, professionally very valuable because of me having another focus....demands on my time. It makes the situation more sustainable to me, each job more enjoyable (supervising physician).

As this factor has the potential to extend the working life of physicians currently in practice, it should also be considered in impact analysis. Greater physician satisfaction, combined with decreased stress, is also anticipated to have a positive impact on other team members. Similar impacts are observed among hospital-based staff, who report reduced frustration and workload, enhanced inter-professional communication, as well as greater confidence in the care with which patients are provided.

#### Enhanced patient flow through, timeliness of follow up (hospital and clinic)

Both hospital and community sites report enhanced system effectiveness (e.g. follow up to test results, hospital discharge). This is another factor that will potentially impact both patient quality of care and system costs.

#### Improved communication and documentation

Similar patient and system benefits potentially flow from the reported improved communication and documentation that result from PA placement. Enhanced communication appears to result both from a) the additional professional time made available at the site through placement of the PA, and b) the promotion of effective use of technology by the PAs (e.g. developing templates, texting rather than phone calls). In addition, improved documentation appears to be in large part a function of PA training.

#### Evidence on greatest impact of PA placement

As the innovation of placing PAs in primary care is expanded, and greater interest is shown by sites with diverse characteristics who are interested in hosting a PA, it is useful to explore preliminary evidence on where, and under what conditions, a PA is likely to have the greatest impact.

The current evaluation, which has focused on implementation evaluation, is not able to provide definitive guidance at this time. However, even at this early stage, there is some emerging evidence about the *factors* that should be considered (given the limited number of PAs available) in selecting sites for PA placement. While it is important to stress that it has not been possible to quantify reported impacts, and that three of the sites are still in process of developing the PA role, *early* impacts seem to be most evident in two settings:

 Hospital-based family medicine placements. (Identified impacts: increased # of unattached patients provided with family physician care in hospital (Doc of Day shifts); increased nurse manager satisfaction; reported patient/family satisfaction; faster response to deteriorating condition; facilitated admission/discharge; facilitated inter-professional communication; improved documentation)

<u>Evaluator comments</u>: Provision of care to hospitalized elderly patients has been identified as a provincial/regional challenge. It is not only a question of coverage and quality of care, but also an important cost and HHR issue.

 Placement in over-paneled practices. (Identified impacts: elimination or dramatic decrease in wait times; avoidance of walk-in (potentially duplicate) visits; avoidance of ER visits; potential avoidance of hospitalizations; improved patient satisfaction/confidence; earlier intervention in potentially dangerous situations; increased continuity of care; enhanced education/prevention care; physician health/satisfaction).

<u>Evaluator comments</u>: there are a number of potential reasons why integrating a PA into an over-paneled practice may result in more rapidly observed impacts: a) there may be more motivation to change practice patterns to meet patient needs; b) the physician is generally well-established (entry physicians may be more concerned about building a billable practice).

The fact that these settings appear to provide the most evidence of early impact does not, however, mean that these patterns of impact will not change over time; or that other factors – unmeasured and perhaps unidentified, will be of greater importance. It is quite possible that patterns of impacts (e.g. types of impact of

greatest importance) may change as the individual PAs gain more experience, and as sites explore different strategies for most effective use of PAs.

#### Placement characteristics potentially influencing impact

Of factors identified as affecting PA impact in primary care, *quality and confidence of the supervising physician/PA relationship* was identified by participants as the most critical factor. Evaluation activities conducted to date also suggest that other placement characteristics may also affect impact.

While there is commonly a distinction between hospital- and community (clinic-) based placements, the variety of 'mixed' models (PA roles that combine hospital-based, clinic, home, nursing home care) found (and the diversity of how the PA roles were organized even within, for example, the "clinic" model), suggests that it is important not to make simple distinctions at this time. Findings suggest that the following characteristics of PA placement should be considered in planning and assessment.

#### Site characteristics

*Readiness/support of other staff for new roles:* Initial sites can be viewed as early adopters: while some staff felt that greater preparation about PAs and the PA role would have been helpful (and in at least one site is still needed), PAs report a welcoming and helpful environment. It will be important to continue to ensure appropriate resourcing for site preparation; monitoring of site readiness may also be useful.

<u>Physician/practice panel size</u>: As previously mentioned, sites with a heavy workload may be more motivated to find a meaningful role for PAs.

<u>Age and characteristics of practice patients</u>: Inadequate data has been collected on this variable: however, much positive response is expressed about the PA role with complex (including patients with mental health/addictions issues) or frail patients.

#### Physician characteristics

<u>Supervision model:</u> There appear to be differences in supervision style of physicians (and resulting extent of independent PA practice) that may be unrelated to PA experience. In other words, the rate at which the same PA would take on more independent practice may vary based on supervising physician. This factor may benefit from greater exploration, as it may affect total impact.

<u>Supervision skill/interest</u>: An important reported factor in PA/staff reports of successful placements is the consideration and attention given to PA orientation, ongoing professional development, and support. This suggests that physician readiness and skill to adopt these roles is an important factor. The importance of

site-specific training for PAs, as well as family practice roles in pre-service training was also stressed by supervising physicians.

#### PA Role characteristics

Whether PA is main provider of care to part of the physician's panel: Some PAs have been identified as primary contact for a certain group of patients; others completely share the supervising physician's panel. It was not possible to determine from this implementation evaluation whether there are benefits/disadvantages of these models.

<u>Number of physicians supported by each PA</u>: As discussed earlier, the critical factor in successful placements appears to be the ability of the PA to adopt and support the physician's practice style. Therefore, placement of a PA with more than one physician is more than a question of workload – it may involve the PA learning, and continuing to practice, two or more very different styles of patient management; and create additional logistical challenges.

<u>Functions performed by PA; specializations</u>: While PAs are described as taking on full scope of family practice (rather than focusing on routine, simple tasks), some PAs are also taking on specialized roles (e.g. methadone patients; homebound elderly). While initial evidence suggests that a wide scope, combined with responsiveness to PA experience and interest, is contributing to satisfaction and effectiveness of PA roles, it is premature to draw any conclusions about the specific functions and specialty roles – ongoing monitoring is required.

#### Perceptions of mechanisms of impact

As indicated in the previous section, evaluation participants report a number of impacts of Physician Assistant introduction. Interviews also explored the potential "mechanisms" leading to these perceived impacts, including any unique characteristics of the PA role.

Respondents were unanimous in their support for interprofessional collaboration in primary care: not a surprising finding given the site selection process. Many emphasized the importance of having a range of primary care providers (not only PAs). Some felt that many of the reported benefits were due to the addition of a provider: that results would have been similar whatever this provider's professional background.

However, the majority of participants felt that much of the observed benefit could be attributed to the specific nature of the PA role: the fact that this role was that of '*physician extender*' and able to quickly adapt to the needs of the practice ("the chameleon-like nature"). The uniqueness is that skill set is larger, there is more (the PA) can do for the physician. What makes a PA unique is practicing under their license, it allows (the PA) to adapt to their situation and do what they need.

The fact that the PA does not work independently is also reported by many to lead enhanced interprofessional communication – not only between the PA and physician, but also helping link the supervising physician with other providers. (The time available to work with complex/frail patients; availability to address patient/family concerns; and role of the PA in documentation and follow-up appear to be some of the factors contributing to this dynamic).

PAs are automatically more conducive to IP practice. The tendency with an NP is like (name of physician) hired another doctor to work here, you wouldn't necessarily have to collaborate.

This close relationship with the supervising physician may cause unease for some, as the PA role may support the centrality of physicians in providing primary care. However, this concern should be balanced with the reality that in the current system a) family physicians do function as gatekeepers to care, and b) the population is calling for greater access to physicians.

#### **SECTION 3: CONCLUSION AND RECOMMENDATIONS**

This report is the final report of the *implementation* evaluation of the Introducing Physician Assistants into Primary Care. The purposes of this phase of the evaluation were to:

- a) Provide timely information to Manitoba decision-makers on the implementation, and in so doing guide further implementation activities;
- **b)** Help ensure that future outcome/impact assessment was appropriately planned;
- c) Provide guidance to other jurisdictions on how best to implement such an initiative.

Introduction of Physician Assistants into Primary Care is an exciting innovation that has not been tested in the Canadian context. For this reason the IPAPC Steering Committee has been committed to ongoing evaluation: it is to be expected that in any such initiative, a number of challenges will be identified.

As described in earlier sections, the introduction of PAs into primary care has been extremely well received by sponsoring sites and patients; site-level implementation, while occasionally demanding, has gone much more smoothly than originally anticipated. Through the evaluation, much has also been learned, both to guide selection of sites for PA implementation, and about strategies for facilitating implementation. In addition, this phase of the evaluation has identified some critical challenges that must be addressed if the innovation is to meet its full potential.

This next section is organized under the following headings: *Implications for Steering Committee Planning; Implications for PA Profession; Implications for Other Jurisdictions, Recommendations for Ongoing Evaluation,* and *Conclusion.* Recommendations presented in this section are based on analysis of data for from all sources, including direct suggestions made by interview and focus group participants, review of the PA literature, and observational methods throughout the evaluation.

#### Implications for Steering Committee

#### Applying learning from the pilot

There is strong support for the initiative from affected sites, PAs, supervising physicians and patients. Much has been learned that can assist in both ongoing implementation, and adoption of PAs at additional sites.

Recommendation:

• That findings emerging from this implementation evaluation be studied and applied in the next planning phases.

#### Continuing to enhance stakeholder engagement

The evaluation also identified a strong interest from stakeholders in greater engagement in planning processes (e.g. hiring; planning for educational supports; addressing identified challenges; discussing issues related to accountability). Some suggestions for achieving this were also offered (e.g. creating a central point of access for information and support).

Recommendations:

- That engagement strategies to provide opportunities for joint planning and enhanced communication be explored with relevant stakeholders.
- That development of strategies to ensure readily accessible information on PAs, their role, and on current Manitoba initiatives be considered.
- That there is additional follow up to the request of initial sites to support a peer support network of physicians and PAs involved in, or interested in, primary care.

# Monitored action plan to address identified issues related to scope of PA practice

The implementation phase of the evaluation has identified a number of systemlevel issues that continue to create inefficiencies and, therefore, may be affecting optimum impact of the innovation. There is, therefore, some urgency to clarify these outstanding issues.

Recommendation:

- That a clear plan to clarify these issues and communicate any resulting decisions be developed. This plan should address:
  - Investigation of frustrations around lack of an" ID number" for PAs, and explore alternatives. This issue, identified in the Phase 2 report, continues to be a major source of frustration for participants. While there is full understanding that a 'billing number' is not needed (this tracking should stay outside the billing system), most participants do not understand why PAs should not be given an "ID" number. There are two separate types of concerns expressed: a) Inefficiencies and potential patient risks related to practice and operational issues; and b) challenges in determining impacts of PA roles (which may have negative impacts on future assessment of the initiative). Initial exploration of data sources while preparing for the PHSI grant highlighted the challenges, based on current data availability, of addressing the questions of concern to decision-makers.

Recommendation:

- That the issue of "ID number" for PAs be revisited, and if providing an ID number is not possible, the reasons for this, along with alternate plans, be developed and clearly communicated.
- *Issues related to ordering and communication of test results.* Issues related to diagnostic imaging appear to be in a different category than

other barriers to full scope of PA practice: it is reported that is it the position of Diagnostic Services Manitoba that only physicians should be able to order, and receive results from, these tests. This complex issue may require a specific strategy.

- Recommendation:
- That appropriate stakeholders seek clarification on this issue, and develop a plan to address issues identified.
- Collaborative review of other issues identified through the implementation evaluation as obstacles to full scope of practice for PAs (e.g. ordering of orthotics, MRI, length of prescription of routine meds, co-ordination with home care).
- Province-wide strategy to communicate to other professions the roles and mandate of PAs.
- Continued refinement of selection and hiring process.

There is recognition that these processes are still in development and that there is action underway to improve them; however, stakeholders are strongly suggesting there is need to align hiring processes, within the context of PCR activities, with both the academic calendar and with site requirements.

Recommendations:

- The hiring process for the next round of graduates be redesigned to address identified concerns.
- The family physician and PA community are involved in designing the revised process
- Strategies are developed to demonstrate transparency of the process
- A confidential evaluation process for participants in this year's hiring process is designed and implemented.
- Immediate attention to issues related to data collection, monitoring and outcome evaluation. (Described in the Section: "Planning for Future Monitoring and Evaluation", below).

#### Support for PA Education

This evaluation was not focused on the evaluation of the University of Manitoba PA education program. Spontaneous comments indicated mixed assessments about whether the program was optimally preparing graduates for roles in primary care. There was a question about whether more content was needed on Family Medicine and Primary Care. Perhaps of more importance, however, were issues raised regarding

a) system capacity and interest in supporting PA education Lack of sufficient field placements, need for greater Family Medicine participation in the

curriculum were mentioned. In addition, some participants spoke of the need for system (provincial and regional) commitment to be more involved in training activities.

- *b) Issues related to family physician preparation* it was recognized that while there were important benefits to MDs taking on PAs, significant orientation and customized training were needed to achieve the full benefits of the PA role.
- *c)* capacity of the current program to meet potential demand. Some questions were raised regarding the promotion of PAs in primary care roles given the number of training places available particularly given the interest in PAs in other (e.g. hospital-based) roles. Given the number of diverse stakeholders, a collaborative approach is needed.

#### Recommendation:

• That a collaborative approach involving relevant stakeholders, including program representatives from the University of Manitoba, Manitoba Health, the WRHA and rural health regions be created to explore strategies for better aligning education with workforce planning initiatives, and other strategies for continued development of the PA program.

#### EMR capacity to generate needed information for planning and evaluation

There is a working group that is now exploring the needed changes to current EMR data collection to support and assess inter-professional practice. Recognizing that EMR has been recently implemented within the province, and that there is currently attention to EMR optimization province-wide, it is an essential point to ensure that the EMR has the capacity to address questions of concern to planners. At this point there appears to be some confusion about the capacity of the EMR to capture needed data, and what additional data collection mechanisms would be advised in order to provide the Manitoba Health and the regions with the knowledge they need for planning.

Recommendations:

- That steps are taken to ensure that issues related to PAs in primary care are included in ongoing and future EMR optimization strategies.
- That there is clear communication to the affected sites and programs about progress of this planning, and timelines and rationale for proposed changes.

#### Dissemination of innovation description and evaluation findings

At the request of the IPAPC Steering Committee a draft dissemination plan has been developed. This will be presented for discussion at the June Steering Committee meeting.

Recommendation:

• That this plan is reviewed, adapted and implemented.

#### **Broader Patient Assessment**

The patient assessment undertaken for this phase of the evaluation is preliminary and results must be interpreted with caution. A number of challenges to completing the assessment were identified.

Recommendations:

- That findings from this approach to soliciting patient experience be shared with other patient assessment initiatives
- That questions specific to PA introduction and experience with/impact of PA care be integrated into ongoing patient assessment strategies.

#### Implications for the PA Profession

The positive response to this first systematic introduction of PAs into primary care suggests that these roles are likely to also be effective and valued in other Canadian jurisdictions. The PA profession, and its associations, have an important role to play in promoting awareness of evaluation results, and promoting evidence-informed planning.

- Much has been learned about factors (preconditions, setting, resources) required for successful implication: promoting awareness of this learning will be of benefit to other jurisdictions. The need to prepare for large-scale implementation by addressing potential systemic obstacles to full deployment should be emphasized.
- Enhanced roles for PAs in primary care may create additional demands for education programs, mentoring resources, and placement opportunities. It will be important to develop strategies to support this potential growth. Findings also highlight the need for engaged, developmental-focused evaluation of current programs, as they develop, to ensure that they meet needs for primary care preparation.
- Some of the challenges encountered in introduction of PAs into primary care may indicate context-specific barriers to assumed scope of PA practice.

#### Implications for Other Jurisdictions

- There is promising potential for PA roles in primary care to help achieve many of the objectives of primary care renewal. There has been good acceptance from both providers and patients, and early evidence of impact on access and attachment, as well as enhanced quality of patient care.
- Careful planning and adequate resourcing of implementation is needed at the site level. A number of preconditions for successful introduction have been identified, as well as guidelines for helping sites determine whether to introduce a PA, and steps to facilitate successful introduction (See discussion in Phase 2 report, Appendix C). A well-planned implementation evaluation can facilitate introduction of PA initiatives, as well as provide early identification of emerging challenges, and help build consensus among stakeholders. Investing in appropriate implementation evaluation is advised.

- Many of the potential concerns, related to deployment of Pas in Primary Care identified in the baseline stakeholder assessment, have not come to pass. However, this apparent ease of implementation is likely due in large part to the planning and resourcing dedicated to making the innovation successful: it should not be assumed that the initial concerns were unfounded: they provided a focus for much planning and evaluation activity.
- There are large system (provincial, regional) issues that should be addressed prior to roll-out of PA roles in primary care. While there is a nation-wide movement to greater inter-professionalism in primary care, the PA role is largely unknown in Canada. Necessary activities include: a communication plan to inform professional organizations of the planned introduction of PAs in primary care settings; negotiating with diagnostic services around PA roles in ordering and obtaining results of tests; clarification with Pharmacy Associations of the PA scope of practice related to prescriptions; clarification of accreditation/certification requirements; developing recruitment and hiring processes; clarification of any incentives (e.g. salary, overhead) and reporting requirements; and other issues well in advance of initial introduction. The Canadian Association of Physician Assistants website (http://capa-acam.ca/) includes helpful resources.

#### Planning for Future Monitoring and Evaluation

Through the implementation evaluation of this initiative, we have learned much about what is needed for successful implementation of PA roles, and their acceptance by both the sponsoring sites and affected patients. This has been the purpose of this phase of the evaluation – which was deliberately limited in focus to *implementation* evaluation, in response to widespread concern about the risks of premature attempts to measure outcomes (see discussion in Baseline Report, Appendix A).

While a number of impacts have been reported by participants and included in this report, limitations of current data collection systems mean that the answers to many important questions, needed by decision-makers for planning, have not been addressed. We are as yet unable to describe actual system and patient outcomes, to quantify the reported impacts, or to determine the resulting economic implications. At this point it is, therefore, useful to propose direction for the next phase of evaluation.

#### Recommendation 1: Ensure ongoing monitoring mechanisms

The application for an extension of MPAN funding included a request to "institutionalize" ongoing monitoring and evaluation into provincial, regional and site operations. It is not feasible to support intense implementation evaluation activities over the long term: simpler, less resource intensive mechanisms are needed now that the pilots have been evaluated. However, in order to facilitate, in future sites, the same success experienced by early adopters (as well as to ensure ongoing positive experiences at the pilot sites), monitoring systems are required to provide the opportunity for early identification of issues requiring both system and site attention. Because PA roles are new to primary care in Canada, it is also important to recognize that there may be important issues arising in the next few years that require prompt attention: a monitoring system is one way of identifying these. Some of the issues for monitoring include (but are not limited to): PA workload, hours and job satisfaction; changes in supervision time and activity, type of services provided, and independence of PAs over time. Where possible, these monitoring activities should be integrated with ongoing operations (including incorporation in the revised "implementation handbook").

# Recommendation 2: Provide supports to, and focused evaluation of, outstanding issues.

The success of early implementation activities and positive acceptance of the new role is impressive. At the same time, it is important for ongoing success of the initiative that remaining issues of concern are addressed – and that interventions to address them are evaluated. Evaluation efforts should be focused on issues of known concern. These include: specific aspects of data collection (e.g. "ID number"); the hiring/selection process; initiatives to address outstanding issues related to lab and diagnostic imaging; site/provider engagement; communication about PA roles and scope of practice; strategies to improve support for PA education; optimal number and criteria for multiple supervising physicians; and effectiveness of proactive communication with professional bodies.

# Recommendation 3: Ensure capacity for accurate and appropriate measurement and evaluation of longer-range outcomes.

One of the purposes of the implementation evaluation was to ensure that appropriate mechanisms were in place to capture impact and patient outcome measures of this innovation. It is now critical to ensure that the initiative is well positioned to achieve this task.

One of the accomplishments of the past year was submission of a collaborative proposal to the Canadian Institutes of Health Research competition "Partnerships for Health System Improvement" (PHSI). The purpose of this proposed evaluation research was to *assess, in depth, the impacts and potential of Physician Assistants in Primary Care.* Unfortunately, in spite of strong support from Manitoba decision-makers, this proposal has not been successful. This suggests that resources (financial and expertise) will need to be found from another source if the impacts, and eventual patient and system outcomes of PAs in Primary Care are to be assessed.

In any case, work over the past year (in developing the PHSI proposal and collaboration with the Data and Measurement group) has identified a number of questions about whether current data collection systems are adequate for answering the questions of priority to decision-makers. There appear to be diverse understandings of the information that the EMR is able to provide; the capacity of the system to link services with providers (necessary for any evaluation of specific roles); and lack of clarity about the EMR and other data collection adaptations that are needed to support quality evaluation and research. In addition, no systematic data collection strategies are in place to quantify many of the reported impacts: these will need to be developed. Whether or not the PHSI proposal is successful, there will be a need for a timely system response, a clearly communicated plan, dedicated resources, and explicit lines of accountability to address these questions of system capacity for measurement.

Patient experience and outcomes are an important area for future evaluation. Only preliminary assessment of patient experience has been conducted during this phase of evaluation: a more comprehensive plan is needed.

There is a great deal of interest in economic evaluation of the PA in primary care initiative. However, quality economic evaluation is complex. It will be important to ensure that any plan for economic evaluation is rigorous, comprehensive, and informed by the evidence of the wide number of potential impacts identified through this phase of the evaluation. All of the potential factors (not simply the cost of the PAs compared to a limited number of currently available indicators) must be considered in designing a cost effectiveness or cost benefit analysis. Societal impact (e.g. enhanced family support, avoidance of stress through home visits for complex patients, frail elderly) should also be considered.

# Recommendation 4: Integrate PA evaluation activities with broader evaluation of inter-professional roles in primary care.

It should also be noted that, in Manitoba, the innovation of introducing PAs into primary care is taking place within a broader plan for promoting interprofessional care. This evaluation, however, was intended only to investigate the process of PA introduction. As the PA role is new to primary care in Canada, this has been an appropriate emphasis. However, this means that the contribution of other components of primary care renewal have not been assessed as part of this evaluation. At this point it will be useful to explore development of strategies for a) integrating learning from this initiative into related initiatives, and b) exploring the feasibility of coordinating future evaluation activities with evaluation of other primary care renewal evaluation activities.

#### Conclusion

It is useful to reflect back on the expectations, hopes and concerns about introduction of PAs into primary care identified in the Baseline Report: perspectives of stakeholders prior to implementation of the initiative.

A number of potential challenges in integrating the PA role into primary care *sites* were identified at that time. The vast majority of these concerns did not materialize, in part because they were anticipated and planned for: the fact that initial sites were highly motivated ("early adopters") must also be considered. However, there were a number of unanticipated challenges at the *system* level. It is useful to clearly identify these challenges as it is recommended that jurisdictions planning introduction of PA roles in primary care prepare for the introduction by undertaking the system development needed.

There were also, prior to their introduction, very high expectations of what PAs could potentially accomplish in primary care renewal. It is interesting to note that most participants felt that the benefits of introducing PAs were higher than anticipated: those who had high expectations felt that their expectations were met. Several were looking to even greater benefits as the innovation matures. It is unusual that an innovation would achieve such enthusiastic support: this fact in itself suggests that further development of the initiative (along with rigorous exploration of the impacts of this innovation) is warranted.

It is too soon to assess whether planned long term outcomes will be achieved; however early results suggest that introducing a PA has a number of benefits (some unanticipated) not limited to the goals of improving attachment and access. The next phase of the evaluation should be designed to map, and quantify, these reported impacts: the broad range of reported impacts should also be kept in mind in overall health system planning.

# **APPENDIX A**

# Introducing Physician Assistants into Primary Care Steering Committee (IPAPCSC) To June 2014

Dr. Ainslie Mihalchuk, Chief Medical Officer, Concordia Hospital, and Family Physician, Access River East

Beth Beaupre, Assistant Deputy Minister, Health Workforce, Government of Manitoba

Dr. Brock Wright, Senior Vice President, Clinical Services and Chief Medical Officer, Winnipeg Regional Health Authority

Chris Rhule, Director, Clinical & Physician Assistant Program, Winnipeg Regional Health Authority

Christie Houston-Klatt, Primary Care Team Manager Point Douglas, Aikins Street Community Health Centre, Winnipeg Regional Health Authority

Ian Jones, Program Director, Master of Physician Assistant Studies, College of Medicine, University of Manitoba

Dr. Ingrid Botting, Director, Health Services Integration, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority, and Assistant Professor, Department of Community Health Sciences, University of Manitoba

Jeanette Edwards, *Regional Director, Primary Health Care and Chronic Disease, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority* 

Jose Francois, Head of the Department of Family Medicine, University of Manitoba and Medical Director Family Medicine/Primary Care, Winnipeg Regional Health Authority

Dr. Kerrie Wyant, Family Physician and Site Medical Lead, Aikins Street Community Health Centre, Winnipeg Regional Health Authority

Lori-Anne Huebner, *Program Specialist, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority* 

Louis Sorin, *Community Area Director Downtown-Point Douglas, Winnipeg Regional* Health Authority

Margaret Kozlowski, Director, Primary Care Community, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority

Dr. Sheldon Permack, *Medical Director, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority*  Tom Fogg, Consultant, Primary Health Care Branch, Government of Manitoba

Dr. Sarah Bowen, Applied Research and *Evaluation Consultant; Associate Professor, University of Alberta* 

# Implementation and Evaluation Sub-Committee

Dr. Ingrid Botting Director, Health Services Integration, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority

Dr. Sarah Bowen, Evaluation Consultant

Tom Fogg Consultant, Primary Health Care Branch, Government of Manitoba

Lori-Anne Huebner Program Specialist, Family Medicine/Primary Care Program, Winnipeg Regional Health Authority

Dr. Kerri Wyant Family Physician and Site Medical Lead, Aikins Street Community Health Centre, Winnipeg Regional Health Authority

Christie Houston-Klatt Primary Care Team Manager Point Douglas, Aikins Street Community Health Centre, Winnipeg Regional Health Authority

Marta Crawford Consultant, Primary Health Care Branch, Government of Manitoba

Richard Walker Consultant (EMR), Primary Health Care Branch, Government of Manitoba

Jide Babalola, Lead Economist, Health Workforce Secretariat, Manitoba Health, Government of Manitoba.

Ian Jones Program Director, Master of Physician Assistant Studies, College of Medicine, University of Manitoba

Carol Deckert, Chronic Disease Specialist, Winnipeg Regional Health Authority

#### APPENDIX B DESCRIPTIONS OF PILOT SITES

**Aikins Street Community Health Centre** is a direct funded primary care site operated by the Winnipeg Regional Health Authority. Located in an inner city neighbourhood, the clinic provides primary care across the lifespan; a teen clinic; a methadone clinic; a public health well-baby clinic; a wound care clinic; a diabetes education program; as well as connections with mental health services. The patient population is primarily low-income residents of all ages and stages of life. A large proportion of the patients served are Aboriginal, refugees and immigrants, or those without a permanent residence.

Although it was the first site selected for a funded PA position, Aikins Street Community Health Centre was not successful in its initial recruitment efforts in 2011. This setting has a long experience of inter-professional practice, with a current staff complement of 3 physicians, 2 primary care nurses, one nurse practitioner, one shared care counselor, four administrative support staff, one coordinator, and (since January 2013) one Physician Assistant. Initial expectations of the PA were to oversee the chronic disease care portion of the clinic, and address the physician panel sizes. The PA is the main provider of care to part of the physician's panel: roles include providing primary care services to this panel, connecting with mental health services (including provision of home care visits with mental health workers) and an active role in the methadone clinic.

**The Concordia Hospital**, a community hospital in Northeast Winnipeg, has had experience with PAs in surgical roles, but also identified the potential of PAs to support their family medicine program. The PA was hired in December 2012 and began with a residency-type training program with an emphasis on system operations. This was expanded to several rotations with graduated independence and gradually increasing workloads. While initially the PA was placed with different family practitioners on a rotational basis, the role has evolved to be a placement with one primary physician, while providing back up coverage for vacation and other high-demand situations.

The initial objectives of the role focused on helping family physicians bridge their in-hospital and community responsibilities, acting as a liaison and communicator between the physician and hospital staff; and – through greater hours of availability – supporting patient family care in hospital. While not a primary goal, there was also interest in exploring the capacity of physicians to take on a greater number of patients. Currently, the PA provides patient in-hospital coverage on behalf of a single Family Practitioner for 40 hours per week.

**Sheldon Permack Clinic** (Community – based fee-for-service site). This is a traditional solo physician practice, offering full-scope family practice. Additional staffing includes an office administrator, Shared Care mental health (a counselor and psychiatrist), a laboratory technician, and since November 2012, one PA. The practice has a 50/50 male female patient ratio, with many patients having

Been with the practice for over 30 years. Like most family practices, mental health and chronic disease are significant areas of care. The physician provides in hospital service, includes a 40-bed nursing home unit as part of his enrolled practice population, and is part of a call group. The PA performs hospital rounds and home visits, either independently or together with the physician; and also is the main provider of care to a number of frail elderly on the physician's panel that are seen at home. Other areas of PA focus are prevention (diet, lifestyle, obesity, smoking, immunization), chronic disease reports, and management of same-day patients.

**St. Boniface Clinic** is a multidisciplinary fee-for-service clinic located beside the St. Boniface hospital, near downtown Winnipeg. The clinic consists of 8 family doctors and 9 specialists. Each doctor works independently, running two examination rooms, supported by a full time Medical Office Assistant. They also lease space in their building to a lab and a pharmacy, so both services are on site for their patients. Fourteen of the physicians are stakeholders in the business operations of the clinic. An accountant acts as the business manager for the clinic, overseeing all aspects of the operation. A Physician Assistant joined their clinic in November 2013. Currently, the PA works with two supervising physicians, one of whom was significantly over-paneled, seeing patients off the daily sheet, alleviating some of the appointment pressure experienced, and improving patient access as well as providing vacation coverage. In doing so, it is anticipated that all of those doctors will be able to attach more patients in the coming years.

**C.W. Wiebe Clinic (Winkler)** is a group of 20+ Family Practice and specialist physicians and other care providers. This private, fee-for-service clinic is operated by the physician group, and its operations are not managed, funded, or overseen by the Southern Regional Health Authority (SRHA) or Manitoba Health: physicians are responsible for their own operating costs. The group shares practice costs and resources in order to maximize efficiencies. In this rural setting, a group practice allows for necessary coverage of obstetrics and inhospital care as well as to support easier consultation and sharing of patient information. Some of the CWWMC physicians also provide services at facilities which are operated by SRHA, such as Boundary Trails Health Centre and personal care homes. The physician assistant began at this clinic in October

2013, working with three supervising physicians. Maternal child health is a major area of service. The goal is to have the PA supporting the three physician's panels to ease their workload, increase provisions of same day appointments, and allow for the attachment of more patients.

**Seven Oaks/Inkster PCN:** The Seven Oaks/Inkster Primary Care Network partners hired a Physician Assistant, who began in November 2013, to support their in-hospital and community practices. Most of the early adopter family physicians in Seven Oaks/Inkster practice provide full service family medicine and see their patients in hospital at Seven Oaks General Hospital. The PA is supervised by a lead physician in a fee for service community practice located within SOGH, called Prairie Trail at the Oaks. Currently the PA focuses on clinic care for this physician, and in-hospital care for patients of both the lead, and other family physicians who are part of the network.

# **APPENDIX C**

## PHASE 3: SIMPLIFIED INTERVIEW AND FOCUS GROUP GUIDE

### **1.** Introduction

- Purpose of interview/focus group
   Confidentiality and voluntary nature of participation
   How information will be used

#### 2. Questions

Participants for sites involved in 2013	New participants
Response to evaluation findings to date	Expectations prior to arrival of PA
Extent to which implementation challenges identified earlier have been addressed?	What is working well in implementation
Any new challenges identified?	Any challenges to implementation?
Any additional supports to address challenges needed?	Any additional supports to address challenges needed?
How PA role has changed/evolved	Changes experienced because of introduction of PA
Overall evaluation of implementation experience	Overall evaluation of implementation experience
Overall impact/benefits of PA introduction	Overall impact/benefits of PA introduction
Specific impacts of PA introduction (workload, access, attachment, acceptance by other team members, benefits/downsides to patients; benefits/downsides to supervising physicians; other impacts	Specific impacts of PA introduction (workload, access, attachment, acceptance by other team members, benefits/downsides to patients; benefits/downsides to supervising physicians; other impacts
Any unique aspects to PA role	Any unique aspects to PA role
Advice for MB Health, WRHA, University of MB related to PA roles in Primary Care	Advice for MB Health, WRHA, University of MB related to PA roles in Primary Care
Any other information useful for evaluator to know	Any other information useful for evaluator to know

## APPENDIX D: PATIENT EXPERIENCE WITH PAs

### SELECTION CRITERIA AND INTERVIEW GUIDE

#### Patient Selection Criteria

- Format: Telephone interview.
- Sample selection: First 10 patients who meet eligibility criteria with appointments on date of selection (date of sample selection varied among the sites).
- Eligibility criteria
  - **o** (Hospital based)
    - *b)* Patient has been provided services by PA in hospital visit prior to discharge
    - *c)* Ideally patient has had a previous admission to the Concordia with no PA (Not required)
    - *d)* Patient able to participate in interview in English and over 18years of age
    - e) Exclude those who are mentally incapable, or are terminally ill.
  - o (Clinic-based)
    - Patient has been attached to the clinic for the past 3 years or more
    - Patient has seen the PA at least 2 times
    - Patient able to participate in interview in English and over 18 years of age
    - Exclude those with a recent serious illness/terminal diagnosis, or mentally incapable.
- Transcription: Manual transcription of key responses during interview based on template form.

#### Interview Guide

#### **1.** Introduction

Personal introduction Purpose of interview Confidentiality, rights to decline or answer specific questions Anticipated time needed for interview

## **2**. Confirming eligibility

## 3. Experience of change

As I mentioned, we are interested in hearing directly from patients about what their experience with a PA has been like.

- Did you notice any differences in your hospital stay (with PA) available at the hospital compared to your previous hospital stay? (*hospital version*);
- In your experience, have there been any differences in the services or care provided by (site) since (PA) joined the practice? (*clinic version*).

## 4. Satisfaction with Care

Now I would like to ask you some questions about the general care you received at (site)

a. **Overall satisfaction with care**: Overall, how satisfied would you say you are with the care a) you receive from the clinic (*clinic version*); b) received during your hospital stay (*hospital version*)?

- *i.* Would you say you were:
  - 1. Very satisfied?
  - 2. Somewhat satisfied?
  - 3. Somewhat dissatisfied?
  - 4. Very dissatisfied?
- *II. You say you are very satisfied.* What is it about the care you received that makes you very satisfied?
- *III. For other 3 responses:* What changes could be made that would increase your satisfaction with the overall care you received during a) your hospital stay (*hospital version*); b) at the clinic (*clinic version*)?

## b. Satisfaction with MD care:

Overall, how satisfied would you say are with the care a) you receive from Dr.X/your usual provider (*clinic version*) b) provided to you by Dr. X during your hospital stay (*hospital version*)?

- I. Would you say you were:
  - 1. Very satisfied?
  - 2. Somewhat satisfied?
  - 3. Somewhat dissatisfied?
  - 4. Very dissatisfied?
- II. You say you are very satisfied. Hospital version: What is it about the care you a) receive from Dr. X (*clinic version*); b) received from Dr. X during your hospital stay (*hospital version*) that makes you very satisfied?
- III. *For other 3 responses:* What changes could be made that would increase your satisfaction with the physician care you

a) receive (*clinic version*); b) received while in the hospital (*hospital version*)?

- c. **Satisfaction with PA care**: Overall, how satisfied would you say you were with the care provided to you by (PA) a) at the clinic (*clinic version*); b) during your hospital stay (*hospital version*)?
  - I. Would you say you are:
    - 1. Very satisfied?
    - 2. Somewhat satisfied?
    - 3. Somewhat dissatisfied?
    - 4. Very dissatisfied?
      - i. You say you are very satisfied. What is it about the care you received from (PA) that makes you very satisfied?
  - II. For other 3 responses: What changes could be made that would increase your satisfaction with the PA care you receive?

#### 5. Probe on specific issues:

#### Hospital version

(PREVIOUS HOSPITAL ADMISSION): Now I would like to ask you a few questions about specific aspects of your hospital stay, and how these have changed since your last hospital visit. Can you tell me a bit about how you found:

- a. the admission process to hospital?
- i. the discharge process?
- ii. the information provided to you and/or your family?
- iii. how long you had to wait to hear back from your doctor about any question you had?
- iv. how confident you felt in your hospital care?

(**NO PREVIOUS ADMISSION):** Now I would like to ask you a few questions about specific aspects of your hospital stay. Can you tell me a bit about how you found:

- a. the admission process to hospital?
- the discharge process?
- the information provided to you and/or your family?
- how long you had to wait to hear back from your doctor about any question you had?
- how confident you felt in your hospital care?

#### **Clinic Version**

Since (the PA) joined the practice in (month, year), have you noticed any changes in the clinic?

- a. How long you wait to get an appointment?
- b. Time spent with you during an appointment?
- c. Information you get on your condition and how to manage it
- d. Other.....

# g) Open ended closing question.

Do you have any suggestions for the WRHA about use of Physician Assistants a) in primary care clinics (*clinic version*); b) for caring for family medicine patients in hospital (*hospital version*)?