

Alberta Health Primary Care Networks

October 2017

About This Audit

The Primary Care Network (PCN) program is a key initiative funded by the Department of Health. The purpose of this audit was to follow up on the findings and recommendations of our initial audit of the PCN program, reported in July 2012. The focus of our 2012 audit was to determine whether the department and Alberta Health Services (AHS) had adequate systems in place to manage the PCN program.

The department launched the PCN program in 2005. By April 2017, there were 42 PCNs operating across the province. PCNs have approximately 3,800 family physician members and employ over 1,400 full-time-equivalent non-physician healthcare providers to deliver primary care services to 3.6 million Albertans. The department expects to pay PCNs a total of \$240 million in 2017–2018 and has provided over \$1.5 billion in direct funding to PCNs since the program began.¹

A PCN is created by a joint venture agreement between Alberta Health Services and the physician members of the PCN. Historically, AHS and the former regional health authorities had little operational contact with the practice of primary care by family physicians in the community. Before PCNs, there was no formal mechanism for AHS and physicians to jointly plan and coordinate the delivery of primary care. One of the goals of the PCN program was to help improve this integration.

Patient Medical Home

PCNs comprise groups of family physicians working with other healthcare professionals such as nurses, nurse practitioners, dietitians, pharmacists, social workers and mental health professionals. The department's overarching goal for the PCN program is to help primary care in Alberta transition to a patient medical home model of care.²

The patient medical home features a multidisciplinary care team working with one or more family physicians to provide comprehensive primary care to a defined panel of patients. It functions as a patient's "home" in the healthcare system because it provides continuity of care over time, and care coordinators help patients move through other parts of the healthcare system including acute and continuing care.³ It is the foundation of the Alberta Primary Health Care Strategy released in 2014, and it is endorsed by the College of Family Physicians of Canada, the department and PCNs.

It is important to understand the PCN program in the context of primary care as a whole in the province. The department provides PCNs with annual funding of \$62 for each patient that the department attributes to a physician member of the PCN, or between \$62,000 and \$93,000 for an average physician patient panel of 1,000 to 1,500 patients.⁴ After paying basic administration costs, PCNs generally have funding for less than one full-time-equivalent multidisciplinary care provider per physician, as borne out by the

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¹ These amounts exclude PCN program administrative costs incurred internally by the department and AHS. The costs of the PCN program do not include the \$1.5 billion the department expects to pay as compensation to primary care physicians in 2017–2018, or the \$2.4 billion AHS expects to spend on community-based care, promotion and prevention, and home care services.

² See http://aimalberta.ca/index.php/why-work-with-aim/patients-medical-home/.

³ In the United States, both private insurers and publicly funded programs are demonstrating that patient medical homes are achieving significant improvements in cost, utilization, population health, prevention, access to care, and patient satisfaction relative to non-medical home care. See for example *The Medical Home's Impact on Cost & Quality: An Annual Update of the Evidence, The Patient-Centered Primary Care Collaborative*, 2014, Executive Summary, page 6.

⁴ From 2005 to 2011, PCNs received funding of \$50 per patient allocated to member physicians. In 2012, PCN per capita funding was increased to \$62.

current overall ratio of less than one multidisciplinary team member for every two PCN physicians. This ratio is lower than evidence suggests as best practice for a patient medical home.⁵

The department's own analysis shows that a patient medical home generally functions most effectively when care teams work in clinics with a ratio of three or more multidisciplinary care providers per physician, with five or more physicians in the clinic.⁶ The PCN program is meant to help primary care evolve toward the patient medical home model by introducing multidisciplinary care providers into family physician practices and promoting patient engagement and quality improvement.⁷

PCN Challenges and Opportunities

PCNs face challenges. Physician membership in PCNs is voluntary, meaning not all family physicians are members of a PCN, and physicians can withdraw at any time. Moreover, family physicians and patient populations are not homogeneous—practice sizes range from sole practitioners to large, multi-physician clinics,⁸ and the extent to which they use technology such as electronic medical records varies widely.⁹ Patient populations range from high-density urban centres to small communities and rural areas, with diverse local needs.

Introducing care teams into practices where family physicians have traditionally been the sole provider, and engaging patients to be active participants in their care, are adaptive challenges that require learning and changes in behaviour. In addition, family physicians have practical limitations in terms of their ability to effectively add part-time team members (e.g., one day per week) to practices that operate on a full-time basis.

To meet these challenges, many PCNs have adopted a "hub-and-spoke" or "hybrid" model of care delivery, which involves creating one or more central locations with large, diverse care teams (i.e., hubs), with some distribution of care team members to individual clinics (i.e., spokes), and the opportunity for all clinics in the PCN to refer patients with complex primary care needs to a central location. PCN services (e.g., after-hours clinics, diabetes care, healthy living) are also centrally located in many cases, with patients referred to the central service by their physician.

A core strength and source of pride for PCNs has been their ability to provide "local solutions for local needs." At the same time, the geographic dispersion of PCNs and the lack of a coordinating governance structure across PCNs created challenges in standardizing services and spreading innovation.

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⁵ Wranik and Hanrahan, Alberta Health, *The Compensation and Management of Interdisciplinary Primary Health Care Teams in Alberta*, 2012, pages 36–39.

⁶ See our September 2014 report, *Chronic Disease Management*, page 20.

⁷ Other initiatives designed to promote patient medical homes in primary care include the Crowfoot Village Family Practice in Calgary, the Taber Clinic in southern Alberta, and the plan by the department and Alberta Medical Association to launch five blended capitation pilot clinics in 2017, followed by 10 more pilot clinics in 2018.

⁸ We examined physician claims data for 2015–2016 and found that more than half of PCN physician clinics have only one or two family physicians, including approximately one-third of PCN clinics where physicians are sole practitioners.

⁹ Alberta Medical Association, PCN Evolution—Final Report: April 1, 2014 to March 31, 2016, March 2016, page 12.

¹⁰ Alberta Health, Alberta Primary Health Care Strategy, 2014, page 5.

PCN Governance Structure

In June 2017, PCNs and PCN physicians ratified a new PCN governance structure proposed by the department. The new structure consists of five PCN zone councils that will serve as forums for PCNs and AHS to collaborate in joint planning of primary care services in each zone through the creation of zone service plans that will provide direction to the individual PCN business plans in the zone.¹¹

A PCN Provincial Committee will consolidate the work of the zone councils and act as liaison in bringing primary care issues to the minister's attention. ¹² Through the Provincial Committee and zone councils, the minister and the department will also be able to communicate their priorities and expectations to the PCNs. See Appendix C.

The department plans to expand the new governance structure to bring other providers who are closely related to primary care into a joint primary care planning process (e.g., AHS Mental Health services and AHS Home Care services). The department has indicated it may distribute a portion of federal funding for mental health and home care to PCNs. The new governance structure also provides opportunity to shift PCN funding from the current per capita allocation method to a population-based model that considers local health needs.¹³

Audit Objective and Scope

The objective of our follow-up audit was to determine whether the department and AHS have implemented our five previous recommendations on the PCN program.

In 2012, we recommended that the department improve its systems to:

- establish clear expectations and targets for each of its PCN program objectives, and develop systems to evaluate and report performance of the PCN program
- proactively inform Albertans which PCN they have been allocated to for funding purposes, and what services are available through their PCN
- provide information and support to help PCNs and Alberta Health Services achieve PCN program objectives
- obtain assurance that PCNs are complying with the financial and operating policies of the PCN program, and ensure PCN surplus funds are used in a timely and sustainable manner

In 2012, we also recommended that AHS, within the context of its provincial primary care responsibilities, improve its systems to define goals and service delivery expectations for its involvement in PCNs, define performance measures and targets, and evaluate and report on its performance as a PCN joint venture participant.

¹¹ There are five zones in the province (North, Edmonton, Central, Calgary and South), corresponding to the divisions AHS uses to manage many of its services.

¹² Zone council members include the AHS senior zone lead, PCN zone physician lead, a patient/community representative, and one or more other members to be determined. PCN Provincial Committee members include five department representatives, the five AHS senior zone leads and five PCN zone physician leads, two AHS Primary Health Care representatives, and one AMA PCN Program representative.

¹³ PCN Physician Leads Executive, PCN Governance Framework—Frequently Asked Questions, June 2017, page 6.

What We Examined

Our examination included interviews with management and staff members of the department, AHS, and the Health Quality Council of Alberta. We reviewed the business plans and annual reports of all 42 PCNs for the 2015–2016 fiscal year, and information from various other sources for 2016–2017 as indicated in our report. We also analyzed data on physician claims and PCN funding allocations for the 2015–2016 year. We conducted our field work between December 2016 and May 2017, and substantially completed our audit on June 30, 2017.

We did not audit the work of family physicians or individual PCNs. We met with management from eight PCNs to understand their business operations, systems and perspectives on PCN effectiveness. We did not audit systems at the PCN Program Management Office, but we met with management to understand their role and perspective on PCN accountability.¹⁴

As part of this audit, we did not audit or verify the completeness or accuracy of information that PCNs report to the department, and we did not assess whether the patient or service data in the information systems of the department, AHS or the PCNs is complete or accurate.

Our work was conducted under the authority of the *Auditor General Act* and in accordance with the standards for assurance engagements set out in the CPA Canada Handbook—Assurance.

Conclusion

In our opinion, the department, AHS and PCNs, collectively, have taken sufficient action for us to conclude that, as of June 30, 2017, the department had implemented our four recommendations to improve its systems to manage the PCN program, and AHS had implemented our recommendation to improve its systems to measure and report the effectiveness of its partnership in PCNs.

In the past five years, the department, AHS and PCN physicians have worked together to make important progress in the PCN program. They have built a more effective governance structure for the program, advanced patient-physician relationships through formal attachment, improved the information and technical supports available to individual PCNs, and strengthened financial management and controls. These actions meet the underlying intent of our 2012 recommendations. However, the healthcare sector's understanding and awareness of how PCNs, and primary care in general, should evolve has also progressed considerably since 2012. The department, AHS and physicians recognize that more work is needed to fulfill the objectives of the PCN program. To help the department and PCNs continue to advance the program in a structured and timely manner, we are providing two new recommendations:

 We recommend that the department, through its leadership role in the PCN governance structure, work with the PCNs and PCN physicians to agree on appropriate targets for each PCN program performance measure, require PCNs to measure and report results in relation to the targets, and develop a formal action plan for public reporting of PCN program performance.

¹⁴ The Program Management Office is funded by the department and administered by the Alberta Medical Association. Its main role is to assist PCNs in preparing their business plans, budgets and annual reports.

¹⁵ Key directional documents include the *PCN Evolution Vision and Framework* in 2013, the *Alberta Primary Health Care Strategy* in 2014, Toward Optimized Practice's *Guide to Panel Identification* in 2014, and the four new objectives for the PCN program developed in 2016.

 We recommend that the department, through its leadership role in the PCN governance structure, require PCN physicians to complete the established patient attachment process, set appropriate timelines for completing this process, and agree on the best approaches for engaging Albertans as active participants in their own care and explaining the PCN services available to help them achieve their health goals.

Why this Conclusion Matters to Albertans

Effective primary care is the foundation of a high-performing healthcare system. It is critical for preventing acute illness and effectively and efficiently managing chronic disease. By focusing on health promotion and disease prevention, primary care can help to identify illness at its onset and minimize its severity. Effective primary care can improve health outcomes and reduce the demand on more expensive services such as hospitals, emergency departments and long-term care facilities.

PCNs can contribute to advancing primary care by helping family physicians to build teams of healthcare providers and apply evidence-based good practices at the point of care. PCNs can help integrate family physicians with AHS in the delivery of primary care, and can be a vital link connecting family physicians and care teams with patients, specialists and researchers.

PCNs have increasingly demonstrated their potential to drive improvement in primary care and the healthcare system as a whole. The significance of the PCN program to the healthcare system underscores the importance of setting clear objectives and performance measures for the program and reporting on results achieved.

Effective primary care is the foundation of a high-performing healthcare system.

Findings and Recommendations

PCN program evaluation—recommendation implemented, with new recommendation for further action

Context

At the inception of the PCN program, the department established five key program objectives:

- Access—increase the proportion of Albertans with ready access to primary care.
- 24/7 care—provide coordinated 24-hour, 7-days-per-week management of access to appropriate primary care services.
- Prevention and chronic disease management—increase emphasis on health promotion, disease and injury prevention, and care of patients with complex health conditions and chronic diseases.
- Integration—improve coordination and integration with other healthcare services, including hospitals and long-term care, through specialty care links to primary care.
- Team-based care—facilitate greater use of multidisciplinary teams to provide comprehensive primary care.

In 2016, the department defined four new objectives for the PCN program that are consistent with, and build upon, the initial objectives:¹⁶

- Accountable and Effective Governance
- Health Needs of Community and Population
- Patient Medical Home
- Strong Partnerships and Transition of Care

Performance measurement is necessary to understand the extent to which PCNs are achieving these objectives. Performance measurement is important at three levels:

- a) Individual family physicians and clinics: performance measurement helps providers understand the quality of the services they are providing. Evaluation helps identify opportunities for improvement and see whether changes are improving service delivery. The point of care is arguably the most important level at which performance measurement needs to occur because it has the most direct impact on patient outcomes.
- b) PCNs: performance measures help managers and providers understand the value of PCN services. This informs quality improvement efforts and resource allocation decisions and helps form the basis of accountability for achieving the results expected by the department and PCN patients.
- c) The department: the department needs the cumulative performance measure results from physicians and PCNs to assess the extent to which the PCN program is achieving its objectives on an overall basis. Performance measures supply the information the department needs to demonstrate accountability for the results achieved for the public investment in this program. Publicly reported performance can also help patients make informed choices about services that may benefit them and understand how the quality of the services they receive compares with services offered by other providers.

¹⁶ The new objectives were formally endorsed by the PCN Committee established under the PCN Consultation Agreement, which is an element of the master agreement between the department and the Alberta Medical Association. The Committee is chaired by the department, with five representatives from the AMA's PCN Physician Lead Executive, three representatives from AHS, and two additional representatives from the department.

Our 2012 audit revealed that the department had not set service delivery expectations, performance measures or targets for any of the PCN program objectives. The department and AHS had each done work on performance evaluation, but the work was fragmented and did not constitute an adequate performance evaluation system for the program. For example, the department's annual report provided the public with only basic statistics on the number of PCNs in the province, the percentage of Albertans allocated to a PCN physician for funding purposes, and the percentage of family physicians who are members of a PCN.

In 2012, no standardized information was required or generated across PCNs to provide the basis for program-wide analysis. Many PCNs were working to develop their own evaluation systems to manage their clinical programs. As a result, there were multiple different PCN systems that did not share common performance measures and rarely had targets. We also noted that individual PCNs were expending significant effort to develop performance measurement systems on their own, because there were limited channels for collaboration with other PCNs.

We recommended that the department establish clear expectations and targets for each of the PCN program objectives, and develop systems to evaluate and report performance of the PCN program.

Criteria: the standards of performance and control

The department should:

- provide clear objectives for PCNs, and review and approve additional objectives that may be proposed by the PCNs if they will help achieve the department's goals
- provide or approve performance measures and targets for each objective of the PCN program. Measures and targets should be:
 - clearly linked to funding provided for key programs and services to be delivered by PCNs
 - specific, meaningful, reasonable and, where possible, focused on patient outcomes
 - used to report publicly on the overall performance of PCNs for funds spent, including outputs and, where possible, improvements in patient outcomes

Our follow-up audit findings

Key Findings

- Some individual physicians and PCNs have made significant progress in measuring their performance, but these advancements are not consistent across the province.
- The department has established nine key performance measures for PCNs, with three intermediate measures to assess PCNs' progress toward reporting the nine key measures.
- Results reported by PCNs in 2015–2016 show wide variation in physician participation in the three intermediate measures for access, screening and patient satisfaction.
- The department has not set measurable targets for each PCN performance measure and does not report publicly on the extent to which PCN program objectives are being achieved.

Physician-level performance measurement

Performance measurement by individual PCN physicians has advanced considerably since our audit in 2012.¹⁷ Our follow-up audit found many instances where physicians have identified their patient panels and work with care coordinators to make advanced use of electronic medical record (EMR) systems to improve patient care. These EMR systems also collect and report the information that physicians and care teams use to assess the quality of care they are providing.

As we noted in two of our previous reports, there are at least 16 different EMR systems used in primary care in Alberta, and their features and how individual physicians and care teams use these features vary widely. Over 10 per cent of family physicians still use paper records. Lack of a unified provincial approach to adoption and optimization of EMRs remains a formidable barrier because performance measurement at the PCN program level requires accumulating the detail for each measure from individual physician records.

PCN-level performance measurement

Our review of PCN annual reports for 2015–2016 found that many PCNs have developed systems to measure the volumes and quality of their services (e.g., after-hours clinics, mental health counselling). For example, several PCNs use patients' self-reported health status before and after treatment to determine whether a particular PCN service is effective. In other cases, PCNs are able to cost their services at an individual-patient level to help inform resource allocation decisions, and some use data from AHS to assess the impact PCN services are having on patients' total healthcare utilization.²⁰ At least two PCNs collect information from physicians to provide them with feedback on their performance relative to other physicians in the PCN—a valuable approach for identifying and promoting good practices.²¹

These are notable accomplishments, in some cases reaching levels of sophistication achieved by the highest-performing healthcare systems in the world.²² However, much work remains to be done to sustain this momentum and bring the majority of PCNs to this level.

¹⁷ Performance evaluation in the PCNs has been led by individual physicians, care teams and PCN managers. They have been supported in this work by the Health Quality Council of Alberta, the PCN Program Management Office, the Toward Optimized Practice (TOP) program funded by the department and administered by the AMA, the Access Improvement Measures (AIM) program administered by AHS and the AMA, the Physician Learning Program administered by the AMA in collaboration with the University of Alberta and the University of Calgary, the AHS-sponsored Measurement Capacity Initiative (MCI), AHS's Data Integration and Management Reporting (DIMR) unit, AHS's Primary Health Care Portfolio at the provincial and zone levels, academics and researchers from Alberta universities, and others.

¹⁸ Differences include the extent to which EMR systems provide, and physicians use, clinical decision support tools at the point of care, alerts and reminders for recommended care, and performance reports. See our May 2017 report, *Better Healthcare for Albertans* (page 45–46), and our September 2014 report, *Chronic Disease Management* (pages 37–40).

¹⁹ Commonwealth Fund Survey 2015, data table Q24. See https://www.cihi.ca/en/commonwealth-fund-survey-2015.

²⁰ More than a dozen PCNs have participated in the Measurement Capacity Initiative sponsored by AHS, which allows PCNs to access AHS's data to better understand their patients' use of other healthcare resources (e.g., hospitals and emergency departments). AHS's Data Integration and Management Reporting (DIMR) unit has advanced expertise in data collection and analytics and is now working with at least two PCNs to develop new insights and help plan PCN services. For example, DIMR assigns Clinical Risk Groups to every individual in the population based on their historical clinical and demographic characteristics and the projected amount and type of healthcare resources they will consume. PCNs and PCN physicians can now start to use this information for purposes ranging from optimizing physician panel sizes to allocating care team resources across the PCN.

²¹ Agency for Healthcare Research and Quality, Confidential Physician Feedback Reports: Designing for Optimal Impact on Performance, March 2016, page 4. The HQCA's PCN and physician panel reports also provide comparative information to help physicians understand their performance and patient outcomes relative to other PCNs and the province as a whole.

²² We noted several high-performing healthcare systems, and the results they achieving, in our May 2017 report Better Healthcare for Albertans. These systems included the U.K. National Health Service, and Kaiser Permanente and Intermountain Healthcare in the United States.

Department-level performance measurement

The department has defined performance measures for the PCN program but has not set targets for these measures. PCNs are not yet measuring and reporting performance information on a consistent and complete basis. As a result, the department is not able to demonstrate the extent to which its objectives for the PCN program are being achieved.

In consultation with the PCNs and AHS, the department has established nine performance measures for the PCNs, together with intermediate measures to track physician participation in monitoring three of these measures.²³ The nine performance measures are generally accepted as appropriate for primary care and align with key pillars of the patient medical home model of primary care. Developing the systems and processes to capture and report these performance measures will help PCNs monitor additional measures in future.

For 2015–2016, the department required PCNs to report three intermediate measures—physician participation in measuring access, offering recommended screening tests and surveying patient satisfaction.²⁴ Although full participation by physicians is the department's implied objective, it has not set targets for participation rates or timelines for achieving them.

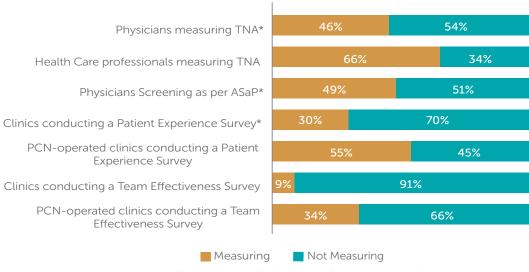
The department has also not set targets for the nine performance measures themselves (e.g., what screening rates should be). Targets will require collaboration with the medical profession to ensure they are appropriate and reasonable. Benchmarking results against medical guidelines and the achievements of high-performing healthcare systems in other jurisdictions will also help to ensure performance targets are meaningful and quantify the potential for improvement.

²³ See Appendix 1 for a list of the nine performance measures.

²⁴ Access is measured using a physician's third-next-available appointment time, i.e., the average length of time in days between an appointment request and the third available appointment. The "third-next-available" (TNA) appointment is considered a more accurate reflection of true availability than "next-available" because it is less affected by appointment cancellations. Screening tests include the 11 procedures recommended by the Alberta Screening and Prevention (ASaP) initiative developed by the Toward Optimized Practice program in collaboration with the Alberta Medical Association (e.g., breast, cervical and colorectal cancer screening).

Results to date

Our review of PCN annual reports for 2015–2016 found wide variation among PCNs in their participation in performance measurement, with individual clinics ranging from zero to 100 per cent. At March 31, 2017, the PCN Project Management Office's survey showed that overall participation in monitoring the key indicators was below 50 per cent for five of the seven measures, as shown below:



* one of the three intermediate indicators of participation in performance measurement

Source: PCN Evolution Report March 31, 2017, PMO, page 10

The wide variation in results between PCNs presents an opportunity for the department to improve performance measurement significantly overall by requiring all PCN physicians to move to the level achieved by the highest performers.

Public reporting

The department has not reported PCN performance information. Given the current rates of physician participation in measuring the key indicators requested by the department, it may be some time before PCNs as a whole are providing the information necessary for the department to report publicly.

There is potential for reports developed by the Health Quality Council of Alberta to form part of future reporting by the department on the effectiveness of the PCN program. The HQCA reports are currently used to help individual physicians, clinics, PCNs and AHS zones understand their performance relative to their peers and the province as a whole.

Conclusion

We recognize that the department has made a substantial effort to collaborate with PCNs and AHS to establish a performance measurement framework for the PCN program. We also recognize that individual physicians and PCNs have significantly advanced performance measurement at their respective levels. In our opinion, the intent of our 2012 recommendation has been met and the recommendation is implemented.

However, we have also concluded that significant work is needed to build on the accomplishments to date. A next step for the department will be to work with PCNs, PCN physicians and AHS to agree on reasonable targets for the program performance measures, and require PCNs to report results on a consistent and timely basis. The department also needs a formal action plan with defined responsibilities and timelines for reporting publicly on the extent to which PCNs are achieving program objectives. A key consideration for public reporting will be the level of detail at which performance information will be most meaningful (e.g., province-wide, by zone, or by PCN). The new PCN governance structure provides an opportunity for the department to take a strong leadership role in these areas.

RECOMMENDATION: Evaluate PCN effectiveness

We recommend that the Department of Health, through its leadership role in the PCN governance structure, work with the PCNs and PCN physicians to:

- agree on appropriate targets for each PCN program performance measure, and require PCNs to measure and report results in relation to the targets
- develop a formal action plan for public reporting of PCN program performance

Consequences of not taking action

Without adequate systems to measure performance, the department cannot evaluate the results of the PCN program to make informed decisions on what is working well in the program and what needs to improve. The department will also lack the information needed to report to Albertans on the results achieved for the significant public investment in this program.

Informing Albertans about their PCN—recommendation implemented, with new recommendation for further action

Context

In primary care, the concept of patient attachment is fundamental to establishing the doctor-patient relationship and the continuity of care flowing from that relationship.²⁵ Attachment involves a patient formally acknowledging that a particular physician is their primary physician.²⁶ Collectively, attached patients form a physician's patient panel.

²⁵ In some cases, a PCN physician may work in a walk-in clinic where the episodic nature of patient visits may make panelling less important. In other cases, physicians in small clinics may lack the EMR systems and support staff to facilitate panelling.

²⁶ The *Guide to Panel Identification for Alberta Primary Care* states that formal acknowledgement can be as simple as answering "Yes" to the question "Is Dr. X your family physician?" The guide was issued in April 2014 by a collaborative composed of the Toward Optimized Practice (TOP) program, the Access Improvement Measures (AIM) program, the Alberta College of Family Physicians, the Alberta Medical Association's Practice Management Program and Physician Learning Program, AHS, the PCN PMO, the HQCA, and the University of Alberta's Department of Family Medicine.

Patient attachment has several potential benefits:

- Attachment is the basis of patient-centred care and promotes continuity of care.²⁷ It helps physicians and care teams engage with patients on a one-on-one basis to understand their needs and preferences, and explain the services they need to help them meet their personal health goals over time.²⁸ Attachment is therefore foundational to the process of informing Albertans about the services their PCN provides.
- As attachment evolves, it can move beyond simple acknowledgement of the doctorpatient relationship to become the basis for agreement between the patient and their physician, helping patients understand the benefits of attachment and defining the reasonable expectations and responsibilities of both parties. For example, a physician and care team may offer to work with the patient to develop a care plan and provide treatment, and the patient will be expected to follow the plan.²⁹
- Attachment provides the foundation for panel management in primary care. Panel management is a structured process for monitoring the care needs of patients on the panel and proactively offering them care such as screening, testing or other services.³⁰ Attachment thus forms the basis for performance measurement and quality improvement by establishing the patient population for which each physician and PCN is responsible.
- Attachment is a prerequisite for participation in alternative physician compensation
 plans in primary care, such as blended capitation models where compensation is based
 on a clearly identified patient panel.³¹

The doctor-patient relationship has always been a cornerstone of primary care, but the concept of formal attachment is relatively new in Alberta. Physicians typically require two to three years to confirm their patient panel for the first time because it takes this long for all their patients to cycle through their office. The process must be ongoing to keep the panel current.

Historically, the department has funded PCNs on a per capita basis that tries to approximate the number of patients on the panels of the physicians in each PCN. The department allocates funding to a PCN based on patients' visits to the family physicians in that PCN over the previous three years. Our 2012 audit found that the department was not informing Albertans which physician it had allocated them to for funding purposes or which PCN that physician belonged to. Partly as a result, we found that general public awareness of the benefits and costs of PCNs was low. This also meant Albertans were not able to hold physicians or PCNs accountable for providing them with the services that PCNs were being funded to provide.

²⁷ College of Family Physicians of Canada, Best Advice—Patient-Centred Care in a Patient's Medical Home, October 2014, page 2.

²⁸ PCN Evolution Vision and Framework—Report to the Minister of Health, December 2013, pages 8 and 12, and Toward Optimized Practice, Guide to Panel Identification, April 2014, page 3.

²⁹ Toward Optimized Practice, Coordinated Approach to Continuity, Attachment and Panel in Primary Care, March 2014, page 2

³⁰ PCN Evolution—Evolving PCNs, December 2013, page 5, and Best Advice—Patient Rostering in Family Practice, College of Family Physicians of Canada, November 2012, page 4.

³¹ See footnote 6.

Our 2012 audit also found that the department was not informing physicians which patients it had allocated to them for PCN funding purposes. As a result, PCN physicians were not able to verify whether the department's funding process accurately reflected their patient panels. PCN physicians need to know which patients they are receiving funding for to properly plan the delivery of services and to be accountable for the results of those services. We also found that the department was not informing AHS which patients it had allocated funding for to each PCN—without this information AHS was not able to fully assist PCNs in service planning or evaluation.

We recommended that the department proactively inform Albertans which PCN they are allocated to for funding purposes and what services are available through that PCN. We also recommended the department provide information to help PCNs and AHS achieve program objectives by identifying the patients it had allocated to each PCN for funding purposes.

Criteria: the standards of performance and control

The department should clearly define the accountability relationships and reporting requirements for all parties involved in managing PCNs.

Our follow-up audit findings

Key Findings

- The department has set formal patient attachment as a PCN program objective and has provided guidance to PCN physicians to help them establish their patient panels.
- More than half of PCN physicians have established their patient panels or are actively working to do so.
- Some PCNs and PCN physicians inform their patients about PCN services and engage patients as partners in their own care, but these practices are not strong across all PCNs.

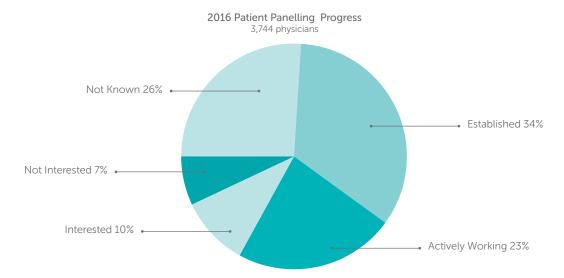
Patient attachment

The department has made patient attachment a priority. Since August 2014, the department has provided guidance through the Toward Optimized Practice program and the Access Improvement Measures program to help family physicians make attachment a reality.³² Attendees at TOP and AIM training sessions have included physicians, nurses, medical office assistants, panel coordinators and PCN staff. Over 3,000 participants from more than 80 per cent of PCNs have attended one or more sessions on panelling.³³

³² Several entities and programs are available to help PCNs and individual physicians with panelling, panel management, evaluation and quality improvement. In addition to TOP and AIM, both the PCN Project Management Office and the Health Quality Council of Alberta are actively involved in this area.

³³ In addition, 95 per cent of PCNs and over 200 participants have attended TOP and AIM improvement facilitation sessions, while 50 per cent of PCNs and more than 700 participants have attended workshops to optimize their use of electronic medical records.

As shown below, more than a third of PCN physicians have established their patient panels, and a further one-quarter of PCN physicians are actively working to do so:³⁴



Patient panels can also help form a more accurate and transparent basis for PCN funding than the current allocation method, and patient panels can be used as part of joint planning of primary care services by PCNs and AHS at the local, zone and provincial levels. The department also plans to use patient panels as a basis for measuring primary care quality.

The department is currently developing a central patient panel registry system. The purpose of this registry will be to help identify and resolve apparent duplication of individual patients on more than one physician panel, and to help inform population-based PCN funding and resource allocation decisions going forward. The department expects the system to be completed by December 31, 2017.

Unattached patients

The best way to manage the care of unattached patients is an open question. While some unattached patients may not require or want a family physician, others could clearly benefit from attachment. For example, our audit of chronic disease management in 2014 found there were over 490,000 Albertans who were not attached to a family physician, including more than 16,000 who were known to be suffering from one or more chronic diseases.

AHS is the default provider for unattached patients, but delivers care on an episodic basis and only when these patients come in seeking service. AHS indicated it would work with PCNs to help these patients become attached to a PCN physician in their community. However, the department's PCN review in 2016 found that only half of the PCNs reported having specific initiatives in place to connect unattached patients with one of their member physicians.³⁵

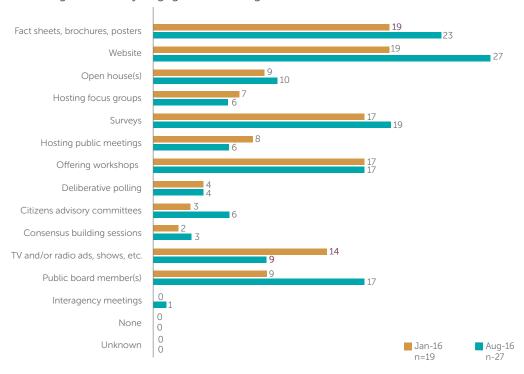
³⁴ Data from Toward Optimized Practice, *Building Capacity for Primary Care Transformation—Highlights Report*, March 2017, combined with April 2016 PCN funding data from the department.

³⁵ Alberta Health, Primary Care Networks Review, June 2016, page 7.

Public awareness of PCN services

We found that many PCNs are using various strategies to raise public awareness that they exist and to promote their services. However, discussions of PCN services must also take place at the individual-patient level if they are to be effective, and we do not see evidence that this is occurring on a widespread and consistent basis across the PCNs.

In 2016, the PCN PMO reported that a sample of PCNs indicated they were using the following community engagement strategies:



Source: PCN Evolution Report December 31, 2016, PMO, page 11

The department informed us it also plans to work with IMAGINE—Citizens Collaborating for Health to help Albertans understand patient attachment and health home concepts, and provide feedback to inform these processes going forward.³⁶

Conclusion

We recognize that the department has made substantial efforts to support PCNs in the formal patient attachment process as a foundation for patient medical homes and informing Albertans about the services available from their family physician and PCN. We also recognize that many individual physicians are engaging their patients through formal attachment, and PCNs are using various means to promote public awareness of their services. In our opinion, the intent of our 2012 recommendation has been met and the recommendation is implemented.

³⁶ IMAGINE is a not-for-profit initiative whose goals are to expand and enrich citizen participation in healthcare. See http://imaginecitizens.ca/.

However, we have also concluded that much work is needed to build on the accomplishments to date. A next step for the department will be to require PCN physicians to complete the established patient attachment process within an appropriate timeframe.³⁷ The basic panelling process (i.e., "is Dr. X your family physician?") also needs to be supplemented with information to help Albertans more fully understand the services that may be available to them through their patient medical home and their PCN.³⁸

The real challenge will not be simply telling Albertans what services are available, but engaging them as active participants in their own care and helping them understand the patient medical home and PCN services in that context.³⁹ This will require a cultural shift from patients seeing themselves as passive recipients of care to patients understanding they must accept responsibility for being active partners in generating better health outcomes for themselves.⁴⁰

The department, AHS, PCNs and physicians will need to help educate patients about their health conditions and risks, and the treatment options and lifestyle choices that will influence their health outcomes.⁴¹ Strategies will be required to increase patient participation in their own care—for example, through interactive discussions and providing patients with access to view and contribute to their personal health records.⁴² The new PCN governance structure provides an opportunity for the department to provide leadership in this area.

RECOMMENDATION: Informing Albertans about PCN services

We recommend that the Department of Health, through its leadership role in the PCN governance structure, work with PCNs and PCN physicians to:

- require PCN physicians to complete the established patient attachment process, and set appropriate timelines for completing this process
- agree on the best approaches for engaging Albertans as active participants in their own care, and explaining the PCN services available to help them achieve their health goals

Consequences of not taking action

If patients are not engaged to understand who their family physician is, what services are available through their patient medical home and their PCN, and how they can access those services, there is significant risk that key benefits of the PCN program will not be fully realized. As one PCN told us, "patients themselves are the largest untapped resource in primary care."

³⁷ The established process is described in TOP's Guide to Panel Identification for Alberta Primary Care (see footnote 26).

³⁸ As collaborative initiatives under the new PCN governance structure evolve, patients may also gain access to a broader "community" of primary care providers, including the services of other PCNs and AHS.

³⁹ Patient engagement is a key theme of our reports *Better Healthcare for Albertans* (May 2017) and *Chronic Disease Management* (September 2014).

⁴⁰ The Alberta Primary Health Care Strategy (2014) states that a core primary care service that should be available to Albertans through their medical home is individual and family engagement. This includes capacity building within primary care to support patients' self-management of their health, and processes to effectively engage individuals and families in planning for, and taking accountability for, their own health. The U.K.'s National Health Service formally recognizes patients as experts in their own healthcare and mandates that providers support and educate patients to help them self-manage their conditions (see *Involving People in Their Own Health and Care: Statutory Guidance for Clinical Commissioning Groups and NHS England*, page 10).

⁴¹ Best Advice—Health Literacy in the Patient's Medical Home, May 2016, page 1.

⁴² See our September 2014 report on *Chronic Disease Management*, pages 41–42, and College of Family Physicians of Canada, *Best Advice—Patient-Centred Care in a Patient's Medical Home*, October 2014, page 5.

AHS's joint venture role in PCNs—recommendation implemented

Context

AHS is the largest single provider of primary care services in the province. In 2015–2016, AHS spent \$1.2 billion on community-based care programs, \$360 million on promotion and prevention programs, and \$570 million on home care programs. A portion of AHS's costs for diagnostic and therapeutic services, emergency services, laboratory services and ambulance services also involves or supports primary care delivery.

AHS's main role in primary care is to fill gaps and supplement the primary care services provided by family physicians. For example, it fills gaps by establishing community health centres and Family Care Clinics to provide services to patients who do not have a family physician. AHS supplements PCN services by providing specialized primary care services (e.g., mental health clinics, chronic disease management) for patients whose conditions are more acute than a family physician clinic may be able to deal with effectively. As PCN clinics evolve to provide more comprehensive services under the patient medical home model, they may begin to take on some of AHS's traditional role in specialized primary care.

A major goal of the PCN program is to improve the integration of primary care services provided by family physicians and AHS. To facilitate this integration, each PCN has been structured as a joint venture, with AHS and the collective physician members of the PCN as equal partners. This structure is designed to provide AHS with opportunities to:

- collaborate with family physicians to help patients transition between primary care and acute care
- engage family physicians to increase their awareness of the impact their decisions have on the overall utilization and cost of healthcare services
- improve the effectiveness of primary care, with resulting benefits in AHS's acute care, emergency departments and other healthcare service areas

Our 2012 audit found that AHS was not capitalizing on these opportunities. In part, this was because the daily operations of PCNs are under the control of family physicians, with AHS participating mainly at the governance level on PCN boards. We found that AHS had not defined clear objectives, performance measures or targets for its partnership in PCNs, and did not provide meaningful performance reporting on the results of this partnership to its board or the public. For example, we noted that the extent and quality of the data AHS used in working with physicians to plan and evaluate PCN services could be improved by making greater use of data on the utilization of hospital, emergency, laboratory and other services.

We also noted that the degree of co-operation and integration between AHS and PCNs varied widely across the province, and even between PCNs within the same zone. In some cases, AHS and PCNs had strong working relationships, including co-located staff members. At other PCNs, the two parties had little interaction or coordination.

We recommended that AHS, within the context of its provincial primary care responsibilities, define goals and service delivery expectations for its involvement in PCNs, define performance measures and targets, and evaluate and report on its performance as a PCN joint venture participant.

Our follow-up audit findings

Key Findings

- AHS prepares an annual Primary Health Care Operational Plan that defines goals, performance measures, targets and timelines for its involvement in PCNs.
- AHS's Primary Health Care Portfolio provides annual reporting to AHS senior management on the achievement of the objectives set out in the operational plan.
- The PCN governance structure formally established in 2017 provides a strong framework for AHS and PCNs to coordinate the planning of primary care service delivery.

Objectives, targets and performance measurement

AHS's goals for its involvement in PCNs are to see that its own primary care services align with those of PCNs, and that collectively AHS and PCN primary care services contribute to achieving AHS's objectives for the healthcare system overall. AHS's business plan for 2016–2017 sets out its objectives for the primary care services it provides, including the services provided through its joint venture partnership in PCNs.

AHS has now set performance measures and targets for primary care, including early detection of cancer, surgery readmissions, and average length of patient stay in hospital versus expected stay. AHS also reports hospitalization rates for ambulatory sensitive conditions and the percentage of emergency department or urgent care visits for health conditions that could be managed appropriately at a family physician's office. These measures are widely recognized as key indicators of the effectiveness of a healthcare system's primary care services.

AHS's Primary Health Care Portfolio develops an annual operational plan that identifies key priorities including AHS's PCN involvement, together with actions, timelines and specific responsibilities within the business unit for their completion. Actual results are reported to AHS senior management annually. Key measures of success are provided for each action.

PCN governance structure

The new governance structure approved in 2017 provides a strong framework for advancing the integration of AHS and PCN primary care service delivery. This integration may occur between the PCNs in each zone and between the PCNs and AHS.⁴³

The new governance structure formalizes collaborative efforts that were already occurring in some zones. For example, the Calgary Zone Council was formed in 2012 with representatives from all seven PCNs in the zone, plus representatives from the Calgary zone of AHS's Primary Health Care Portfolio. A key directional document produced by this zone council is the Calgary Zone Primary Care Action Plan, which identifies key priority areas for collaborative delivery. Similar collaboration began in the Central zone in 2014.

⁴³ Integration between PCNs could mean one PCN delivers a service (e.g., diabetes care) and another PCN delivers a different service (e.g., pre-natal care), with patients from both PCNs being referred to either service. Another example could be a shared service (e.g., after-hours clinic), with two or more PCNs contributing resources and supplying staff on a rotational basis. Such efforts could help broaden the scope of services available to patients and improve efficiency through economies of scale. Coordination with AHS could work in a similar way, with PCNs and AHS dividing service delivery between them or consolidating services as circumstances indicate.

Information to support PCN planning

We found that the quality of the data AHS uses to work with physicians in planning and evaluating PCN services has improved significantly since 2012. For example, AHS is starting to make greater use of data on the utilization of hospital, emergency, laboratory and other health services. This information is being made available to PCNs through the Measurement Capacity Initiative and AHS's Data Integration and Management Reporting (DIMR) business unit. Three PCNs (one from the Central zone, one from the South zone and one from the Edmonton zone) are among the first to share their physicians' patient panels with AHS to determine the total healthcare system utilization and costs for their patients.

Challenges and opportunities

Our 2012 audit found wide variation in the degree of co-operation between PCN physicians and AHS as joint venture partners in PCNs. The department's review of PCNs in 2016 also found that PCNs reported relationships with AHS ranging from excellent to requiring significant improvement.⁴⁴ Our follow-up audit found these relationships have generally improved across most PCNs, reflecting what both AHS and PCNs indicated to us was greater trust between them, but there is room for further advancement in this area. Both parties emphasized that building this trust takes considerable time and effort—it cannot simply be mandated.

Future challenges and opportunities for integration between AHS and PCN physicians also lie in the area of population health planning. For example, PCN zone councils currently focus on selected areas where they believe greater collaboration will be beneficial. Going forward, there is a need for PCNs and AHS to assess jointly the primary care needs of communities in a comprehensive way to inform the efficient allocation of their resources.

PCN program supports—recommendation implemented

Context

To effectively plan and evaluate their services, and to be effective stewards of healthcare resources, PCNs and PCN physicians need information on the patients they serve, such as:

- demographics and chronic conditions (available from the department and AHS)
- frequency and cause of emergency department visits (available from AHS)
- frequency and length of hospitalizations (available from AHS)
- frequency of visits to other healthcare providers (available from the department and AHS)
- how the services their patients receive compare with services provided by other physicians (e.g., screening rates for preventable diseases)

For example, if PCN physicians participate in discharge planning and follow-up care for their patients leaving hospital, it would be useful for the physicians to know if this is helping to reduce unplanned readmissions for these patients, and if so, which patients benefit most.

In our 2012 audit, we found that data sharing between the department, AHS and PCN physicians was limited, and systems to share data were not well developed. We also found that the department was not capitalizing on opportunities to help guide and support PCN planning and evaluation efforts.

⁴⁴ Alberta Health, Primary Care Networks Review, June 2016, page 44.

We recommended that the department improve its systems to provide information and support to help PCNs achieve the program's objectives.

Our follow-up audit findings

Key Finding

• The department, AHS, the HQCA and other publicly funded programs collectively provide PCNs the information they need to understand their patient population needs and to plan services accordingly.

We found that the department, AHS and the HQCA have moved to fill the previous void in data available to PCNs for planning and evaluation purposes. In contrast to the lack of key information provided to PCNs in 2012, our follow-up audit found:

- The department publishes detailed community profile information for 132 local geographic areas covering the entire province.⁴⁵ Profiles include demographic information, socio-economic status, chronic disease prevalence, frequency of and reasons for emergency department visits, including conditions potentially treatable in a family physician's office, frequency and length of hospitalizations, and other information relevant to planning primary care services in each community. The department also publishes PCN profiles that provide the same types of information as the community profiles, based on the patients the department has allocated to each PCN for funding purposes.⁴⁶
- The HQCA produces reports annually on a broad range of measures in primary care.
 The reports are available for individual physicians, clinics, PCNs and AHS zones. Among other things, the HQCA's reports show the frequency of PCN patient visits to family physicians other than their own physician, and how the services PCN patients receive compare with services provided by other family physicians in their zone and the province as a whole.⁴⁷
- Various other initiatives discussed elsewhere in this report are helping to make healthcare data available to PCNs to assist in service planning and program evaluation.

Challenges and opportunities

The challenge for PCNs and PCN physicians going forward will be determining how to make efficient and effective use of the information and tools being made available to them by the department, AHS, the HQCA and others.

Department's oversight of PCNs—recommendation implemented

Context

The department needs assurance that PCN funds are spent in accordance with program policies and that the information on results it receives from PCNs is accurate.

⁴⁵ See http://www.health.alberta.ca/services/PHC-community-profiles.html.

⁴⁶ See http://www.health.alberta.ca/services/primary-care-networks-profiles.html.

⁴⁷ See http://hqca.ca/health-care-provider-resources/physician-panel-reports/.

Assurance

In 2012, we found that the department did not have adequate systems to obtain assurance that financial and performance information it received from PCNs was accurate and expenditures complied with program policies and approved business plans and budgets. For example:

- the department has authority to audit PCNs with respect to the use of PCN grant funding, but had not done so
- PCN external audits were focused on general purpose financial statements
 (e.g., categories such as salaries or supplies), not the priority initiatives and programs of the PCN
- there was a lack of clarity about the role of the PCN Program Management Office in reviewing PCN business plans, budgets and annual reports—specifically, there was overlap in the reviews done by the PMO and the department, and some duplication in the enquiries made to PCNs

We recommended that the department improve its systems for oversight of PCNs by obtaining assurance that PCNs are complying with program policies.

Surpluses

The department provides per capita funding to a PCN from the time it is formed. Most PCNs do not fully use their funding in their early years when programs are in development and staff members are being recruited. Our 2012 audit found that combined PCN surpluses totalled more than \$80 million at March 31, 2011. By March 31, 2015, surpluses had risen to over \$130 million.

While the department required PCNs to take steps to reduce these surpluses, we found surplus reduction initiatives were not clearly described in PCN business plans, budgets or annual reports, and some appeared to be unsustainable because they increased core program spending above annual revenues. We also found that the department's rationale for freezing \$16 million of PCN assets to fund closing cost reserves was unclear.

We recommended that the department provide clear guidance to PCNs on how they can spend their surpluses to ensure these funds are used in a timely and sustainable manner without creating structural deficits.

Our follow-up audit findings

Key Findings

- The department has implemented a process for periodic on-site reviews to obtain assurance that PCNs are complying with program policies.
- PCN external audits now examine year-end financial statements based on the programs and expense categories used by the PCNs.
- The role of the PCN Project Management Office has been formalized and expanded.
- The department has eliminated the requirement for PCN closing cost reserves and taken effective steps to reduce PCN surpluses, while ensuring PCNs avoid structural deficits.

Assurance

In 2015, the department engaged an external reviewer to examine the PCN program, including on-site visits to 13 PCNs. The results of this review were made public in 2016.⁴⁸ The department informed us it intends to conduct reviews of PCN operations on a periodic basis in the future, using a combination of in-house staff and external consultants.

PCN external audits now examine actual financial results for the programs and expense categories used by the PCNs, rather than general purpose financial statements. This enhances the assurance the department derives from these audits.

The role of the PMO in reviewing and advising PCNs on the content of their business plans, budgets and annual reports is now formally recognized by the department. The department builds on the work the PMO does with PCNs to avoid potential duplication and delays. The PMO also helps PCNs build their internal capacity for evaluation and quality improvement. The PMO helps to act as a channel for sharing best practices among PCNs, a position it furthers through hosting a semi-annual PCN Strategic Leadership Forum for PCN executives and the widely attended Accelerating Primary Care Conference every fall.

The department has also issued several new documents since 2012 to clarify program policies in areas where greater detail was requested by the PCNs. For example, the department has clarified the criteria for determining the eligibility of PCN expenditures and provided guidance on appropriate governance and financial controls. The department indicated to us it will issue further guidance as needed.

Surpluses

To prompt PCNs to draw down their surpluses, the department reduced its funding to the PCN program by \$50 million in 2015–2016. Actual PCN surplus reductions for the year totalled \$45 million.

For 2016–2017 and future years, the department requires PCNs to submit balanced budgets, meaning budgeted expenses cannot exceed their projected revenue. The department informs every PCN in advance what its annual revenue is likely to be so the PCN can plan accordingly. If a PCN has an accumulated surplus, the department will reduce its funding on a cash basis and the PCN will be required to draw on its surplus to meet budgeted expenses. This process requires PCNs to convert their surpluses into services, while avoiding the risk of PCNs creating unsustainable structural deficits.

At March 31, 2016, PCNs in total still held combined surpluses of more than \$87 million. The department expects these surpluses to decline over the next several years as PCNs continue to submit balanced budgets that will be funded in part by any available surpluses.⁴⁹

The department has also eliminated the need for PCNs to internally restrict funds as closing cost reserves. This has freed PCNs to use these funds to improve service delivery, while signalling the department's continuing support for the program.

⁴⁸ Key findings from the department's review included:

PCNs are all targeting the five provincial objectives, but there is little evidence they assess community health needs
in a methodical manner to match their programs with community needs, allocate resources for priority areas, and
evaluate to ensure results are aligned with objectives.

Given that PCNs are now 10 years old, the pace of development of effective interdisciplinary teams has been slow.
 PCNs have limited integration with home care and long-term care, community agencies, community addiction and

PCNs have limited integration with home care and long-term care, community agencies, community addiction and mental health teams, and public health.

⁴⁹ The department may allow PCNs to continue to retain a small surplus as a reserve for unforeseen events and contingencies, but has not set this amount.

Appendix A—Performance measures

PCN Funding Agreement—Performance Measures

Primary Healthcare System OUTCOME	Delivery Site OUTCOME	PCN Level PERFORMANCE INDICATOR
Attachment All Albertans have a health home.	Attached patients	Percentage of patients going to a different provider or different clinic for a subsequent visit.
Access Albertans have timely access to a primary health care team.	Timely access to PHC	Percentage of physicians measuring Time to Third Next Available Appointment (progress measure for actual mean time to TNA).
Quality Clinical and social supports are brought together to promote wellness, provide	Early detection of risk and disease	3. Average of patient responses to the question "Overall, how would you rate the care you received in your visit today?"
quality care based on proven courses of action, and effectively manage chronic disease.		4. Percentage (or percentages) of compliance of physicians in screening or offering screening to their panel of patients, as described in a menu of screens recommended by Alberta Screening and Prevention Initiative (ASaP).
Self-management of Care Albertans are involved in their care and have the supports needed to improve and manage their health.	Patient self- management	5. Percentage of patients with a chronic condition who were offered self-management supports during the fiscal year.
Health Status and Care Experience Albertans are as healthy as they can be, have better health overall, and report positive experiences with primary health care.	Enhanced patient experience of PHC	6. Percentage of patients with a chronic condition who report maintaining or improving quality of life as measured by the EQ-5D Health Questionnaire during the fiscal year.
Provider Engagement and Satisfaction Providers satisfied and happy with their work lives and able to provide quality care.	Enhanced provider experience	7. Percentage of identified team members responding to a team effectiveness survey.
Leadership and Governance PCN leadership and governance is	Effective governance	8. PCN board completion of all three components of self-assessment during the fiscal year:
effective.		 self-assessment of the PCN board as a whole self-assessment of individual PCN board members performance improvement plan
		9. PCN board assessment of the performance of the PCN administrative lead and all other staff members reporting directly to the board for the prior fiscal year.

Appendix B—Good Practices Observed

In the course of this follow-up audit, we identified many good practices that appear suitable for adoption more broadly among PCNs. While PCNs pride themselves on delivering "local solutions for local problems," that does not mean each PCN should invent or reinvent these solutions on its own. We also believe good practices are noteworthy not simply for their own sake, but because they serve to show what is possible—they are real examples of what is being done on a daily basis in various PCNs across Alberta. The following is a small sample of the success stories we heard.

Screening tool

Westview PCN has developed EMR queries to measure screening completion rates for a physician's entire panel. The tool has been developed for five family practice clinics and extracts data from four different EMR systems. To date, the tool has been tested and fully implemented by one clinic. This clinic is generating monthly "Screening and Prevention" reports from its EMR system at both the provider and clinic levels. Application of the tool in two other clinics is currently being refined. The remaining two clinics face significant limitations due to their EMR data structure and query features.

The importance of screening is apparent in the case of colorectal cancer. It is currently the second most lethal form of cancer—over 700 Albertans die from it every year. If detected early, it can be cured in 90 per cent of cases. In 2014–2015, the most recent year for which data is publicly available, Alberta's colorectal screening rate for patients was less than 40 per cent, the second lowest among the nine provinces reporting this measure. The rate of patient counselling to reduce their colorectal cancer risks (e.g., though diet and lifestyle changes) is not measured.

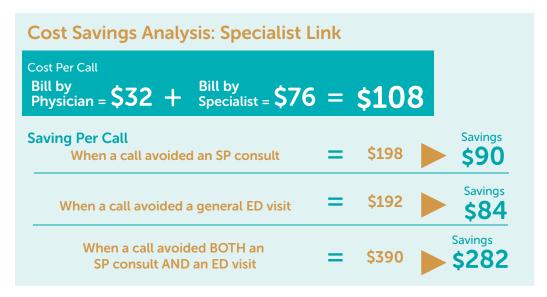
The department, AHS and the HQCA can each compile information centrally to identify Albertans of target age who have not received recommended screening (i.e., lab tests or colonoscopies). However, this information helps to improve colorectal cancer screening only if primary care physicians have a system, including an EMR, to identify patients in the target group and ensure they get screened. Advances like the Westview screening tool are helping to make this a reality.

Specialist Link

A collaborative effort of all Calgary-area PCNs and the AHS Calgary zone, Specialist Link is a telephone service that family physicians can use to contact a specialist for a virtual consultation. Specialists enrolled in the service typically respond within 30 minutes, often while the family physician's patient is still in the office for their visit.

The cost savings and potential improvement in patient outcomes associated with Specialist Link are significant (see below). In many cases, a proactive telephone consultation with a specialist can avoid a full specialist consultation or a trip to the emergency department. In other cases, a specialist may identify the need for further testing or consultation for a patient who might not have been given a referral.

Illustration of potential cost savings through Specialist Link



AHS language line

AHS offers telephone interpretation services to affiliated agencies, including PCNs, on a cost-recovery basis. It is available on demand, 24/7, in more than 200 languages. Several PCNs subscribe to the service and described it to us as "absolutely essential" for serving their diverse patient populations. Customer satisfaction among the PCNs we spoke to was very high.

Web-based portal for PCN data

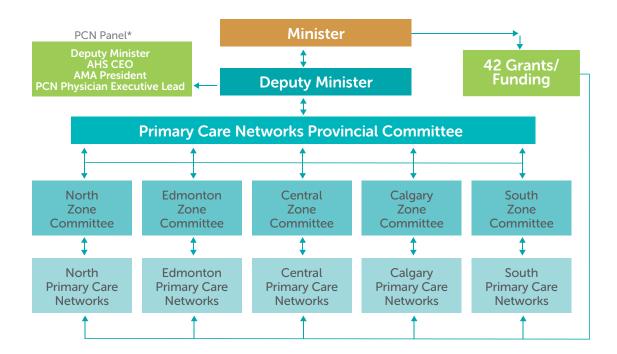
One innovative PCN has developed its own central database that draws information securely from participating physician EMRs through a web-based portal. As of March 31, 2016, 44 per cent of its 236 family physicians were contributing their data for analysis and feedback from the PCN's evaluation team. This solution avoids the need for physical data collection and standardization procedures.

Patient-reported health outcomes

SF-12, EQ-5D and PHQ-9 are questionnaires designed to be easy-to-use surveys of a patient's own perception of their physical and/or mental health status.⁵⁰ Administered at different points in time (e.g., the beginning, middle or end of treatment), they can provide insight into the progression of a patient's condition and the effectiveness of their treatment.

⁵⁰ Short Form 12 (SF-12) has 12 questions designed to measure physical and mental health. EuroQol 5D (EQ-5D) has five questions, of which four are designed to measure physical health and one is designed to measure mental health. Patient Health Questionnaire 9 (PHQ-9) has nine questions designed to measure depression.

Appendix C—PCN Governance Structure (approved June 2017)



* The PCN panel is accountable to the minister. The purpose of the panel is to provide recommendations to the Provincial PCN Committee. If the chair of the Provincial PCN Committee identifies a matter on which consensus cannot be reached, any member of the committee can request that the matter be referred to the PCN Panel. The Panel will consider the matter and send back a recommendation. This process is designed to ensure that all members of the ministry, AHS and physician-represented zones have opportunity for matters of concern to be considered in an equitable and fair manner.