

**Evaluation of the Physician Integrated Network (PIN)
Initiative: Phase 2**

Analysis of post-intervention interviews

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Prepared for:

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Glossary of terms	
AHCP	Allied health care provider/professional
BMI	Body mass index
BP	Blood pressure
CDM	Chronic disease management
CIHI	Canadian Institute for Health Information
EHR	Electronic health record
EMR	Electronic medical record
ER	Emergency room
FFS	Fee-for-service
FOBT	Fecal occult blood test
IT	Information technology
MH	Manitoba Health
NP	Nurse practitioner
PIN	Physician Integrated Network
QBIF	Quality-based incentive funding
RHA	Regional Health Authority
RN	Registered nurse
WRHA	Winnipeg Regional Health Authority

1.0 Introduction

The Physician Integrated Network (PIN) initiative is intended to “facilitate systemic improvements in the delivery of primary care” in Manitoba.¹ The initiative involves group practices of fee-for-service (FFS) physicians who agree to implement practice changes aimed at achieving the following PIN objectives:

- ▶ To improve access to primary care
- ▶ To improve primary care providers’ access to and use of information
- ▶ To improve the work life for all primary care providers
- ▶ To demonstrate high-quality primary care, with a specific focus on chronic disease management²

Phase 1 of the PIN initiative began in 2006 and included three demonstration sites and one control site.

- ▶ Agassiz Medical Centre (Morden)
- ▶ Assiniboine Medical Clinic (Winnipeg)
- ▶ Dr. C. W. Wiebe Medical Centre (Winkler)
- ▶ Steinbach Family Medical Center (Steinbach) – Control Site

Phase 2 officially began with the Steinbach Family Medical Center developing its Phase 2 work plan for its conversion to a full PIN site. This was the Center’s second year of quality-based incentive funding (QBIF), which began in January 2009. Manitoba Health recruited additional FFS family physicians for Phase 2 between February and April 2009.³

In addition to Steinbach Family Medical Center, eight group practices joined the PIN initiative in Phase 2, including:

- ▶ Altona Clinic (Altona)
- ▶ Centre Médical Seine Inc. (Ste. Anne)
- ▶ Clinique St. Boniface Clinic (Winnipeg)
- ▶ Concordia Health Associates (Winnipeg)
- ▶ Prairie Trail Medical Centre (Winnipeg)
- ▶ Tuxedo Family Medical Centre (Winnipeg)
- ▶ Virden Medical Associates (Virden)
- ▶ Western Medical Clinic (Brandon)

One additional group practice joined PIN at the beginning of Phase 2, but did not complete the phase and thus has been excluded from the post-intervention analysis.

¹ Manitoba Health. (no date). *Physician integrated network (PIN)*. Retrieved from <http://www.gov.mb.ca/health/phc/pin/index.html>

² Manitoba Health. (no date). *Physician integrated network (PIN)*. Retrieved from <http://www.gov.mb.ca/health/phc/pin/index.html>

³ Manitoba Health. (no date). *Physician integrated network (PIN)*. Retrieved from <http://www.gov.mb.ca/health/phc/pin/phase2.html>

The evaluation of the PIN initiative relies on several lines of evidence, including a patient survey, provider survey, analysis of electronic medical record (EMR) data, and qualitative interviews with PIN stakeholders. This report presents the findings of the post-intervention interview component of the evaluation. It also compares the findings of the post-intervention interviews to those of the pre-intervention interviews. The results of these interviews will help guide the future direction of PIN and broader primary care renewal strategies. The goals of the Phase 2 post-intervention interview portion of the evaluation were as follows:

- ▶ To document stakeholder impressions of and experiences with the planning and development process of the PIN initiative
- ▶ To determine current stakeholder impressions and expectations of the PIN initiative
- ▶ To identify issues regarding primary health care renewal of relevance to stakeholders
- ▶ To compare current stakeholder impressions with those documented in the pre-intervention interviews

1.1 Guide to the report

The remainder of the report is organized as follows:

- ▶ Section 0 presents the methodology for the post-intervention interviews
- ▶ Section 0 provides the results of the post-intervention interviews, including a summary of the interviews and a comparison with pre-intervention interviews
- ▶ Section 0 summarizes the report
- ▶ Appendix A presents the interview results in tabular format
- ▶ Appendix B provides the interview guides

2.0 Methodology

PRA researchers conducted a total of 29 semi-structured interviews from December 2011 to March 2012 with PIN Phase 1 and 2 stakeholders and decision-makers, including lead physicians and clinic administrators from the practice sites, and representatives from the Regional Health Authorities (RHA) involved. Appendix B contains the interview guides; they are the same guides used for the post-intervention interviews in the evaluation of PIN Phase 1.

PRA researchers conducted the interviews by phone and recorded them using a digital audio recorder. They reviewed and coded the interview notes according to key issues and themes by participant group. These issues appear in tabular format in Appendix A.

The following section summarizes the findings of the post-intervention interviews and compares them to the findings of the pre-intervention interviews. In Appendix A, Table 1, Table 2, and Table 3 contain the key issues and themes identified by clinic stakeholders (including lead physicians and administrators). Table 4, Table 5, and Table 6 contain the key issues and themes identified by the RHA representatives. The tables list the main subject areas in the left-hand column, and group the individual responses according to underlying themes.

3.0 Results

This section briefly outlines the findings of the post-intervention interviews and compares them to pre-intervention interview findings. For more detailed post-intervention interview results, refer to the tables in Appendix A.

3.1 Post-intervention interviews

Post-intervention interviews showed that clinic stakeholders and RHA executives approve of PIN's focus on quality care and chronic disease management (CDM). Several interviewees mentioned that while the "traditional" FFS physician model emphasizes volume (quantity of care), PIN encourages physicians to focus on quality of care. In addition, many respondents said they wanted to take a more proactive approach in their practice, focusing more on chronic disease prevention and everyday health promotion for their patients. Other clinic stakeholders approved of the use of evidence-based indicators, even though a few disagreed on the validity or usefulness of certain indicators. Many interviewees said that the PIN approach would be more beneficial to patients overall, which was often a major factor in their decision to participate in the initiative.

Interviewees discussed a number of other incentives for participating in PIN. The most common reason for participation was the desire to improve patient care. Some respondents also said they were interested in bringing additional allied health care professionals (AHCPs) into their practice. Many noted that the quality-based incentive funding (QBIF) was also appealing. Several clinic administrators and physicians also said they wanted to stay on the cutting edge of EMR and other information technology (IT) developments. Many respondents mentioned they would like to use the EMR data to evaluate the performance of their clinic and establish specific targets for the future. While improving the work–life balance of physicians is one of the four main objectives of PIN, very few respondents gave this as a reason for participating in the initiative.

Respondents also mentioned several disincentives for participating in PIN. By far the most common concern expressed was the potential increased workload, mostly for physicians. Physicians usually expected to spend more time with patients, order and review more screening tests, and perform additional administrative tasks (such as EMR data entry). Some interviewees were concerned that fulfilling the IT requirements of PIN, such as upgrading and programming their EMR, would be challenging and time-consuming. Some clinic stakeholders said that making the transition to PIN would be even more difficult for older physicians who use paper charts and are less computer savvy. A few respondents also mentioned concerns over the sustainability of PIN, and questioned whether the initiative would last beyond a few years.

The post-intervention interviews revealed several changes in the workflow of PIN clinics. Several respondents mentioned that their clinic had dedicated an existing administrative staff member or a newly hired staff member to managing various PIN-related tasks. The most common tasks included data entry, running reports, sending reminders to patients (calls and mail-outs), and coordinating meetings. Some interviewees also said that increased efficiencies from PIN allowed their clinic to open more same-day appointment slots for patients.

Increased workload was a common issue raised during the interviews. Most clinic administrators and physicians indicated that being involved in PIN has created more work for them. For the administrators, the increased workload typically resulted from supporting physicians by

measuring blood pressure, BMI, height, and other patient characteristics; managing the data entry process and ensuring that the data are entered correctly; generating EMR reports; and other general PIN tasks. The workload for physicians increased from spending more time with patients, ordering and reviewing more lab tests, data entry, and PIN meetings. Of the respondents who had an increased workload, the majority said the extra time was worthwhile because of improved patient care and the financial rewards. On the other hand, a few respondents said that PIN had not increased their overall workload, but rather changed the nature of their work day. For example, some physicians spent more time with patients, but saw fewer patients per day.

Physician quality of life was another prevalent topic in the interviews. Many physicians said their work satisfaction increased, with most attributing this to providing improved patient care. While it was difficult for the physicians to comment on actual health outcomes, they believed the patients were, overall, better off with the preventive care approach. A few physicians said they felt they were better doctors because of their involvement in PIN. On the IT side, others said they were pleased to be getting more use out of their EMR. A few physicians indicated they were pleased that they were adhering closely to the evidence-based Canadian Institute for Health Information (CIHI) indicators. However, only one or two physicians reported an improvement in work–life balance. In all other cases, work–life balance either remained the same or decreased. A few physicians suggested that Manitoba Health (MH) should remove work life improvement from the four objectives of PIN, as PIN cannot address this issue, and work–life balance is often a personal choice made by the physician. Others also suggested that PIN creates extra work, and would therefore not lead to an improved work–life balance.

Most respondents felt that PIN has made good progress in addressing CDM issues. Almost all interviewees mentioned that their clinic had increased the number of screening tests provided to patients compared to their usual amount before PIN. Many respondents also noted that the automatic reminders given by the EMRs were very useful in meeting screening targets. Several interviewees claimed that PIN helps increase awareness of CDM and everyday health promotion among both patients and physicians. Conversely, a few physicians indicated that they are ordering some tests only because PIN requires it, not necessarily because they think it will help their patients. In most cases, respondents could only comment on the extent to which they are meeting the screening guidelines, not the actual health outcomes of their patients. A couple of respondents suggested that it will take 10 or 15 years to see whether the increased screening is of actual benefit to patients.

Responses regarding increased access to care were mixed. A couple of respondents mentioned that access to physicians had increased because of the creation of same-day appointment slots. On the other hand, a few said that because physicians are spending more time on each patient, wait times are increasing, potentially reducing access. A key point in improving access to care for patients involved the inclusion of allied health care professionals (AHCPs) in clinics. Several interviewees reported that their clinic had hired at least one additional AHCP, such as a diabetic nurse or dietician. The respondents mentioned that these AHCPs provide additional services and education for the clinic to offer its patients, potentially increasing access to care. However, several other respondents said their clinic had not hired AHCPs, or had not been able to hire the number of AHCPs they wanted. Many of these individuals said that the level of funding provided by PIN was not sufficient to hire additional AHCPs, as the salaries for many of these positions are too high. Generally, it appears that smaller clinics had less capacity (financial or otherwise) to hire AHCPs when compared to larger clinics, regardless of where the clinic was located. On

the other hand, depending on the location of the clinic (often urban versus rural), some said that since there were already existing AHCPs provided by the RHA or located close to the clinic, they did not see the need to include any AHCPs on-site, since patients already had access to them in the region.

Access to information was another major theme in the interviews. Many respondents reported that patient-specific information was much easier to track after implementing PIN, although one or two complained of technical glitches. Also, many interviewees said that the data extracted from the EMR are very useful in evaluating the performance of their clinic. They said they use the data on a regular basis to see how close the clinic is to meeting standards for the indicators, and to decide what areas to focus on in the future. Aside from evaluating the clinic as a whole, several respondents also said the data are useful for evaluating individual physicians. In some cases, clinic administrators were responsible for monitoring the performance of each physician and informing them if their numbers began to drop. Several respondents indicated that the EMR allows for peer comparisons, where physicians actually get into “competitions” to increase their numbers. The interviewees generally agreed that a little competition among physicians was of benefit to the clinic and its patients. Overall, most respondents also felt that their clinic was making better use of its EMR because of PIN.

Responses regarding the financial impact of PIN were mostly split between those who felt PIN led to financial gains, and those who said PIN was revenue-neutral. Most of the respondents who said PIN led to financial gains claimed that PIN funding helped them hire additional AHCPs and/or administrative staff for the clinic, buy new equipment, or make upgrades to their facilities. Most interviewees indicated that physician take-home pay had not changed, although some said it increased slightly. A few respondents also brought up the issue of the new chronic disease tariffs the province will provide as of April 1, 2012. They said that PIN sites will have an easier time claiming the tariffs than sites using paper charts, which may be an unforeseen financial benefit for PIN clinics. That said, they suggested that there may be some potential overlap in terms of government programming between the new tariffs and PIN.

Those who said PIN was revenue-neutral usually stated that they received enough funding to break even, given the additional administrative and physician work PIN requires. One or two respondents said they thought their clinic might be losing money on PIN. When speaking of the financial impact, many participants reiterated that the extra work was worth the improvements to the clinic and the increased quality of care provided.

According to clinic administrators, physicians, and RHA representatives, PIN has facilitated improved collaboration in the Manitoba health care sector. Several administrators and physicians indicated that adopting PIN has encouraged them to work as a team within the clinic and has increased communication between staff members. In addition, most respondents also said that their interactions with their RHA and MH had been positive. The RHA representatives said that PIN has changed the nature of the relationship between FFS clinics and the province, creating a new focus on improving the health care system. They also said that PIN has built and improved relationships between the RHAs and the clinics, allowing them to work together to fill service gaps and improve quality of care.

Most interviewees had many positive things to say about the PIN staff and the initiative itself. Many respondents said that the PIN staff at MH were organized, cooperative, knowledgeable,

and friendly, and that they kept in regular communication. The respondents appreciated the willingness of MH staff to listen to their concerns and work with them on finding solutions. Most respondents also appreciated the autonomy and flexibility they had under the initiative. Several respondents said they appreciated the fact while PIN provides the overall objectives, it is up to the clinics to decide how to proceed and which indicators to focus on. The respondents indicated that PIN achieves higher buy-in from clinics by using a “bottom-up” approach rather than a “top-down” model. Several interviewees said they always felt that the PIN staff listened to their concerns and attempted to address them whenever possible.

Some interviewees mentioned that one advantage of PIN is the evidence-based model it uses by incorporating the CIHI indicators. Several physicians pointed out that they are now screening patients more often because of the indicators, and most of them felt it was a positive change. A few others felt that some of the screening tests were unnecessary. A few physicians also mentioned that they disagreed with some aspects of certain indicators, such as age ranges and frequency of screening. A couple of respondents cautioned that including more indicators could significantly increase physician workload per patient, and suggested keeping the indicators to a reasonable level.

Most respondents said that other clinics in the province would not have trouble implementing PIN so long as they had an EMR. Several interviewees claimed that the lessons learned from the implementation of PIN could assist other clinics in joining the initiative, especially regarding the upgrading and programming of EMRs. Some respondents indicated that additional administrative and IT staff are very important for implementing PIN, but some of the smaller clinics are unable to afford these staff members. Given the financial requirements of implementing an EMR and hiring additional staff, some respondents said that smaller clinics and solo practices may have difficulty implementing PIN. A few interviewees suggested that solo practitioners and small group practices may begin forming “virtual groups” to make PIN implementation more feasible.

3.2 Comparison with pre-intervention interviews

The themes and issues raised in the post-intervention interviews are generally consistent with those found in the pre-intervention interviews, with some exceptions. Post-intervention interviews focused less on the experiences with planning and implementation, and more on the results of post-implementation.

The overall positive impression of PIN does not appear to have changed between the two rounds of interviews. In general, interviewees agree with PIN’s focus on CDM and everyday health promotion. They also acknowledged the IT benefits of PIN, such as increasing the use of EMRs and improving patient tracking. However, during both rounds of interviews, respondents mentioned various technical glitches, and also said they would prefer a more standardized approach to EMRs.

During the pre-intervention interviews, respondents voiced their concerns over the additional workload that PIN could cause for both administrators and physicians. While some clinics were optimistic that PIN would reduce workload, many others were skeptical. In the post-intervention interviews, the majority of respondents claimed to have an increased workload, and did not expect it to decrease in the future. Similarly, while many respondents in the pre-intervention interviews

hoped PIN would improve work–life balance for physicians, most respondents from the post-intervention interviews said PIN had either no impact or a negative impact on work–life balance.

It is important to note that most respondents said the increased workloads are worthwhile because of improved quality of care and financial rewards. Some administrators and physicians indicated that PIN processes have become part of their normal routine, and they no longer think of PIN as being “extra work.”

The respondents from the pre-intervention interviews were often concerned about the IT implementation involved with PIN. They indicated that undertaking the required EMR upgrades and programming would take a lot of time, and some individuals would have difficulty adjusting. Many of these concerns had subsided by the post-intervention interviews. Respondents indicated that while making the IT adjustments took time, the staff eventually adapted. Still, they occasionally complained of technical glitches or improper data entry. However, the respondents were less concerned about IT complications and more focused on the benefits of improving their IT infrastructure and reviewing EMR data.

Some of the respondents from the pre-intervention interviews indicated that they lacked trust in their RHA and the province; this stemmed from some previous experiences with those organizations. Also, some respondents indicated that they were concerned about losing autonomy to MH and not having enough input into the PIN initiative. However, the most recent interviews suggest that trust is no longer an issue. The clinic administrators and physicians did not provide many comments on their RHA, but strongly emphasized their positive experiences with MH and PIN. They regularly spoke of the autonomy and flexibility that PIN afforded them, and said it was one of the greatest strengths of the initiative.

In the pre-intervention interviews, one RHA representative mentioned they did not think that PIN would change the relationship between the clinics and the RHAs. However, during the post-intervention interviews, some RHA representatives indicated that PIN had actually improved these relationships and encouraged working together to fill service gaps and improve the health care system. Another RHA representative mentioned in the pre-intervention interviews that PIN might favour urban clinics over rural clinics, since the requirement for participation was five physicians and an EMR. In the post-intervention interviews, one RHA representative mentioned that urban clinics have only recently started to move from paper to electronic charts, so PIN may actually favour rural clinics, where EMRs are more common.

4.0 Summary

This section briefly summarizes the interview findings and highlights lessons learned from Phase 2 of the PIN initiative.

- ▶ Respondents favour PIN's focus on primary care intervention, CDM, and everyday health promotion. Interviewees mentioned several incentives for joining PIN, including improving patient care, improving CDM, developing their IT infrastructure, making better use of their EMR, increasing practice efficiency, and obtaining financial rewards.
- ▶ The majority of respondents believe PIN has had a positive impact on their clinic. They believe that the quality of care provided to patients has improved, and that the physicians are better managing their patients with chronic disease. Access to information has allowed several clinics to evaluate the performance of individual physicians and clinics as a whole. However, some respondents indicated that it is too early to determine the actual outcomes of the initiative, and suggested the real patient benefits of improved CDM may be visible after 10 or 15 years.
- ▶ The vast majority of interviewees are impressed with the PIN staff at MH, saying that they are well-organized, knowledgeable, and helpful. According to the respondents, the PIN staff members listen to their concerns, and are willing to work with them to find solutions to problems.
- ▶ Interviewees did not report a significant increase in access to family physicians. Only a few respondents indicated that physicians could see more patients or add same-day appointments. However, several clinics expanded their services by hiring AHCPs, potentially improving access to care. Many other clinics are interested in hiring AHCPs, but several say they do not have enough funding to do so.
- ▶ Interviewees reported that the PIN reminders are very useful to the physicians, ultimately improving their practices and increasing patient care. Respondents indicated that the reminders were important for physicians to adhere to standards and maintain consistent care.
- ▶ Most clinic administrators and physicians reported an increased workload because of PIN. However, the majority said that it was worthwhile because of improvements to patient care and the financial rewards. Several clinics also hired additional administrative staff to offset the extra work.
- ▶ According to the respondents, collaboration between the clinics, the RHAs, and MH has increased as a result of PIN. Clinic administrators and physicians reported increased trust and relationship-building with the province, and also appreciated the autonomy and flexibility facilitated by the PIN staff. The RHA representatives said that PIN has allowed them to work more closely with clinics to fill service gaps and improve the health care system.
- ▶ Responses regarding the financial impact of PIN were somewhat mixed. Many interviewees reported that PIN was revenue-neutral in their clinic, and a few said they thought PIN had a negative financial impact. Several others mentioned financial gains, mostly related to the use of PIN funds to hire AHCPs and cover overhead costs.

The respondents from the post-implementation interviews provided a variety of suggestions for future directions for PIN:

- ▶ A few interviewees suggested keeping the number of indicators to a reasonable number to avoid increasingly large clinic workloads.
- ▶ Some respondents mentioned the need for actual outcome measures in the future.
- ▶ Some said they wanted the PIN programming in their EMR to be simpler. For example, one respondent said they had to enter data in three or four separate sections of the EMR, and would prefer to enter all the data in the same place.
- ▶ A few respondents said they wanted additional funding for AHCPs, including NPs, mental health workers, and others.
- ▶ Several interviewees said that PIN should expand as much as possible to other clinics in the province, including smaller practices and non-FFS clinics. This would provide the same high standard of care for more Manitobans.
- ▶ A few physicians suggested removing the work life goal from PIN, arguing that PIN does not address work–life balance issues.

Appendix A – Tabular interview results

Table 1: Clinic stakeholder descriptions of PIN implementation process	
Subject	Theme
Incentives for participation	<p>Quality of care</p> <ul style="list-style-type: none"> • The main reason we participated in PIN was to promote better care. • We wanted to try to improve patient care. • PIN is about patient care, about screening and meeting benchmarks. • We were interested in improving quality of care for our patients. • We wanted to be involved in ways of delivering better care. • Our main goal was to provide optimal care and CDM for our patients. • I liked the project on the basis that it was to improve quality of care. • The initiative is good for patient care. • We felt that the FFS model encouraged quantity of care rather than quality of care. We believed that PIN is the way of the future for medical care remuneration because it encourages quality indicators for patients. • We're participating with PIN to try and help us give better care to our patients. <p>Focus / direction</p> <ul style="list-style-type: none"> • We participate in PIN because of the primary health care direction it provides for our patients. • We wanted to be part of the new up and coming changing health care direction. • We applauded some of the principles that PIN was trying to address. • We valued the evidence-based model. • This seemed to be the direction that health care is going anyways. <p>Innovation / change</p> <ul style="list-style-type: none"> • We wanted to be proactive with the chartless office. • We wanted to stay a cutting edge clinic. • We had a philosophy where if there was going to be changes to the health care system, we wanted to be at the front end of it, not the tail end. <p>Proactive</p> <ul style="list-style-type: none"> • We look at it as being preventative as opposed to reactive, which is something we want to continue. • We did not want to be reactive, we wanted to be proactive. • We figured that if things were going to change, we may as well be the ones making changes, rather than waiting for someone else to do it. • I got involved with PIN primarily because it was going to be a built-in reminder for better care. • We saw preventive care as an area in which we could improve what we are doing. <p>Access to care</p> <ul style="list-style-type: none"> • We wanted to improve patients' access to physicians. • We wanted to give patients better access to care. • The main reason was improving access to care. • We thought that the FFS model did not facilitate access to care, but PIN might help us achieve this. • Improving access was important. <p>Allied health care providers</p> <ul style="list-style-type: none"> • We wanted to bring in additional AHCPs. • We see benefits in using alternate care providers. • We wanted to have the funding to bring in AHCPs to assist with servicing patients.. • We were interested in bringing in AHCPs, such as mental health workers, dieticians, chronic disease nurses, and public health nurses. <p>Financial incentive</p> <ul style="list-style-type: none"> • PIN is a good way to get more funding for the clinic. • We see it as a financial incentive. • At the end of the day, there is also a financial reward as part of this project. But it was driven by possible improvements in patient care, more than anything. • We participated partly to remunerate our physicians for taking care of patients with chronic disease. We know these patients take more time, yet we are only allowed to charge for one visit, even though we are doing several things during that visit. We felt it was a way to recognize the need for more time. • The financial incentive was important. Manitoba is behind the ball on this compared to provinces such as AB, ON, and BC.

Table 1: Clinic stakeholder descriptions of PIN implementation process	
Subject	Theme
Incentives for participation (continued)	<p>IT</p> <ul style="list-style-type: none"> We take pride in being on top of the latest technology. We wanted to address IT issues. We wanted to make better use of our EMR. We wanted to maximize utilization of the EMR. <p>Access to information</p> <ul style="list-style-type: none"> We like the idea of making better use of data and information. It is interesting to see where we are with data. It is a measure of how we're doing. We valued looking at the data and not just assuming things are going well. We had just started with our EMR so we thought we would make the most out of our electronic records. In family medicine, there is so much coming at you at once. I like the idea of being prompted when certain tests need to be done. It lets you stay on top of patients as far as their medical issues are concerned. <p>Encouragement</p> <ul style="list-style-type: none"> We were encouraged by the results from some of the other PIN clinics. <p>Chronic disease management</p> <ul style="list-style-type: none"> We were looking at chronic disease indicators. We wanted to do more in heart disease prevention. We want to be able to identify when patients with chronic disease need certain tests. <p>I was hoping PIN would improve patient care, especially CDM. The indicators are generally quite practical and helpful.</p> <p>Performance measurement</p> <ul style="list-style-type: none"> We were excited to use the EMR to identify areas to improve care. We were interested in seeing what kind of medicine we were doing. We wanted to know if we were meeting the guidelines. PIN creates a drive to measure ourselves and even do peer comparisons. It ensures that things are going well in your practice. <p>Work-life balance</p> <ul style="list-style-type: none"> Physicians' style and quality of life was a big drawing card for us. <p>General / other</p> <ul style="list-style-type: none"> PIN allows us to expand the services we provide. We're participating because the doctors told us we were. I assume it was to improve patient care, but they didn't involve us in the decision-making process. <p>I thought from an overall standpoint, we could be better doctors if we got involved in PIN.</p>
Disincentives for participation	<p>Workload / time</p> <ul style="list-style-type: none"> We were concerned about the physician workload balance. The time factor was a big reservation. All of our physicians' workloads are full. The physicians were reluctant at first; they thought they had enough on their plates. We were concerned about the amount of time it would take to implement PIN. The physicians and admin staff were concerned about extra workloads. Physicians are already very busy. Concerns about physician workload. It comes down to physicians' time. Most physicians thought it was going to be a very heavy workload. Most physicians did not want extra administrative hours completing forms. This was the greatest reservation they had. We were concerned it would be a lot of work, so we did not go for the first round. Additional chart work and following up with all the PIN parameters. <p>IT</p> <ul style="list-style-type: none"> The physicians who were using paper charts for years were especially reluctant. PIN was daunting for them. There was concern because our EMR software at the time did not facilitate us dealing with some of the work that MH wanted us to complete. We had only recently got an EMR, so the IT aspects were a bit daunting. We had an EMR which was not easy to extract data from.

Table 1: Clinic stakeholder descriptions of PIN implementation process	
Subject	Theme
Disincentives for participation (continued)	<p>Buy-in</p> <ul style="list-style-type: none"> Adults are always resistant to change. The difficult thing with physicians is getting them to change. <p>It is the fear of the unknown.</p> <p>Privacy concerns</p> <ul style="list-style-type: none"> Our main reservation was: what would be done with the information collected by MB Health? We know the information is being used to keep track of the indicators, but what else is being done with it? We still have those reservations. <p>Sustainability</p> <ul style="list-style-type: none"> We were concerned that we would put in all this extra work, and the project would just die in a few years. I had some concerns over how sustainable the project was going to be. I was wondering if PIN would only last a year or two. We thought there was a chance this project would end without much coming from it. <p>Cost / feasibility</p> <ul style="list-style-type: none"> There was some hesitation about the level of funding the initiative offered. The doctors were wondering how much we would actually get paid for this. But this was less of an issue compared to the time issue. <p>It seemed like the data transfer was going to be a lot of work. We were skeptical as to whether all the data could be transferred.</p>
Receptiveness	<p>Positive / supportive / enthusiastic</p> <ul style="list-style-type: none"> The physicians were very keen to see how PIN would go. All the physicians were on board from the beginning. All of the physicians are on board with PIN, though some see it as more valuable than others. We were keen right from the start. The PIN staff were good at motivating us. <p>Mixed response / uncertainty</p> <ul style="list-style-type: none"> The first year, we couldn't get anyone interested. When they did decide to participate, it was mostly because of one proactive individual. While the physicians were initially enthusiastic, their enthusiasm has now decreased considerably because PIN is time-consuming and frustrating at times. We had a couple of physicians keen on participating, but there was some reluctance among the others. Some were excited, but others had concerns about the extra workload. 30% of the physicians were excited to go forward, and the rest were apprehensive. It's easier for newer doctors to make the transition. I was keen to get started in Phase 1, but I could not really convince the other physicians in the clinic to participate until Phase 2. We were sceptical in Phase 1, but saw some positive results from those clinics, so we started with PIN in Phase 2.
Experiences with planning process	<p>Time</p> <ul style="list-style-type: none"> It took a lot of time to implement PIN, especially getting our EMR set up properly. <p>Support</p> <ul style="list-style-type: none"> We had our software provider set up our EMR to make it easier to use for everyone.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
<p>IT intervention implementation process</p>	<p>Software</p> <ul style="list-style-type: none"> • Like with any computer change, it took a while for everyone to get the hang of it. • It took some time, but the physicians are more used to the software now. • Initially, it was a lot of work getting the physicians accustomed to the software, but now it's automatic. • We had an EMR before PIN existed. It was easy to incorporate PIN into the software. My sense is that the software we have makes it easiest to run the PIN criteria. • Even when we got the new version of our EMR, there were glitches in the PIN part of the program. We do not have IT people on-site, so this proved to be a challenge. • There was a lot of set-up to go through initially, but we are all used to it now. It no longer seems like "extra work." <p>Data entry</p> <ul style="list-style-type: none"> • We hired another administrative person to help deal with the data entry. • We hired two staff members through PIN funding to go through the files and do data entry. • Entering the data and getting the EMR to function properly in terms of PIN was a huge time commitment. <p>Support</p> <ul style="list-style-type: none"> • Our software vendor has been great. • Whenever we had a problem, we called the IT people with our EMR vendor and they were quite good. They had to tweak some things, but it did not cost us anything or amount to more of our time. <p>Cumbersome</p> <ul style="list-style-type: none"> • Some of the technologically advanced physicians had no issue, whereas others took a while to come on board. • Some of the physicians had a hard time getting used to the way the data presents itself in patients' charts. • The physicians resisted at first, but after they received some training on the computer software, they were a lot more responsive to it. • There were not a lot of software implementation requirements, but there were some. Some of the workflow related to the EMR was not practical, but after some time, we got used to the new way of doing things. The limiting factor was not the EMR; it was figuring out the workflows and then requesting a change. • Some physicians are not entering the data consistently. You have to enter it a certain way for PIN to recognize it properly. There is some double entry going on. Some physicians like the old system better. <p>Data validity</p> <ul style="list-style-type: none"> • It has given us better data.
<p>Impact on work</p>	<p>Work flow / processes</p> <ul style="list-style-type: none"> • PIN has allowed us to free up some physicians' time for same-day appointments. • There has been an increase in lab tests because of the reminders. • We identified PIN team leaders in our clinic so as to not overwhelm the physicians. Their role is to manage the various aspects of PIN. • PIN has helped physicians organize their days. • We now track what is being done in the lab. Before, we did not usually track the lab data. • The physicians and administrative staff are having conversations about workflows. • I spend more time with patients, and therefore see fewer patients per day. • We have opened up some same-day appointment slots. • With PIN, the extra lab tests we ordered swamped the system. Finally a private lab came to the area to deliver the services where we could not meet the demand. • Doing the PIN things slows me down a little. <p>Workload – general</p> <ul style="list-style-type: none"> • We would like to do more with PIN (e.g., patient educational mail-outs), but we don't have enough staff for this. • We are using our staff much more effectively.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
<p>Impact on work (continued)</p>	<p>Workload – administration</p> <ul style="list-style-type: none"> • It has added more time for administrators in making sure physicians input everything correctly. • My workload has increased. I get more emails, do more billing, and assist with taking height and weight measurements from patients. • My workload increased considerably until we designated more people to help out with PIN activities. • PIN has definitely increased my workload. • We now help with data entry and calculate BMIs, etc. • More work, more hours per week. I get emails from the province every day. It's just something I have to deal with. • We now have a staff member who spends about half their time assisting physicians with the PIN requirements. • It changed my workload, but didn't increase it. Just changed the nature of my days. • I spend more time monitoring and evaluating things. • My workload has increased, and we also have another administrative person who does a lot of the data checks internally. • The only thing affecting the staff are the PIN surveys we are asked to give to patients. • I generate the reports. We report on each indicator and compare them to the last report run. • The administrative staff are now more involved in putting patients in rooms, checking height, weight, blood pressure, etc. It has been a shift in work. • We have some new admin staff because of PIN. They go over the patient's file at the beginning of the day and see which indicators we need to deal with. They do BMIs and book appointments. <p>Workload – physicians</p> <ul style="list-style-type: none"> • The FFS doctors do not see as many patients as they used to. • Having an extra AHCP has really helped the physicians. • I think it has created extra work for the physicians, but not a measurable difference in their days. They have learned to "work more smart" when they see patients. • It has increased our workload, but we are rewarded financially for this. • Our workload increased at first. This began to improve over time. • It has optimized our workflow. • It is a lot more work for me as the lead physician, but it is worthwhile. • Physicians are spending more time entering things into EMRs. They are usually small, but they add up over time. • I do a fair amount of work. I work with IT people. • PIN has not affected my daily work. However, it does affect what I do with my time off. • I am seeing approximately the same number of patients as I did before. However, I am ordering more lab tests than I normally would. <p>Time</p> <ul style="list-style-type: none"> • It saves the physicians time because the indicators pop up on the screen. • It takes physicians more time, but they feel it is okay because they are getting more out of their EMR. • Physicians and administrators have to spend time making sure everything is recorded in the right place so it is captured by PIN. • PIN increases the amount of time spent per patient visit. • I have to spend more time on patient visits, so I end up seeing fewer patients per day. <p>Work-life balance</p> <ul style="list-style-type: none"> • PIN has not addressed the work-life balance of physicians here. • We thought PIN would address work-life balance for physicians, but it has not. • In terms of work-life balance, PIN has created more work for the physicians. • I would take this goal right out of PIN. Of the four cornerstones of PIN, this has never really been addressed. With all of the one and two day meetings we have had, there has never been a discussion on improved working environment of all primary care providers. I do not know how you deal with this goal. PIN has not addressed this, although it is not a negative; PIN has just not influenced this. • I do not think it has had any affect. • PIN has not addressed work-life balance at all.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
Impact on work (continued)	<p>Work–life balance (continued)</p> <ul style="list-style-type: none"> • My work–life balance has remained the same. • PIN helped me be more organized. I can do things preventatively now. There are ways and means of working around things to make life actually easier. I think the work life and quality of life is good. • PIN has not made my work–life balance any better. It was more work at the beginning for sure. • PIN has not really had an impact on my work–life balance. • I cannot say that my workload has decreased. • Work–life balance has not improved. To do this, we need more physicians and other AHCPs. We are in the process of hiring some AHCPs. With PIN, you actually have more test results to review in some cases. • My work–life ratio has increased. I am doing more administrative tasks and ordering more tests. • It seemed like it would save me time, but the spinoff is that we have a lot more information to deal with now. <p>Work satisfaction</p> <ul style="list-style-type: none"> • The physicians are happy with the way PIN is going in our clinic, and they look forward to seeing how it evolves. • I think I am a better doctor because I am involved in this project. • It is more satisfying when you are contributing to the patient’s health, even in a small way. It adds up and helps the population. • Assuming that looking after these indicators does actually improve the health of my patients, there is a job satisfaction that is raised, absolutely. I always try to do the best I can. • When I see that I am improving in terms of the indicators, I feel I am doing a good thing for my patients. • It has given me more satisfaction in my work. I am feeling more organized and more in control of the EMR and PIN stuff. I am not saving time, but I feel better about my work at the end of the day. <p>Screening</p> <ul style="list-style-type: none"> • The physicians like that the EMR prompts them and reminds them of PIN practices. • We are staying on top of screening. • We are doing more screening tests. • We would not have ordered this many tests if not for PIN. • PIN makes one aware that CDM is not just something you take for granted. • We are managing screening tests a lot better. • I think PIN has addressed CDM. • We have become more aware of the chronic disease indicators overall. • Now I am doing some tests not because I think they are necessary, but because PIN requires it. But some I find very useful, such as the FOBT screening. <p>Collaboration</p> <ul style="list-style-type: none"> • We have regular team meetings and we print out reports on PIN statistics for everyone to review. We review how all the physicians are doing. • We have a mix of FFS doctors who are part of PIN, and new doctors who are not. Still, the enthusiasm for screening and preventive health care that the FFS doctors are showing is having an impact on the non-PIN doctors. The general ethos in the clinic has changed to screening and prevention, even among the non-PIN doctors. • PIN made us communicate data as a group. We coordinate meetings now and see how we can make things easier. We discuss it in an open forum. It makes for better communication with colleagues. • We have a bit more camaraderie here, and better relationships. We encourage each other. <p>Compliance</p> <ul style="list-style-type: none"> • If physicians are not doing a good job documenting encounters, we let them know. It’s a self-regulating body. • It ensures the physicians adhere to the standards.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
Impact on work (continued)	<p>Documentation</p> <ul style="list-style-type: none"> The update to the EMR changed the way physicians entered their information, so they're not necessarily entering information correctly anymore. PIN has allowed us to document that we are doing good work with our patients who have chronic disease. For example, we know that for our diabetic patients we are examining their feet, but before PIN, that would never be logged into our EMR. We look at the reports PIN sends us to see how we are doing as a practice. It is eye-opening. <p>Standards of practice</p> <ul style="list-style-type: none"> The PIN work became second nature to us. PIN is not going to be around forever, but this is the new standard in terms of the work we will be doing. We are doing things in a more standardized way. PIN is getting more doctors to follow care in a more standardized approach, being accountable for what they are doing, and being incented to do it. <p>Recruitment</p> <ul style="list-style-type: none"> We are having trouble recruiting family physicians. They are overworked as it is.
Impact on information management	<p>Access to information – evaluation</p> <ul style="list-style-type: none"> The data extracts allow us to see where we're at and determine how we can do better. We sit down and look at our indicators and talk about how we could do better. PIN helped us identify how to make changes to our practice that are not easy to address. We run reports every couple of months to gauge how we are doing. We look back at the data to see where we are missing targets. We have not yet looked at monitoring it to see whether it has made an impact on the patients. We print out the data as a clinic once a month, and look at the numbers and see how we are doing. <p>Access to information – decision-making</p> <ul style="list-style-type: none"> It allows us to identify what we need to do for our patients, and to identify the things we miss. We use the data a lot more compared to before we had PIN. We use it to address ideas, problems, and issues. <p>Access to information – patient-specific</p> <ul style="list-style-type: none"> Patient care is now easier to track. Information on screening and other PIN-related activities is easier to find. The reports run from the EMR are not accurate. It is not properly identifying tests that we know were done. We can now track patients' care more easily. We can now track which patients haven't had a mammogram in X number of years, etc. It allows us to know our practice in terms of number of patients, types of patients, etc. We have been tracking the screening of our patients. For those chronic disease patients who are not complying with follow-up, we have used mail-outs and telephone reminders. We were not involved in these activities before PIN. It has improved our access to patient information, such as immunizations. We can track patient data over time, such as weight and blood pressure. <p>Access to information – networking</p> <ul style="list-style-type: none"> Many more labs are providing us with information in usable format. The tests done at these labs are fed to our computers and entered automatically into the EMR. There were problems with this at the beginning, since only one lab submitted the information in the correct format. We have imported some information on our patients from other providers. We have information from the hospital on whether our patients had immunization shots, for example. <p>Peer comparison</p> <ul style="list-style-type: none"> The doctors want to do better for themselves. But it has become kind of a competition among the physicians. It makes them want to do better. PIN allows physicians to compare to their peers. The peer pressure makes them adhere to the standards more often. Our incentive has been for everyone to look at the individual statistics, and when they are less than average, their new goal is to attain the average. When you are told you are below average, it forces you to pay attention. Doctors do not like being last. A little bit of competition is not bad.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
<p>Impact on information management (continued)</p>	<p>Peer comparison (continued)</p> <ul style="list-style-type: none"> • We compare with one another to see how we are doing. If a physician gets complacent, their numbers drop, and the numbers show it. • It has actually become kind of a competition (not a bad thing). • We compare among the physicians. For individual physicians, we also compare the actual results to what the physician believes he or she is doing. <p>Standardization</p> <ul style="list-style-type: none"> • PIN has highlighted the need for EMR standardization. Indirectly, PIN has contributed to EMR development. • It has streamlined and standardized the EMR. <p>Functionality</p> <ul style="list-style-type: none"> • Our physicians feel it is a better usage of the medical software. • Better data collection. • PIN has helped us recognize the power of our EMR. • It has helped us optimize the use of our EMR. • We are making more consistent use of our EMR. • We found the EMR a bit challenging, but PIN has helped us get more benefits from it. <p>General</p> <ul style="list-style-type: none"> • We now have consistency in recording and reporting information. • We had an EMR before PIN, so we had a high level of access to information before. PIN is helping us continue in this direction. • Because we are better able to track information, it does provide better delivery of care. • PIN made us more knowledgeable about data and reflection on data that can be mined out of an EMR. • We now have a huge database of clinical data.
<p>Impact on access to care</p>	<p>Access to family physicians</p> <ul style="list-style-type: none"> • More patients have same-day access now. • PIN has somewhat improved access to our physicians. It has not helped with access to specialists such as a dermatologist. • We are spending more time on many patients, and as a result, other patients have increased wait times. • We do not know whether PIN has improved access. We need to see the results of the patient survey first. • I think access has improved, but it is difficult to measure this. We find that people are spending less time in the waiting rooms, but still wait to make the actual appointments. • We are trying to improve access. • Access to care has not occurred. We would need more AHCPs, such as nurse practitioners. • I cannot say that access to care has increased. • PIN has slightly helped with access to care, but I do not think it has done much. • PIN has not helped us with access. We are a smaller clinic with no walk-ins, and our physicians are pushed to the max. • I do not think PIN has increased access. The nurses we have hired have not really seen patients instead of our seeing patients; they are just helping to look after some indicators as patients come in. <p>Access to allied health care providers</p> <ul style="list-style-type: none"> • We have not hired any AHCPs. This is because there is another clinic close to us with those professionals already there. It would not make sense to hire more here. • We hired a diabetic nurse. • We hired a full time dietician, and every physician considers this to be a positive addition. • There is not enough funding to hire the AHCPs we're interested in. • We hired a nurse using PIN funding. She helps with measuring blood pressure, BMI, etc. so the physicians can spend more time with the patients. • We would like to hire a nurse practitioner, but this hasn't happened yet. • We have a diabetic nurse educator and a part time dietician now. • We have not been able to hire any AHCPs yet. • We have hired a full time dietician through this program.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
Impact on access to care (continued)	<p>Access to allied health care providers (continued)</p> <ul style="list-style-type: none"> We have looked into hiring AHCPs, but it doesn't make sense to do so when those services already exist in the RHA. In conjunction with PIN, we are now using dietitians, psychologists, and counsellors. We did not have these services available prior to PIN. As we started with PIN, we needed to increase administrative time. We have not hired dietitians or other AHCPs. We have not hired any AHCPs. We have a shared mental health worker and a diabetes educator on site. We have done a bit of collaborative communication with a dietitian and a diabetes educator within the RHA but not within our clinic. In my opinion, if other AHCPs exist in the region, we should collaborate with them, not necessarily hire them to work on-site. We should collaborate with existing AHCPs. We have employed a diabetic nurse because of PIN. We are not able to hire a nurse practitioner to assist us with our practice because we are too small a clinic. We now have a dietitian on staff who is trained to talk to patients about dietary issues. I now have more time to talk to patients about other things. We would like to hire a mental health worker, but there is not enough funding. We would like to bring in a nurse practitioner, but their salaries are too high for us to afford.
Impact on quality of care	<p>Awareness</p> <ul style="list-style-type: none"> Because of the EMR and the PIN headings, we feel now that the everyday promotion of health is brought to the forefront in each patient encounter. Illness prevention and health promotion are now the focus. <p>Comprehensive care</p> <ul style="list-style-type: none"> PIN has opened the door for interdisciplinary teams. The providers we bring to the clinic support physicians so they don't have to do everything. Patients come in for a variety of reasons, and sometimes it is difficult to find the time to address the PIN indicators on top of everything else. The reminders reinforce the comprehensiveness of care. PIN has been developed with the idea of comprehensive care. <p>Measures</p> <ul style="list-style-type: none"> There are too many indicators. It has helped our physicians reach higher percentages on their indicator clusters. <p>Standardization</p> <ul style="list-style-type: none"> PIN ensures that certain standards of care are being adhered to. <p>Reminder</p> <ul style="list-style-type: none"> I believe our patients are receiving better care because of the way our EMR is set up in reminding physicians not to miss steps. We like the reminders that pop up on the screen. The doctors find it helpful. The physicians are on board with the reminders. The reminders are allowing us to improve patient care. The reminders improve the efficiency of patient visits. I can do more things per patient visit, which saves people from having to come back. If someone took a more "mercenary" approach, they might see this as a bad thing, but I see it as a strength. The reminders are very useful. Sometimes you forget to do certain tests, even though you see the patients very often. PIN keeps you focused by using reminders. It is difficult to ignore them. It has been especially useful in keeping us focused on FOBT screening. The reminders have served as good prompts for us. They fill in the gaps in patient care. <p>Patient education</p> <ul style="list-style-type: none"> There hasn't been an increase in patient education because we already had an EMR, and were already showing screens to patients. PIN has helped with patient education. The education from the diabetic nurse has been helpful for diabetic patients.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
<p>Impact on quality of care (continued)</p>	<p>Patient education (continued)</p> <ul style="list-style-type: none"> • Patients are now more motivated to deal with their medical issues. • We have more patient education materials available. We do patient mail-outs and patients now have regular care plans. • We send reminders and let patients know we are trying to prevent diseases, rather than cure them afterward. We send letters about colon, breast, and cervical screening tests. <p>Health outcomes</p> <ul style="list-style-type: none"> • Because the reminders keep us consistent in providing good care, we are all under the assumption that we are influencing the results people get and are making them healthier. For example, we may delay the complications related to a disease like diabetes. • Hopefully, by providing or meeting the standards of care, physicians are improving quality of care. It would be nice to be able to measure whether we are actually improving patients' health. • It is too early to measure health outcomes. You need to follow patients for 10–15 years and see whether timely tests have made a difference in their lives. I suspect there are similar projects in other provinces, and I wonder if they have been able to show actual health benefits (outcomes). • Keeping track of information and being good at paperwork does not necessarily lead to better health outcomes. It is too early to see these yet. • I am seeing some improvement in some of my patient's lab tests. <p>Chronic disease management</p> <ul style="list-style-type: none"> • CDM has improved. Patients are being managed better in a preventive way. • Screening has increased. • There has been a positive impact on screening and managing chronic conditions. • We are working more on prevention now. • CDM has been a success. PIN forces physicians to screen according to certain guidelines, and ensures a certain standard is being followed. • Physicians are better able to manage chronic disease. • The EMR is flagging screening tests which may have been missed before. • Doctors and nurses in the clinic are now more aware of prevention. • Our CDM is better. I can track screening tests a lot easier. • PIN has enforced the need for timely monitoring of patients. For some of the tests, I am actually doing them less often, since PIN does not always require the frequency of screening I had done before. <p>General</p> <ul style="list-style-type: none"> • Better patient care. • Better prevention. • PIN has improved quality of care. • PIN has addressed improvement of quality of care patients receive. • We are more proactive now than we were before. • It is too early to say whether PIN has really impacted quality of care. • I think the fact that I am measuring these parameters is leading to positive impacts on patient care. • The care we provide is more thorough now. There is more monitoring going on.
<p>Financial impact</p>	<p>Feasible practice change</p> <ul style="list-style-type: none"> • There is not much money to focus on improving patient care. • Our goal is to reach 85% on all the indicators. We are not sure the extra workload is worth it. • We want to hire a variety of AHCPs, but there is not enough funding. <p>Neutral</p> <ul style="list-style-type: none"> • The clinic has not lost any money on PIN. • We are maybe breaking even. But a lot of people do not record their PIN time, so we may be making a loss. • We have not lost any money. • I would say at this point, we have not seen any positive or negative impact financially. • I do not think there has been a negative impact. • The compensation is appropriate. • It has had no financial impact on the clinic.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
Financial impact (continued)	<p>Neutral (continued)</p> <ul style="list-style-type: none"> We had a lot of money at the beginning to start the project. I think in the long run we will break even. I think it has been revenue-neutral. It is difficult to say. It may have benefited some individual doctors, depending on how compliant their patients are. It also let us add a dietician and upgrade our EMR. But it has taken up more administrative and physician time. We certainly have not lost any money by doing this. We might have made some money, but I do not know the exact numbers. <p>Gains</p> <ul style="list-style-type: none"> We are spending money on things that we could not do before PIN. These things benefit our patients. It's been positive because of the reward for extra time and because chronic care is now recognized by MB Health. MB Health is recognizing that the doctors that provide ongoing care to patients with chronic diseases need to be rewarded differently than other doctors. There hasn't been that much impact. A bit more money for the physicians for taking care of the patients. On the financial side, it has been at least neutral, and probably beneficial to the clinic. The funding is tied to achievement, which we agree with. The funding has been fair and generous. We originally had some reservations on this, but not any more. In terms of physician take-home pay, we are neutral. However, the PIN funding has allowed us to improve our clinic by hiring additional AHCPs, and we want to add more. It creates a more integrated practice and a network of health. It's definitely been positive. PIN money helps cover our overhead costs. PIN has allowed us to buy extra things such as portable blood pressure machines. Although PIN has created work for us, we are provided with some remuneration, which I believe is a fair amount. With Doctors Manitoba's latest contract, the provincial government is including tariffs for CDM. Any PIN site will have an easy time claiming those tariffs. It would be a lot more work for a non-PIN site to claim the tariffs. So this will be an unforeseen financial impact. The financial impact has been positive. It has allowed us to explore and bring in staff without increasing our costs. There has been a nice incentive from the finances. We have paid off some debt, done some construction, and are looking at hiring an extra person to help with workflow. <p>Losses</p> <ul style="list-style-type: none"> Physicians are not sure the additional money covers the time they put in, but knowing they have better patient care is a plus for the project. <p>Distribution</p> <ul style="list-style-type: none"> Most of the money that comes in from PIN goes to the diabetic nurse. We had some difficulty deciding how to distribute the funding. We eventually decided to split it based on the total number of patients in the physician's roster. I think the doctors were satisfied with this, for the most part. We have spent most of the PIN money on staffing and some equipment. It has not had a huge financial impact because it is basically money that comes in and goes out. We have money available for IT development and other projects.
Political impact	<p>Collaboration</p> <ul style="list-style-type: none"> PIN encourages a whole mindset of working together. PIN has motivated us to partner with other organizations and look into hiring more AHCPs. The data gives us a platform of communication with the RHA, so we have a language with which to talk to them about our patients. For example, we can tell them how many diabetics we have, what our targets are, and whether we are meeting various targets. We are having conversations on how we are doing with delivering health care. It has helped bridge the gap between practicing physicians and MH. We had a lack of trust with the RHA in the past. But PIN has been a positive experience. We have met key players at MH and we trust each other. In the planning stages of PIN, we were consulted by the MH staff. They asked us for our input. I think that was a great thing to see.

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Subject	Theme
Transferability	<p>IT infrastructure</p> <ul style="list-style-type: none"> • It would be impossible to do if you did not have an EMR. • This project will encourage people to move from paper to electronic charts. People appreciate the access. • You need an EMR to make this project work. For those who have an EMR, it is not much more work. Hopefully, PIN will encourage those who do not have an EMR to get one. • A lot of the EMR work has been done in general. If you have a clinic coming on board with a similar EMR, you can use the lessons learned from the original PIN clinics and train people accordingly. In other words, with assistance, people do not have to start at square one. • PIN as it is now would be impossible without an EMR. • I think more standardization from the vendors would make it easier. • You need to give everyone an EMR education before they start using it. This includes staff, physicians, assistants, medical records personnel, and accounting people. • I have heard some smaller clinics say that investment into EMR is too expensive for them. • It is very important for clinics to have good IT access and IT staff. We can afford to hire an IT person, but other clinics cannot. • The clinics will do well if they have EMRs or very organized patient charts. • The EMR mapping we have done will benefit other clinics. • You have to have a very strong administrative support system. In general, physicians are not geared to doing much administrative work. <p>Financial incentive</p> <ul style="list-style-type: none"> • The money helps. They will not put in the extra effort without the funding. • I think it will be prohibitively expensive to do this whole thing to all clinics in Manitoba. Our provincial government is running a deficit and the money is not going to be there. <p>Commitment / buy-in</p> <ul style="list-style-type: none"> • We were fortunate to have a lead physician who has been really great in terms of bringing other physicians on side. • You need to have a leader or “champion” who takes this on at the clinic. • You get much more buy-in using the bottom-up model, rather than the top-down model. PIN uses the bottom-up model and we think that is a strength. • It will be great for people to talk to people who have been through it, so they can see beyond the extra work. • Some physicians are close to retirement and would not bother with making the transition to PIN. • The younger physicians, who are usually more computer savvy, will find this easier. <p>Group size</p> <ul style="list-style-type: none"> • Each doctor likes to practice medicine in different ways. It makes it difficult for larger clinics to get one or two drivers to get people motivated and get them on board. • A one-person clinic will be difficult because of the EMR. I think once the bugs are worked out, it will be easier. • Since PIN is done in group practices, I think people in smaller practices would have to form virtual groups. • People in the clinic such as nurses and administrative staff must be available to assist with PIN stuff.
PIN strengths	<p>Focus / direction</p> <ul style="list-style-type: none"> • Generally I think it’s a good initiative, especially for patients. • We are now more focused on preventive care. • PIN is really focused on health care. • The focus on improving primary care is a huge strength. • The CDM piece is amazing. • Improving quality of care and focusing on CDM such as heart disease, diabetes, asthma, etc. • PIN emphasizes the importance of family medicine, which is a strength. <p>Leadership</p> <ul style="list-style-type: none"> • The PIN personnel are excellent at MH. • The PIN staff are helpful. • MH staff are extremely supportive and helpful.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
PIN strengths (continued)	<p>Leadership (continued)</p> <ul style="list-style-type: none"> • The people from the province do a really good job in terms of explaining the process and documenting it. They also do a great job communicating and providing lead time when there are changes. • The group we work with from MH provides great support. • The PIN people are very well organized. They have helped immensely in terms of getting doctors on side. • I would compliment the people who run PIN. They have done an exceptional job in terms of defining it, keeping us involved, meeting with us, and trying to encourage us. The meetings and whole organization have been very strong. • I am impressed with the people who led the initiative. The people part makes a difference. They are good leaders. • The enthusiasm of the people in Winnipeg. The people involved in PIN are pretty amazing. They're enthusiastic, knowledgeable, helpful, friendly, and encouraging. • The government is involved, which means the program is big and stable, with financial and political backing. • The PIN staff seem to have a good understanding of primary care, and they communicate very well. <p>Evaluation</p> <ul style="list-style-type: none"> • PIN allows us to produce reports on our clinic. It allows us to flag patients who are not complying with their follow-up visits. If we did not have PIN, we would not be running these reports. • PIN lets us produce reports on each indicator by physician to see which ones we need to work on next. • It is an innovative way of looking at what is going on in the clinic. • It makes you accountable. <p>Collaboration</p> <ul style="list-style-type: none"> • Our RN is getting more involved in hypertension follow-up, which supports the physicians. • We have been able to hire extra staff to assist with the initiative. • PIN helps us work together as a team. • The willingness to collaborate was a strength. • The strength of PIN is that it is team-oriented. • I think we are accepting a team spirit. PIN has created a culture of sharing and understanding better. • We are seeing more of the integration of health practitioners in the system. <p>Flexibility / individualization</p> <ul style="list-style-type: none"> • PIN allowed us to be a part of developing what we think are best practices. It did not come with someone already having made the decision. It has been flexible and we have made changes along the way. • They listen to us in terms of what we think will work and what we think will not work. • It's a flexible way of trying to practice evidence-based medicine. • They allowed us to distribute the funds as we saw fit. • They have listened to my concerns about some of the indicators. I've been very impressed with their willingness to listen. • We are allowed to have individual variation within PIN. <p>Evidence-based model</p> <ul style="list-style-type: none"> • The FOBT screening is really good. • The indicators are well thought out and evidence-based. • The indicators are "fluid," which is a good thing. The goal is to be as evidence-based as possible. <p>Standardization</p> <ul style="list-style-type: none"> • PIN has developed a number of standards we should be aiming for in our practice. • PIN standardizes the approach to preventative health and CDM. <p>Prevention</p> <ul style="list-style-type: none"> • It has got us thinking more about prevention and practicing medicine in this way. • It forces the physician to look more at screening. • The physicians are constantly being prompted to follow certain guidelines.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
PIN strengths (continued)	<p>Prevention (continued)</p> <ul style="list-style-type: none"> • Encourages day-to-day health promotion and disease prevention. • The reminders serve as good learning tools. <p>IT functionality</p> <ul style="list-style-type: none"> • PIN has helped modernize more practices. • The ease of implementation with the EMR. • It was easy to incorporate PIN into our EMR. • Because of PIN, more people are inquiring about EMRs. We are so far behind Europe in the uptake of computers. • A strength of PIN is that it is electronically-based. <p>Autonomy</p> <ul style="list-style-type: none"> • A major strength is the bottom-up approach PIN uses, rather than the top-down approach. They give us the objectives, but allow us to figure out how to do it. You get much better buy-in with that approach. • PIN has never used a top-down model. They listen to our opinions, are willing to change, and they let the physicians drive the model, which is how it needs to be done. • We can talk about the indicators and change things like the age range. • It's not top-down, it is sort of from the inside out. • I like PIN's intent to impact my work as little as possible. <p>Simplicity</p> <ul style="list-style-type: none"> • PIN lays out things really well. • The simplicity of the introduction and implementation. • PIN is extremely well organized. <p>Positive results</p> <ul style="list-style-type: none"> • The primary issues are being addressed. • Fewer people are developing rectal cancer because of the FOBT screening. • We can stay on top of patient care. • The strength is the improvement in the quality of care. • Quality of care is the positive outcome. • It encourages physicians to do good work and to continue to do good work.
PIN challenges	<p>Measures – evidence</p> <ul style="list-style-type: none"> • The physicians think that the patient and physician surveys are not designed to evaluate anything related to PIN. • I do not think we are as evidence-based on cholesterol as we could be. In my opinion, the jury is still out on how beneficial regular cholesterol treatment is for primary prevention, particularly in women. The cholesterol guidelines are too austere and rigid. • Right now, we are only collecting yes/no answers from our EMR data. We need to improve the quality of information we collect. We need to include the test results as well, to get quality data. We need the actual values of the test results. <p>Measures – incentive</p> <ul style="list-style-type: none"> • Sometimes I feel as though I am meeting indicators not for the patient's sake, but for PIN's sake. Sometimes I do not believe the information will save my patient's life, but that I am just collecting it to satisfy PIN parameters. <p>IT infrastructure / support</p> <ul style="list-style-type: none"> • It still takes a lot of time to enter patient data. • It is difficult to enter external data into our EMR. For example, an external lab may send us lab results in the form of a letter or a PDF. Someone then has to input the information manually. This is a substantial issue. <p>Buy-in</p> <ul style="list-style-type: none"> • Some people are resistant to change. • It is easier for young doctors and technologically-minded doctors to make the transition, but not for others. <p>Capacity</p> <ul style="list-style-type: none"> • Overall, I think the model is good. But the increased number of lab tests costs money, and may clash with the cost controls of the health care system.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
PIN challenges (continued)	<p>Funding / incentives</p> <ul style="list-style-type: none"> • There is not enough funding to hire additional AHCPs. • We were told we would be getting so much money per indicator, but they had not anticipated we would be doing so well, so they did not budget enough money. There was a lack of communication here. • When a patient comes in with a problem, we sometimes have to do a bunch of other tests because we get more funding if we do them. The funding is good for us, but this does not necessarily make the patient happy. There are two agendas here. A patient will not like it if they come in for a specific problem, and you give them three unrelated tests because PIN asks you to. <p>Time</p> <ul style="list-style-type: none"> • I do not think anyone involved in the project can say that the project focuses on the work–life balance of physicians. • There is some talk of survey burden here, for physicians, and perhaps for patients.
Participant recommendations	<p>Measures</p> <ul style="list-style-type: none"> • There are too many indicators to focus on. Some of them are poorly developed. We would like to work on improving original indicators before adding new ones. • The number of indicators needs to be kept reasonable if quality of care is to be maintained. I feel if there are a huge number of indicators, the actual time available is going to run out. If doctors fail to meet parameters with a set number of indicators, they may become disillusioned with it, even with the financial rewards. As it stands now, I think the number of indicators is reasonable. • PIN needs to have measures in place to actually measure patient care. With all the money spent, we need to evaluate whether the program is actually doing what they say. <p>Simplification</p> <ul style="list-style-type: none"> • With our EMR, you have to manually check and see when the patient is due for a test. We would prefer the reminders popping up on the screen so the physicians do not have to look for them. • PIN is not always clear with its definitions. For example, how do you define “access”? These should be clarified. • It would be nice to have one section of the EMR where all the PIN things are located. As it is right now, we have three or four different sections that contain PIN information. It would be nice to have a place on the record where all the PIN items would be accessible. • It would be nice if information could be entered more automatically somehow. Or if they provided funding to hire a PIN “parameter clerk” to ensure we are getting all the information we need. • It would be better if the data were auto-populating. Some of the data do not populate correctly, so I always have to double-check when I add things to the patient’s chart. <p>IT infrastructure / support</p> <ul style="list-style-type: none"> • We would like to be able to auto-populate data from our labs and have it register in the PIN portion of patients’ charts. • Some of the data pulls showed incorrect numbers. We think this is the result of where the data lie in patient charts. The numbers are being missed I think. • We would like more external information coming to our computers when tests are done. For example, an external diabetic specialist does tests on our patients, but the results do not always show up in the patient’s EMR. <p>Funding / incentives</p> <ul style="list-style-type: none"> • There should be more money for nurse practitioners. There are not enough of them, and they are very helpful to physicians. • There should be more deliverables we had to meet for the funding. • We would like more funding put into mental health. Some clinics are looking at depression indicators. Having an additional AHCP to focus on mental health issues would be great. • I am not sure funding is the real answer. We should be adhering to standards and indicators anyway, even without funding. Perhaps the money should go toward adding other practitioners to clinics. <p>Expansion</p> <ul style="list-style-type: none"> • We would like to see better access to specialist care. People in rural areas often do not have good access to these appointments/services. • PIN should try to include all residents of Manitoba. However, many do not have family doctors or continued care. The people who need care need it to be effective.

Table 2: Clinic stakeholder perceptions of PIN initiative	
Subject	Theme
Participant recommendations (continued)	<p>Expansion</p> <ul style="list-style-type: none"> We would like to see better access to specialist care. People in rural areas often do not have good access to these appointments/services. PIN should try to include all residents of Manitoba. However, many do not have family doctors or continued care. The people who need care need it to be effective. <p>Scope</p> <ul style="list-style-type: none"> Remove the physician work–life balance from the four main goals. When you are involved in this project, there is no way you do less work. Change the wording of PIN’s objectives to remove access to health care and work–life balance. We should be real about what PIN is actually doing. <p>General / other</p> <ul style="list-style-type: none"> There is still some value to the personal interactions with patients. I hope we do not lose that piece.

Table 3: Clinic stakeholder descriptions of major issues in primary health care	
Subject	Theme
Work environment	<p>Workload</p> <ul style="list-style-type: none"> • Family physicians are overworked as it is. • Family physicians are very busy. Nurse practitioners could help ease some of the burden, but there usually is not enough funding for these health care professionals. <p>IT</p> <ul style="list-style-type: none"> • There seems to be a fairly widespread movement from paper charts to electronic charts. • Anyone who still has paper charts lives in the Stone Age. • Younger physicians have an easier time adapting to EMRs compared to older physicians. • Physicians who are close to retirement may not bother with PIN because of the IT transitions required. <p>Collaboration</p> <ul style="list-style-type: none"> • Overall, we are seeing health care delivered more through a network. • There is more information sharing between different sites, but it can be difficult to input data from one site or lab into EMRs. There do not seem to be many standards for this. <p>Location</p> <ul style="list-style-type: none"> • I do not think that location (rural or urban) will influence a clinic's decision to join PIN. • Small clinics and rural clinics may have to form virtual groups to be eligible for PIN.
Access to care	<p>Timeliness</p> <ul style="list-style-type: none"> • With PIN, some clinics have been able to open more same-day appointments. • PIN requires that the physicians spend more time per patient, which could increase wait times for other patients.
Funding	<p>Funding structure</p> <ul style="list-style-type: none"> • With Doctors Manitoba's latest contract, the provincial government is including tariffs for CDM. Any PIN site will have an easy time claiming those tariffs. It would be a lot more work for a non-PIN site to claim the tariffs. So this will be an unforeseen financial impact. • PIN may serve as an introduction to CDM, which will get a lot of clinics on board with the indicators. Then provincial tariffs may take over as the chief source of funding for these. • In general, there is a lack of funding for AHCPs. In particular, nurse practitioners have very high salaries that some clinics cannot afford.

Table 4: Region stakeholder descriptions of PIN implementation process	
Subject	Theme
Incentives for participation	<p>Focus on practice change / prevention</p> <ul style="list-style-type: none"> PIN has re-focused us back into primary care. We had become such an illness hospital-based model that we needed to focus our system back into primary care. Preventive care is important. There is a bigger emphasis on primary care. The program is able to adjust to the environment. The focus is now on quality, not so much on volume. PIN helps bring focus on areas of practice we sometimes leave out, such as checking vitals on a routine basis, talking about smoking cessation, discussing exercise, etc. It is about lifestyle management. <p>Model</p> <ul style="list-style-type: none"> PIN has re-sealed the recognition of the FFS model. The FFS model does have cons, but there are pros as well. <p>Physician quality of life</p> <ul style="list-style-type: none"> One of the goals of PIN was to improve the lifestyle of physicians, and their ability to do more and be more effective in their practice. The physicians would be able to get other people in their clinic who would be useful, such as a dietician or nurse practitioner. <p>IT</p> <ul style="list-style-type: none"> I am very pleased with EMRs and being able to collate information is a great idea. <p>Access</p> <ul style="list-style-type: none"> It is very important to have good access. <p>Financial incentive</p> <ul style="list-style-type: none"> Some clinics saw the money as an opportunity to enhance their clinic in some way. <p>Allied health care professionals</p> <ul style="list-style-type: none"> A lot of the clinics wanted to get a nurse practitioner, dietician, etc. They wanted to build multi-disciplinary teams.
Reservations	<p>Motivation</p> <ul style="list-style-type: none"> The reservation for me was wondering whether physicians were going into PIN with the altruistic patient care standpoint, or with the entrepreneurial standpoint. Were they in it for better patient care, or for the money? Ultimately I think the altruistic attitudes were screened in, and those who were in it for the money were weeded out. <p>Workload</p> <ul style="list-style-type: none"> I was a little concerned about the workload for the RHAs and how they would connect to this initiative. We saw as indicators were being put in place a leap in the need for laboratory work. The volume of requests for lab services increased significantly, and we did not have the staff for it. My concern going into it would be that it would be too much work. <p>Autonomy</p> <ul style="list-style-type: none"> Doctors like their independence. PIN holds them accountable for what they're doing. It changes the whole picture and can be a challenge to manage.
Experiences with implementation process	<p>Collaboration / engagement</p> <ul style="list-style-type: none"> I think the WRHA, in some ways, felt not as involved in the planning process as the rural RHAs. This is probably because there was only one urban clinic that was big enough and had an EMR. Once the urban clinics realized they needed the EMR to participate, they began to show an increased interest in getting EMRs, especially in the last two years. I think we were well involved in the planning process. This is partly because we invited MH to explore this project with us. Communication needs to be a two-way street.

Table 5: Region stakeholder perceptions of PIN initiative	
Subject	Theme
Impact on work	<p>Work flow / processes</p> <ul style="list-style-type: none"> One of the critiques of the FFS model is that it encourages physicians to only see a patient for one problem at a time. I hope PIN has wiped that out. If you look through the PIN indicators, people may have multiple problems that need to be addressed. Sometimes this comes up with people with chronic disease and the elderly. Some of the administrative staff are helping to offset the extra workload by doing blood pressure, weight measurements, etc. They will do lab work requisitions and other kind of paperwork. <p>Workload</p> <ul style="list-style-type: none"> With respect to the RHA, there has been an increase in lab work done, especially for FOBTs and blood work. It has been difficult for our lab here. We are adjusting and trying to get more funding. PIN has created extra work for clinics (tracking visits, entering data, etc.). While PIN has created extra work, the clinics feel that it is a good process and it is worth the extra work. <p>Work satisfaction</p> <ul style="list-style-type: none"> For the physician lifestyles goal, all of the physicians who are involved in PIN are extremely happy with it. I am not sure if it is making their lives easier, but they are happier. They indicate that it is helping them by rewarding them for what they are doing. <p>Collaboration</p> <ul style="list-style-type: none"> PIN fired up the passion of family doctors for care in the community. It brought together a lot of people from different specialities and areas of work for a common cause, which is a rare thing to occur in health care. As a physician, I talk to my colleagues about how to improve our practices. We talk about how to be more efficient, how to enter the data in the best way, how to use the information we already have, and other topics.
Impact on information management	<p>IT</p> <ul style="list-style-type: none"> PIN informs the physicians of the benefits of EMRs and encourages them to move to electronic charts. There is still slow uptake on EMRs, but it is happening. In Winnipeg, EMR use has really increased in the last year or two. <p>Peer comparison</p> <ul style="list-style-type: none"> There can even be a bit of competition between the physicians. It acts as a good internal audit. <p>Measures / benchmarks</p> <ul style="list-style-type: none"> EMR data is used to say whether the physicians are meeting the requirements. We can look at each clinic and examine whether they met the screening requirements, etc.
Impact on access to care	<p>Access to allied health professionals</p> <ul style="list-style-type: none"> PIN has addressed, in some cases, improved access to the clinic. All of the clinics in this group are ones that have converted to “advanced access” because they have connected to other health professionals. Clinics that are using PIN are better at this than clinics that are not using PIN.
Impact on quality of care	<p>Chronic disease management</p> <ul style="list-style-type: none"> The physicians are doing the preventive things, they are doing the tests. <p>General/other</p> <ul style="list-style-type: none"> The quality issue has been addressed somewhat. The indicators have improved.
Financial impact	<p>Funding approach</p> <ul style="list-style-type: none"> The QBIF encourages a shift from volume work to quality work. Most FFS physicians are focused on quantity (volume). PIN helps them change their focus. <p>Costs</p> <ul style="list-style-type: none"> As a region, we had increased laboratory costs. <p>Benefits</p> <ul style="list-style-type: none"> From what I have heard, the clinics and physicians are not worse off than before. The physicians are doing well and are happy because they can do more. Many say that they are able to do things in the clinic that they could not do before, such as hire a dietician. This makes their lives easier and reduces overhead costs. It has been positive. I know one site in our region has added diabetic education and assistance personnel. It has made a positive impact on the physician’s overhead costs as well.

Table 5: Region stakeholder perceptions of PIN initiative	
Subject	Theme
Political impact	<p>Engagement</p> <ul style="list-style-type: none"> Physicians in the community can see that the RHAs and MH are working to try and help them improve their practices. The physicians are being shown that they will be rewarded for improving their practice and quality of care. A number of physicians wanted to get involved in PIN, but could not because they did not have an EMR. They are now moving towards getting EMRs in their clinic because they now realize the benefits of EMRs. PIN has changed the engagement of family doctors with health authorities and the province. It used to be that the relationship between the doctors and the province was about fees; now, it's about quality, and creating a better health care system. It becomes more about patients and providing access, and bringing EMRs into practice. It went from an adversarial relationship to a partnership; now we are all on the same team. <p>Collaboration</p> <ul style="list-style-type: none"> PIN has improved the relationship between my RHA and the clinics. It has made the physicians more likely to work with the region than before. It is good to be partnering and sharing information. PIN re-engaged physicians into thinking they can help plan and change the FFS system and address barriers and hurdles by planning with PIN and the QBIF system. Building relationships was an important outcome. There was not really a need for relationships between RHAs and FFS clinics until PIN. We've had good results from this collaboration, such as recruiting physicians and specialists, looking at service gaps, and working with the clinics in relation to other projects. There are improved relationships between the RHA and the clinics. They can work together on common goals. The RHA has been able to collaborate somewhat with the clinics in meeting some of the goals. For the most part, it has helped us bring along side each other. <p>Strategizing</p> <ul style="list-style-type: none"> We have bi-annual meetings with PIN clinics where we work together to not duplicate services.
Transferability	<p>IT infrastructure</p> <ul style="list-style-type: none"> There is always technical downtime. You might not be able to get data as quickly as you think you can. There can be issues with the link between the servers. The EMR link will be the biggest problem. There needs to be someone not directly related to patient care available for troubleshooting, and people need to be coached on a regular basis. It is a learning process. <p>Feasible practice change</p> <ul style="list-style-type: none"> There is a challenge of changing your whole practice around to be focused on quality and networking. It will be difficult for doctors who have always been focused on volume work to make this paradigm change and find the space, time, and equipment to change their practices. I think you need someone to champion the process locally within the clinic. That person must be interested in using the EMR to its fullest extent. <p>Recruitment</p> <ul style="list-style-type: none"> The first clinics will be the champions, and they will be able to help people implement PIN in their clinics.

Table 5: Region stakeholder perceptions of PIN initiative	
Subject	Theme
PIN strengths	<p>Flexibility</p> <ul style="list-style-type: none"> The review process and feedback has been positive. Instead of just getting something going and letting it go perpetually, we review and see where we are at, and there is a willingness to change and update as needed. <p>Evidence-based</p> <ul style="list-style-type: none"> Being based on evidence is a strength for PIN. PIN emphasizes specific indicators that have been shown to be of benefit to monitor. It does away with work that does not really need to be done, or that is not very helpful in the end. <p>Collaboration / engagement</p> <ul style="list-style-type: none"> To me, the number one strength is trying to integrate FFS physicians into the community because up until now, they have had a minimal link with their RHA and MH. PIN emphasizes the value of sharing information. Through this, it accomplishes networking and integration. The partnerships with the individual clinics and organizations are a strength. The collaboration with health care professionals, along with allowing input from clinic groups into the process, have been strengths. <p>General</p> <ul style="list-style-type: none"> I am in favour of the QBIF model. I always thought we needed a blended funding model of sorts where you got paid for delivering quality care.
PIN challenges	<p>Recruitment</p> <ul style="list-style-type: none"> A lot of physicians are not getting involved because they expect to retire soon. There are many other primary care physicians who want to become involved in PIN. Unfortunately, they were unable to meet the requirements in the beginning. Apparently they are working towards having individual physicians participate via a virtual group. <p>IT</p> <ul style="list-style-type: none"> The IT part of EMRs is difficult and complex. <p>Sustainability</p> <ul style="list-style-type: none"> My current reservation is: is PIN going to be sustainable over time? Is it going to be something that everyone can be involved in? How are we going to fund PIN and the human resources in a way that will be satisfactory to everyone? <p>Scope</p> <ul style="list-style-type: none"> I get the sense that PIN is being rolled into, at the provincial level, the primary care network philosophy. I am concerned that clinics that did not originally participate in PIN will not be as attentive as the PIN clinics. Will the non-PIN clinics just take to their old ways of doing business as they join the primary care network? Will they use their EMR properly or will they use a paper chart? Essentially the PIN clinics are much more prepared for the primary care network than non-PIN clinics.
Participant recommendations	<p>Scope</p> <ul style="list-style-type: none"> We have to find a way to expand PIN to non-FFS physicians. All Manitobans should have access to similar quality of care. Everyone needs to be as well screened in non-PIN clinics as they are in PIN clinics. The models would change somewhat, but the principles would remain the same. We need to get smaller clinics involved, as well as other unattached or unengaged clinics. We need to make sure the standard of care is the same so as not to give advantages to group practices. Smaller practices do not have the relationship with the region and are not forced to do the quality things that PIN sites do. PIN should support the entire spectrum of the practice of family medicine, e.g., personal care, working in hospitals, emergency rooms, palliative care, home care, etc. It does not support these things right now, but family doctors are actively engaged in these areas. <p>Measuring outcomes</p> <ul style="list-style-type: none"> From my perspective, the thing I would like to see is the physicians going to the next step. This would involve ordering the lab tests and also looking at the values, so that they are making a difference in their patients' care. The physicians are doing the preventive things, but there is no way to measure these outcomes yet. <p>IT</p> <ul style="list-style-type: none"> Maybe we need a standardized platform for EMRs to measure the data we need. <p>Approach</p> <ul style="list-style-type: none"> PIN should help with change management, but it is a matter of the way people look at their practice and how they practice medicine. For example, individual versus group practice. How do you get individual practitioners to work with others? It is a paradigm shift.

Table 6: Region stakeholder descriptions of major issues in primary health care	
Subject	Theme
Access to care	Allied health care professionals <ul style="list-style-type: none"> • Access to care is one of the main goals of PIN. The clinics that have had the most success here are those which have hired AHCPs to support their practices.
Quality of care	Paradigm shift <ul style="list-style-type: none"> • FFS physicians have traditionally focused more on volume (quantity) than on quality of care. PIN is taking the FFS model and changing the focus to quality of care.
Information	IT infrastructure <ul style="list-style-type: none"> • The transition from paper to electronic charts can be a challenging process. Depending on the EMR, setting up PIN can also be cumbersome. • There is an increasing interest in EMRs in Winnipeg. Currently, EMRs are more common in rural areas.
Political environment	Collaboration and engagement <ul style="list-style-type: none"> • Before PIN, there was much less of a relationship between FFS physicians and the provinces/RHAs. PIN has emphasized a more team-based approach, which seems to have been successful. Physicians, RHAs, and MH are working together to address issues and review the PIN initiative for improvements. • In general, the dialogue between FFS physicians and the RHAs has improved. There is a mix of formal communication (periodic meetings), and informal communication (physicians discussing how to increase the efficiency of their practices and deliver higher quality care).

Appendix B – Post-intervention interview guides

Physician Integration Network: Evaluation Clinic Administration Interview Guide

Thank you for participating in this interview for the evaluation of the PIN initiative. The interview questions are similar to those answered previously. Comparing answers from before and after the implementation of PIN will help us identify the strengths and weaknesses of the initiative and the factors affecting implementation.

1. Why is your clinic participating in the PIN initiative?
2. What was the initial physician response to participating in the initiative? What is their response to the initiative now?
3. What are the issues you think the PIN initiative has addressed? Are these the issues you expected PIN to address?
4. Prior to PIN implementation, what reservations did you have about participating? Do you still have those reservations? What reservations do you have now about the initiative?
5. What do you think the PIN initiative has achieved? Is this what you anticipated? Have there been any unintended consequences, positive or negative, of the PIN initiative?
6. What are the strengths of the initiative?
7. If you could change the initiative, what would you change?
8. What has been the financial impact of the initiative on your clinic?
9. Describe any change in your clinic that has occurred as a result of the initiative. Please use examples if possible.
10. What impact has this initiative had on your role/workload?

Thank you for your time.

Physician Integration Network: Evaluation Physicians Interview Guide

Thank you for participating in this interview for the evaluation of the PIN initiative. The interview questions are similar to those you answered previously. Comparing your answers from before and after the implementation of PIN will help us identify the strengths and weaknesses of the initiative and the factors affecting implementation.

1. Why are you participating in the PIN initiative?
2. What are the issues you think the PIN initiative has addressed? Are these the issues you expected PIN to address?
3. Prior to PIN implementation, what reservations did you have about participating? Do you still have those reservations? What reservations do you have now about the initiative?
4. What do you think the PIN initiative has achieved? Is this what you anticipated? Have there been any unintended consequences, positive or negative, of the PIN initiative?
5. What are the strengths of the initiative?
6. If you could change the initiative, what would you change?
7. What effect do you think the initiative has had on your work/life balance?
8. Describe any change in your practice that has occurred as a result of the initiative. Please use examples if possible.
9. What has been the financial impact of the initiative on your clinic or your practice?
10. How feasible will it be to implement this approach in other clinics in Manitoba? What lessons learned from the pilot phase could help guide PIN implementation in other clinics?

Thank you for your time.

Physician Integration Network: Evaluation RHA Executives Interview Guide

Thank you for participating in this interview for the evaluation of the PIN initiative. The interview questions are similar to those answered previously. Comparing answers from before and after the implementation of PIN will help us identify the strengths and weaknesses of the initiative and the factors affecting implementation.

1. What do you think about the PIN initiative? Why do you say that?
2. What are the issues you think the PIN initiative has addressed? Are these the issues you expected PIN to address?
3. Prior to PIN implementation, what reservations did you have about clinic(s) in your RHA participating? Do you still have those reservations? What reservations do you have now about the initiative?
4. What do you think the PIN initiative has achieved? Is this what you anticipated? Have there been any unintended consequences, positive or negative, of the PIN initiative?
5. What are the strengths of the initiative?
6. If you could change any aspect of the initiative, what would you change?
7. What effect has the initiative had on the relationship between your RHA and the participating clinic(s)? How about the relationship between you and other primary care physicians in the region?
8. What has been the financial impact of the initiative for PIN sites in the region?
9. How feasible will it be to implement this approach in other clinics in Manitoba? What lessons learned from the pilot phase could help guide PIN implementation in other clinics?
10. Do you feel that your region was sufficiently involved in the planning and implementation of the initiative? If not, please explain.

Thank you for your time.