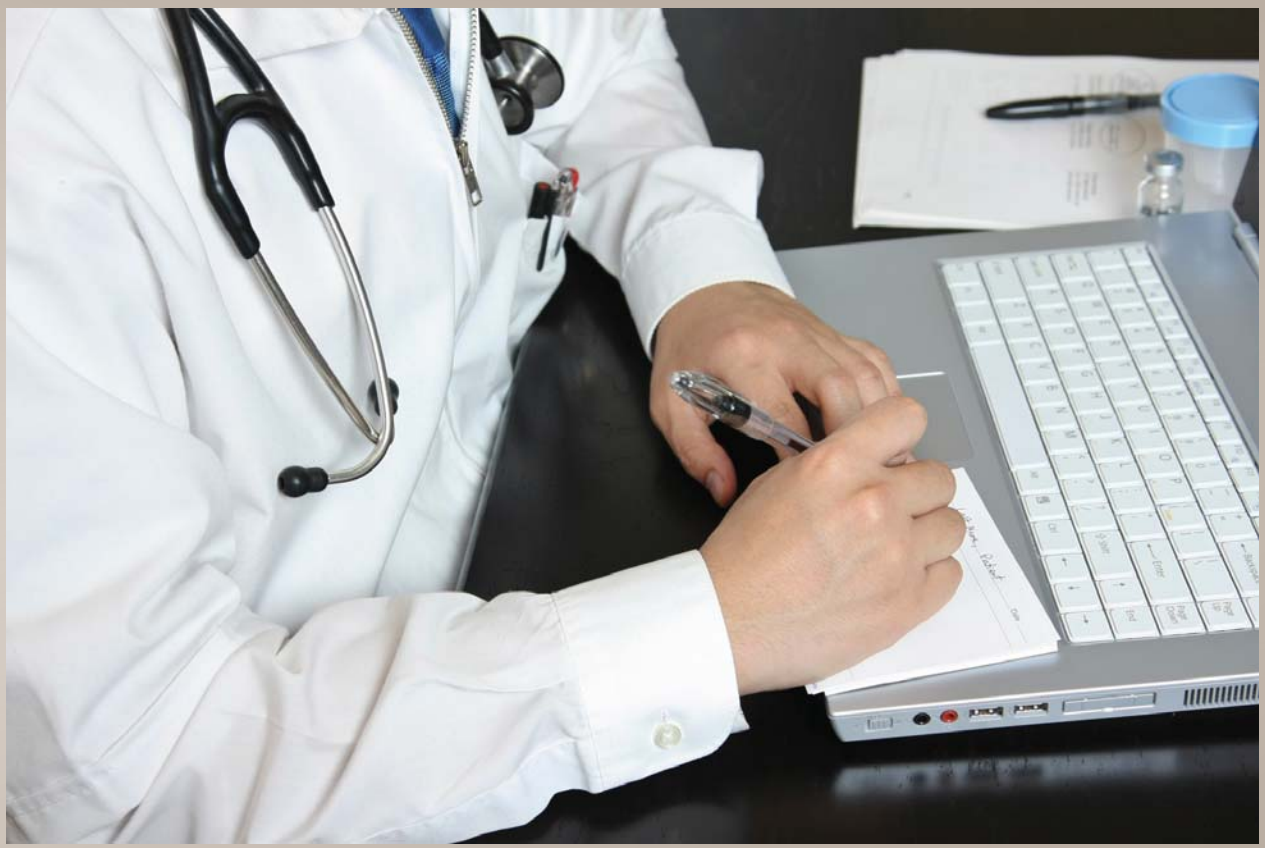

RENEWING PRIMARY CARE IN MANITOBA

A summary of the report Physician Integrated Network: A Second Look by Alan Katz, Dan Chateau, Bogdan Bogdanovic, Carole Taylor, Kari-Lynne McGowan, Leanne Rajotte, and John Dziadek

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Collaborating for high-quality primary care

Primary care clinics are busy places. A family doctor may see up to 30 patients a day, each with different needs. Because primary care is such a key part of our healthcare system, governments across the country are working with healthcare providers to make it as effective as possible. Manitoba is no exception. The government has put considerable effort into collaborating with the hundreds of primary care doctors who practice throughout the province to help improve primary care.

Primary care is an especially complex area of healthcare. This makes bringing about change very challenging.

One way of doing this is through the Physician Integrated Network, or PIN. This program works with fee-for-service clinics (where doctors are paid for each service they provide, rather than a salary) to find ways to improve the care they provide, with a focus on prevention and care for chronic conditions such as heart disease, diabetes, asthma, and depression.

This report from the Manitoba Centre for Health Policy (MCHP) looks at the progress PIN is making towards one of its four objectives: to see whether the clinics are delivering high-quality primary care. Specifically, researchers studied the impact of the financial incentive or "pay for performance" part of the program. Clinics participating in PIN receive extra funding if they meet certain targets in providing high-quality preventative and chronic disease care to appropriate patients. The targets — such as having two-year-old children up-to-date with their immunizations — are hallmarks of good primary care. Clinics then use the bonus funding to further improve their practices.

To show a "PIN effect" -- an improvement that is likely due to the program -- an indicator had to show better results over time in PIN clinics than in shadow practices.

What the study did

This report builds on our 2010 study of PIN's first year, 2007 to 2008, when four clinics with a total of about 80 doctors joined Phase 1 of the program. That report looked mainly at the clinics' use of electronic medical records, which allow clinics to track how they are doing on the quality-of-care targets. Since then, PIN has grown and enough time has passed that we can begin to explore the impact of other parts of the program. With the addition of Phase 2 (2008 to 2010), we're able to include data from ten more clinics, for a total of 14 clinics, about 170 doctors, and more than 160,000 patients (see Table 1).

For this study, we used administrative data stored at MCHP, such as immunization records and doctors' billing claims for treating patients. All records at MCHP have names and other identifiable information removed to protect confidentiality.

Researchers looked at data on 23 indicators used to measure the quality of primary care. They fall into three categories:

- prevention and screening (for example, do patients aged 65 years and older get a flu shot every year?)
- disease management (do patients with diabetes get eye tests regularly?)
- healthcare delivery (do patients typically see the same doctor for their care?)

In the first two groups, most of the indicators are connected to incentive funding and help us see the impact of that part of the program. The third group of indicators, healthcare delivery, has two purposes: Some are about good service delivery in primary care. And others help us see if the incentive funding has led to unintended changes that might be the result of focusing too much on the things connected to the extra funding.

For each of the 23 indicators, we did several types of analysis:

- To see changes over time, we compared each PIN clinic to itself before the program. We compared the care patients received during a two-year period before PIN was implemented to a two-year period after the program started.
- We then compared those changes over time to virtual "shadow practices." These are groups of patients matched to each clinic's regular patients, accounting for age, sex, and urban or rural residence. Like a control group, the shadow practices showed us whether changes in the PIN clinics were actually related to PIN instead of to other changes going on in the healthcare system at the same time.

Table1: PIN Clinics and Locations by Phase

Phase	Clinic Name	Location
Phase 1		
	Agassiz Medical Centre	Morden
	Assiniboine Medical Clinic	Winnipeg
	Dr. C. W. Wiebe Medical Centre	Winkler
	Steinbach Family Medical Center	Steinbach
Phase 2		
	Altona Clinic	Altona
	Centre Médical Seine Inc.	La Broquerie
	Centre Médical Seine Inc.	Lorette
	Centre Médical Seine Inc.	Ste Anne
	Clinique St. Boniface Clinic	Winnipeg
	Concordia Health Associates	Winnipeg
	Prairie Trail Medical Clinic	Winnipeg
	Tuxedo Family Medical Centre	Winnipeg
	Virden Medical Associates	Virden
	Western Medical Clinic	Brandon

To show a "PIN effect" — an improvement that is likely due to the program — an indicator had to show better results over time in PIN clinics than in shadow practices.

We also analysed two more years of data (2011 and 2012) for the Phase 1 clinics to see if the clinics maintained or further improved their earlier positive changes.

Table 2: Prevention and Screening Indicators

Study Indicators	Incentive Funding	PIN Effect
Breast cancer screening	✓	No
Complete immunizations at age 2	✓	No
Annual influenza immunizations		
Older adults aged 65+	✓	Yes
People with total respiratory morbidity		Yes
Pneumococcal immunization	✓	Yes

What we learned

Across the 23 indicators, we found many encouraging improvements. Tables 2, 3 and 4 list all the indicators, check-marked if they have incentive funding and with an indication if they showed a PIN effect. Some indicators had mixed results; they improved for some clinics more than for their shadow practices, but other clinics had no change or got worse.

Three indicators connected to the incentive funding showed a strong, positive PIN effect:

- The rate of annual flu shots (influenza immunization) increased for two groups of patients: older adults (aged 65 and up) and people with respiratory illness such as asthma or emphysema.

Table 3: Disease Management Indicators

Study Indicators	Incentive Funding	PIN Effect
Congestive Heart Failure Management		
Initiation of drug treatment	✓	Yes
Persistence of drug treatment		Yes
Depression Care	✓	No
Diabetes Eye Examination	✓	No
Post Myocardial Infarction Management Beta-Blocker		
Initiation of drug treatment	✓	No
Persistence of drug treatment		No
Post Myocardial Infarction Management Cholesterol lowering		
Initiation of drug treatment		No
Persistence of drug treatment		No
Asthma Care	✓	No
Benzodiazepine Prescribing		No

- The rate of older adults being immunized for pneumococcal disease (a cause of pneumonia and other infections) also increased.
- More patients with congestive heart failure started taking medication recommended for this chronic condition.

Continuity of care (a healthcare delivery indicator) also showed a PIN effect. Increasing the number of patients who get most of their care from one doctor is a goal of primary care — and of PIN — because patients often have better outcomes when they have one person managing their care.

Another healthcare delivery indicator showed a positive change, but in a different way. Electrocardiograms (EKGs) are only recommended for people with signs of heart disease. So we looked at the percentage of patients who didn't have heart disease but did have an EKG shortly after a regular check-up. In this case, a decrease is positive, and we found good news here: the use of routine EKGs decreased in most of the PIN clinics but not in the shadow practices.

Table 4: Healthcare Delivery Indicators

Study Indicators	Incentive Funding	PIN Effect
Continuity of Care		
Assigned Physician		Yes
Provided by any Physicians in PIN Clinic		No
Routine Electrocardiographs		Yes
Hospital separations for ambulatory care sensitive conditions		No
Referral rates		
Assigned Physician		Yes
Clinic Based		Yes
Total		No
Smoking Cessation Prescription		No

Understanding the study findings

For the rest of the indicators and for the other types of comparisons, the patterns were not as clear. Does this mean that PIN isn't working? Not necessarily.

Primary care is an especially complex area of healthcare, and this study was limited to looking at one part of a multifaceted program. Many factors can affect the rates of each indicator in the study. We addressed some factors by accounting for differences among patients where we could. But we couldn't account for all the factors that influence care. Some indicators had as few as 10 eligible patients in a clinic, meaning those doctors had few opportunities to provide those services. When a doctor sees many patients for a particular service, it's easier for recommended care to become routine. Immunizations are a good example: the number of patients eligible for the immunization indicators in this study ranged from about 1,000 to 8,000, depending on the size of the clinic. And these indicators mostly showed a positive PIN effect.

In fact, the best results in this study were for the prevention and screening indicators. This suggests that primary care providers are paying more attention to prevention, an important and appropriate shift in the focus of care.

Other changes may be happening in ways we can't measure with the type of data available for this report. While we did learn what sort of patients received which services, we don't know if doctors recommended other services that their patients chose not to receive. We would need data from surveys or other types of studies to find out about this. It could also be that PIN will show even stronger effects in the future. Change often takes time.

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A window on primary care

This study provides rich information about the PIN initiative to improve primary care in Manitoba, including what worked and what needs tweaking. For instance, our findings suggest that the quality of some aspects of primary care is not as good as it should be. One concern is that in both the PIN clinics and shadow practices only 50% to 80% of two-year-old children had received all the immunizations recommended and fully covered in Manitoba.

We also found some striking differences among clinics, such as dramatically lower or higher rates of referring patients for routine EKGs (lower rates are better). Variations like this can point to opportunities to improve the delivery of care.

The report provides this kind of bigger picture, for both the individual clinics and the system as a whole, and it will be a valuable resource as PIN continues to evolve. Through a broader initiative called My Health Teams, Manitoba Health is building on the knowledge gained through PIN and other programs to continue transforming primary care in the province.

The Manitoba Centre for Health Policy at the University of Manitoba's College of Medicine, Faculty of Health Sciences, conducts population-based research on health services, population and public health and the social determinants of health.

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