

Symposium Overview

The panel management symposium brought together decision-makers and leaders in Alberta's primary healthcare system to reflect on the role of panel management, and challenges to and strategies for moving ahead with successful implementation in Alberta. Two speakers from outside Alberta, with considerable experience implementing panel management and using panel data to improve both care and practice, shared their experiences and perspectives on the potential of panel management to improve patient care and primary healthcare practice. These presentations were followed by Alberta speakers who shared their experiences with panel identification and using panel data to improve care and practice.

Common themes recurred in the presentations:

- **Value added** – Panel management yields substantive benefits in various contexts in terms of more efficient practice or clinic operation, greater continuity, and better patient care at both the patient and population levels. Panel management processes are diverse (not one solution fits all) and take time, commitment, and resources to establish.
- **Importance of relationships** – Panel management relies on and supports development of relationships between patients and a most responsible primary care provider, between patients and other team members, and between primary care providers and their team. The most responsible primary care provider is most often a family physician but in some cases is a nurse practitioner; both have training in differential diagnosis.
- **Importance of teamwork** – Family physicians benefit from working with a team of other healthcare professionals to establish and maintain their patient panels, and to assist them in providing recommended care in an efficient way. Panel management supports effective teamwork. Effective implementation of panels respects team and clinic culture and requires processes to be adapted to meet the team's needs.
- **Importance of electronic medical record (EMR) support** – An EMR that is intuitive and easy to use, with standardized terminology and data entry processes is essential to support panel management and to provide good patient care. Current EMR systems are limited in their ability to support the kind of report generation required for effective panel management. Workarounds are common, such as transferring data to a relational database program or creating specialized forms. This requires some dedicated resources.
- **Clinical application of panel management** – In Alberta, panel data is being used to improve screening, assist with chronic disease management, and improve clinic processes to improve efficiency of care and access for patients.

Summary prepared by Dale Wright, HQCA, January 2014.

Panel-Based Care from the Clinic Perspective

Carolyn Shepherd, MD

Vice-President of Clinical Services, Clinica Family Health Services, Boulder, CO

Dr. Shepherd is the medical director of Clinica Family Health Services which provides primary healthcare through five clinical sites to a population of 41,000 low-income residents in the Boulder, Colorado area. A total staff of 402 includes 21 physical health providers (PHP) (physicians, nurse practitioners and physician assistants), supported by other health professionals and office staff to address the total health needs of the population – medical, dental, behavioural healthcare, nutrition, and medication management.

A clinical redesign process began in 1998 that was focused on their ‘big six’ improvement priorities: continuity, access, team-based care, alternative visits (e.g., group sessions, e-care, phone care, outreach clinics), clinical information, and patient engagement. Dr. Shepherd identified team-based care, panel management, and an electronic patient information system/registry as three critical elements for success.

1. Team-based care – Each clinic is divided into two to four teams (‘pods’) each with a standardized team composition and role functions (standardization is a key strategy) to provide comprehensive primary healthcare to 3,600 patients. The optimum panel size was determined to be 1,200 patients (balanced by age and sex) per full-time equivalent PHP. New patients are assigned to a team and a PHP who works on the team; patients can switch PHPs only within the team. Patients establish relationships with the team and their PHP, and often with other patients who they meet through group clinics. Each team member has specific patient outreach and ‘inreach’ roles for which they are responsible, and contributes to overall care of the patient through shared-care protocols and algorithms. Standing orders are used to ensure that recommended care is accomplished at a visit.
2. Panel management – Panel management is essential to address access issues and accomplish recommended care. Knowledge of a provider/team panel allows the patient population to be segmented by the complexity of care processes required to meet patient needs. Standard services are provided to all to keep the “well well” and those with stable chronic conditions “as wellish as possible”. High risk/high cost populations of focus (e.g., diabetes, hypertension, prenatal, asthma, depression) have specific planned care protocols to decrease variation in management, ensure outcomes measurement, and support improvement over time. Targeted services are provided to patients with complex or uncontrolled chronic disease and those who are high utilizers.
3. Registry – A meaningful registry organized by patient, rather than by disease, is essential. Data from the community-wide electronic health record is pulled into a relational database each night from which reports can be generated that drive daily work by the team members. The planned care registry can generate reports by patient, disease, team, team role, population of focus, alerts (e.g., test is past due) to help teams plan their daily activities. Patient-specific care plans can be generated. Reports about populations of interest (e.g., patients with abnormal breast diagnostics) can be run to ensure follow-up is done. The community-wide EHR provides access to information about utilization of other health services (e.g., ED visits, hospitalizations).

Team-based panel management supported by an EMR and patient-oriented registry has led to patient outcomes that are recognized by national quality organizations (e.g., NCQA Diabetes Recognition award). Reduced utilization of high-cost services (ED visits, readmission rates and high-cost imaging) contribute to overall reductions in cost of care. Job satisfaction for clinicians is increased by data showing improved patient outcomes.

Summary prepared by Dale Wright, HQCA, January 22, 2014.

Panel Management – The Alberta Experience

Steve Chambers, MD

Allin Clinic, Edmonton

There have been many technical changes over the 32 years Dr. Chambers has been a family physician at the Allin Clinic however the biggest changes in how he practices have been due to team-based care and electronic medical record (EMR) support for panel management.

The Allin Clinic has over 30 physicians, of which two-thirds are family physicians, and is a founding member of the Edmonton Oliver PCN which has about 130 physicians in 16 clinics providing primary healthcare to 130,000 patients. The PCN team includes registered and licensed practical nurses, social workers, dietitians, pharmacists, psychologists, kinesiologists, referral coordinators and screening coordinators. The number of visits with team members has increased continually over the last six years to over 200,000 per year. Team-based care has improved job satisfaction for clinicians and team members, and patients like developing relationships with team members.

Initially, funding was the driver to establish physician patient panels. Dissatisfaction with the four-cut method of assigning patients to the clinic for funding purposes prompted participation in the Performance Diligence Indicator program through which validated patient panels were developed. To validate a panel, both the patient and physician have to agree that the physician is the main primary care provider for the patient. To manage attrition of approximately 1 to 3% per year, the physician regularly checks his panel list and notes which patients are deceased, moved, or transitioned to long-term care. Office staff assist by clarifying with patients, for whom no primary care provider is noted on their EMR, who they believe to be their family physician. Knowledge of patient panels has improved patient care in two important ways: improved access through the Alberta AIM program, and improved screening. More recently panels are being used to improve chronic disease management.

The screening coordination program relies on a medical office assistant assigned to each physician who is trained to apply a physician approved and regularly updated screening template and algorithm developed by the PCN. The program focuses on seven of the top ten recommended screening practices identified by TOP: fasting blood glucose, cholesterol, colorectal cancer screening, mammography, bone mineral density, Pap tests and blood pressure. Routine weights and laboratory assessments for four target chronic diseases (diabetes, hypothyroidism, dyslipidemia, and hypertension) are also tracked through the program. Patient records are checked yearly by birth month and the patient is called and sent a requisition to get the tests done if they are not up to date. The proportion of patients up-to-date on all targeted screening has increased each year since the program began, and the screening rates for the clinic are as good, or better, compared to other sites nationally and internationally. The program is cost effective – approximately \$3.50 per patient, per year.

What is the future for panel management at the Allin Clinic? Panels will be used more for CDM as well as to manage the number of visits per year to each physician to ensure access for patients.

Summary prepared by Dale Wright, HQCA, January 2014.

System Level Opportunities for Panel Management in Alberta

Tim Cooke

Health Quality Council of Alberta, Calgary

Alberta evidence related to the potential impact of panel management on the health system and opportunities for panel management to address gaps in the system were presented.

Evidence about the potential benefit of panel management comes from the attachment findings of the HQCA's primary care measurement initiative. The HQCA looked at healthcare service utilization rates of 1.7 million Albertans over a 36 month period, controlled for age, gender, and burden of illness. Compared to low-attached patients, highly attached patients had fewer family physician visits, emergency department visits and hospitalizations, and a reduced length of inpatient stay. This represented not only reduced cost to the system for expensive healthcare services, but also reduced risk to patients. The high-attached patients had almost half the emergency department visit rate of low attached patients; if the visit rate for the low-attached patients could be reduced to the same level, this would represent a reduction in emergency department visits by 528,000 over a three year period.

Attachment to a family physician and related panel management activities is about the relationship between the patient and a single family physician. The HQCA has just completed a qualitative study on the patient experience of continuity of care. The results suggest that from the patient perspective, good continuity of care is dependent on a trusting and ongoing relationship with a single physician, and sometimes with additional providers. This relationship results in good communication, exchange of information, being listened to, and having enough time with the provider. Patients value a small number of providers who are well-connected and work together; and patients see their primary care provider as needing to play a coordinating role, particularly with hospital care and specialists. In the context of team-based care, the relationship between the patient and individuals on the team is critical – if it isn't there, some aspects of care don't work well.

Panel management has the potential to support patients and providers to build trusting relationships over time, but also to impact the system by identifying gaps which need to be addressed. For example, for which patients is the family physician most responsible? Which patients are not presenting at the right time or at all? Which patients are not on a panel, or are on multiple panels? Who are the high-risk and underserved patients? These questions can all be explored using knowledge of physician panels and panel management.

Summary prepared by Dale Wright, HQCA, January 2014.

System Level Opportunities for Panel Management in Alberta

Doug Stich

TOP (Towards Optimized Practice) Alberta, Edmonton

The Accelerating Primary Care Conference continually reminded us to ask ‘why?’ From an innovation point of view and from a change point of view, we need to be able to answer people’s questions about ‘why do things differently?’

Why do panels work? The rise in chronic disease and its impact on primary care providers is talked about at many forums. What is not talked about is the impact of chronic illness on patients and the patient-provider relationship. The impact of chronic illness on patients and providers differs from acute illness in two important ways: who initiates the encounter and who has the greatest influence on the outcome of the healthcare process.

- Acute illness – The need for care is typically triggered by acute symptoms and is initiated by the patient, as in the example of gallstones. The outcome of the healthcare process in this example is primarily attributable to the skill of the surgeon.
- Chronic illness – In contrast, a patient with a chronic illness typically relies on someone – their primary care provider or a team member such as chronic disease management nurse – to tell him when to come in for monitoring or treatment. However, the patient is the individual most responsible for the outcome – adherence to diet, smoking cessation, exercise, and compliance with medication therapy.

What does this mean for the relationship between a patient and their physician? A relationship is not really needed for successful acute care – the patient can dislike their surgeon for example, but still have a successful outcome. But when the patient has a chronic illness, if there is no relationship, there is no follow-up and less likelihood of a successful outcome. In chronic illness, it’s an influence game. Influence requires trust; trust is built with continuity; continuity requires attachment; and attachment is enabled by panel management.

Why does panel management work? Chronic disease management is an important answer. Successful management of chronic illness is less of a technical skill game and more of an influence game – as a patient, how can you get me to come in, get me to change my behaviours, and take my medications?

Summary prepared by Dale Wright, HQCA, January 2014.

Strategies for Implementing Panel-Based Care: The Alberta Experience

Ann Makin

Bow Valley Primary Care Network, Canmore

Bow Valley Primary Care Network encompasses nine clinics with 37 family physicians providing primary care services to 26,000 patients in Lake Louise, Banff, Exshaw, and Morley. Foundations for success of panel management include 100% utilization of an EMR in all physician practices and the relatively small size of the PCN. Currently, 21 physicians have validated patient panels. The presentation addressed factors that influenced implementation of panel management, some implementation strategies, and success factors to consider.

Panel management is a strong bridge between three priorities in the PCN's business plan: chronic disease management, population health, and office practice improvement. Four key elements to successful implementation have been the four Cs: consensus by the team, consistency of process, commitment to a goal, and collaboration with all the stakeholders that need to be involved for accurate and timely panel validation and maintenance. While there is a focus on the benefits of panel management to the patient, physicians can benefit by becoming informed about their patients (How many patients do I have? How many patients have target conditions of interest? Who requires screening?) and using panel reports to become more efficient in their office appointments. Involvement of the team in the validation and maintenance process strengthens team care. Panel management maximizes use of the EMR within the PCN. It has led to standardization of nomenclature and processes for entering information into EMR so that users are confident about the accuracy of reports.

The "Know Your Panel, Simplify Coding, Optimize Care" initiative that was undertaken by the PCN in collaboration with Alberta TOP demonstrated the value of panel management and assisted clinics with implementation. Factors for successful implementation include true engagement of physicians and teams, a strong office manager and team members, and funding and facilitation provided by the PCN. Flow maps were developed to help teams understand the processes required for both panel validation and maintenance. The actual implementation process varied between clinics based on the clinic culture – some chose a fast process (e.g., completed over three weekends with 'panel parties') and some chose a slow, opportunistic process. Value to physicians was demonstrated by developing flow maps to show how panel reports can support management of target conditions (e.g., diabetes or hypertension). An effective question for physicians has been, "If you knew more about your patient panel, what would you do differently?" Typically, once physicians start using information about their panel they won't go back to traditional ways of working.

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Strategies for Implementing Panel-Based Care: The Alberta Experience

Treena Klassen

Palliser Primary Care Network, Medicine Hat

Palliser Primary Care Network covers a large geographic area with a diverse population in southeast Alberta. Seventy-seven physicians in 31 clinics provide care to 98,000 patients. Family physicians in their clinics are supported by eight staff in the central PCN office and more than 50 healthcare professionals, including nurses, social workers, physiotherapists and pharmacists.

Progress in improving care is primarily about relationships – with physicians between physicians, with clinical team members with clinic staff, and with the broader health system. In Palliser PCN, implementation of panel management is a step-wise process which clinics move through at their own pace. Engaging the clinical team is a critical first step. When they are ready, support is provided to help them identify their panel and then identify clinical outcomes of interest to be addressed through panel management strategies. EMR use is optimized to assist with these processes. Success is achieved when these four steps are embedded in the routines of the clinic. A continuous process of measurement and improvement is the key to ongoing improvement once panel management is embedded in the practice. The reality of implementing panel management is that it is a slow, iterative process that each physician and clinic will do at their own pace. There is no prescriptive approach – what works in one clinic might not work in another. There is a need to be creative and take ideas and inspiration from various sources.

Challenges encountered include a lack of interest initially, which is becoming less of a factor. Lack of understanding about what a panel is continues to be an issue and clinics are encouraged to define it for themselves. PCN staff can help clinics address the lack of time issue. Resistance is not an issue if it is reframed as helping people figure out what is preventing them from moving ahead.

Professional staff activity and clinical indicator reports are used as part of the accountability and performance management system and have been instrumental in engaging some physicians and clinics. Seeing standardized measures on clinic activities and patient outcomes (e.g., tobacco use, weight, screening and prevention rates, and specific outcome indicators for populations of patients with diabetes and hypertension) has driven an interest in improvement. Follow-up on questions about the ‘correctness’ of some of the numbers has led to identification of clinical process issues and measurement issues (e.g., multiple terminology used for the same test).

Increasingly, data is being used to identify and track practice enhancements such as dietician group visits to improve efficiency and overcome an identified problem with no-shows. Medical residents are using measurement reports to identify projects and measure the results. Medical office assistants have become involved in assisting with proactive screening work using the EMR to improve screening and preventive care rates.

Moving ahead will require improved knowledge in data collection and process improvement. The PCN measurement team and process improvement facilitators help the clinics make the data useful and support them in using it to improve. An exciting initiative is using panel data to identify patients who are attending multiple clinics.

Summary prepared by Dale Wright, HQCA, January 2014.

Strategies for Implementing Panel-Based Care: The Alberta Experience

Tom Bray, MD

Fort Medical Clinic, Edmonton

Dr. Bray shared his story of implementing panel management at his clinic in northeast Edmonton. Inspiration to make changes in his practice came from dissatisfaction with some aspects of practice and examples of successful primary care practice improvements, such as the access improvement program developed by Mark Murray and Kaiser Permanente, LEAN improvement methods; Thomas Bodenheimer's team approach to care; and AMA's PDI (performance and diligence indicator) program, through which he created a validated patient panel.

Fort Medical Clinic was established 40 years ago in an underprivileged area of Edmonton and is currently staffed by six family physicians, four reception staff, four medical office assistants (MOAs), 1.2 FTE nurses, and four administrative staff supported by the clinical team of Edmonton North PCN. The change process began with a three month study of physician activities to determine what non-medical functions could be assumed by a practice assistant and training a MOA to take on those tasks. Measurement was a key strategy right from the beginning. As the MOA took on more responsibilities and new processes were embedded within the office, there was an improvement in efficiency, a reduction in the average appointment time by three minutes, and improved clinic flow. Through their measurement activities, they were able to demonstrate benefits to patients (improved access, decreased in-office wait time, longer appointment times, and better parking which was an unexpected benefit), physicians (longer appointment times with more time for clinical contact and relationship-building, more screening opportunities, better chronic disease management, more opportunities to upgrade a visit to address care gaps, and overall improved job satisfaction), and the health system (development and maintenance of validated patient lists, greater cost-efficiency by having the most cost-effective healthcare provider doing the care tasks, improved patient access, decreased reliance on expensive tests with more attention to clinical assessment). They were able to demonstrate a reduction in the number of visits per patient per year, thus increasing the number of patients who could be seen even with longer appointment times. The MOA can be readily funded by the increase in physician revenues that result from improved efficiency of the office and effectiveness of an office visit at which more can be accomplished. More open space during the day was seen almost immediately with appointment times opening up after a week; within two months, the backlog in patient appointments had disappeared and more was accomplished at each visit.

This initiative was spread within the PCN as a pilot project with over 50 family physicians participating and all were able to demonstrate sufficient increased revenues to be able to hire an MOA or licensed practical nurse in their practice. This was implemented as a core program within the Edmonton North PCN in 2013. The keys to success of the initiative are measurement; leveraging information technology; embedding improvements into daily work and not slipping back into old habits; enabling assistants to work to their full scope of practice and having some control over their activities; and ensuring all staff are aware of the important role they play on the team. His final message to physicians is don't expect to work less hard, but to work differently and with more job satisfaction. Panel management and team-based care has become an essential part of his practice.

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Strategies for Implementing Panel-Based Care: The Alberta Experience

Peter Lightbody, MD

East Calgary Family Care Clinic, Calgary

East Calgary Family Care Clinic (FCC) was formed in northeast Calgary in the spring of 2012 with founding principles of providing interdisciplinary team care with nurse practitioners (NP) acting as a most responsible primary care provider (PCP), extended hours, and access by the patient to the right provider without having to be referred by a family physician. The original concept of attachment in the clinic was that patients would be attached to the clinic rather than to a specific provider. While this concept was well-intentioned, it led to a situation of chaotic care lacking in continuity and limited relationship and bonding between a patient and provider. Patients saw multiple providers, care plans formulated by one provider were not followed by another, there was duplication of work, waste, and both patient and provider frustration.

In the spring of 2013, clinic processes were reorganized around three teams of two to three family physicians (FP) and one to two NPs who share a chronic disease management nurse and family nurses. Provider panels were formed by assigning patients to a FP or NP on a team using both prospective and retrospective methods. All PCPs reviewed their appointment records for the previous four months and identified who they believed to be their patients. Chart reviews of unclaimed patients were completed to identify a most responsible provider. Provisional panels are continually updated by having staff, at all points of patient contact, ask, "Who do you think is your primary care provider?" It is expected that all patients will be captured over the next year using this method. The electronic medical record (EMR) was of limited utility in defining practitioner panels, and a customized searchable form was created, which allows the team, provider, and other team members providing care to the patient (e.g., dietician) to be documented for each patient. Provider patient panel information can now be generated from the EMR.

Panel information is being used to balance patients between PCPs and to ensure balanced assignment of certain types of patients (e.g., chronic opioid users). Validated panel numbers are regularly posted in the clinic which encourages providers to continually update their panels. Panel reports by conditions of interest (e.g., diabetes) are used to identify whether recommended screening and monitoring is being accomplished. Panel management is supported by a priority booking order process.

Benefits of the new clinic system include cross coverage during absences, and improved team effectiveness. Teams meet weekly to review their patient load for the week and determine what care is needed and who will provide it. Access for patients (time to third next available appointment) has improved.

Challenges were encountered with frontline staff who resisted booking patients by panel, by patients not knowing who their PCP was, and by PCPs not knowing who their patients were. Messaging with new patients is critical to ensure they understand the importance of being assigned to both a team and a PCP. The clinic is still working on defining the best panel size for this type of primary healthcare clinic. The lack of an effective EMR has been a major impediment to moving forward. An EMR that is easy and intuitive to use with standardized data entry processes and coding is essential for effective panel management.

In summary, paneling and panel management is crucial to an effective primary healthcare system, to clinics and to patient care.

Summary prepared by Dale Wright, HQCA, January 2014.