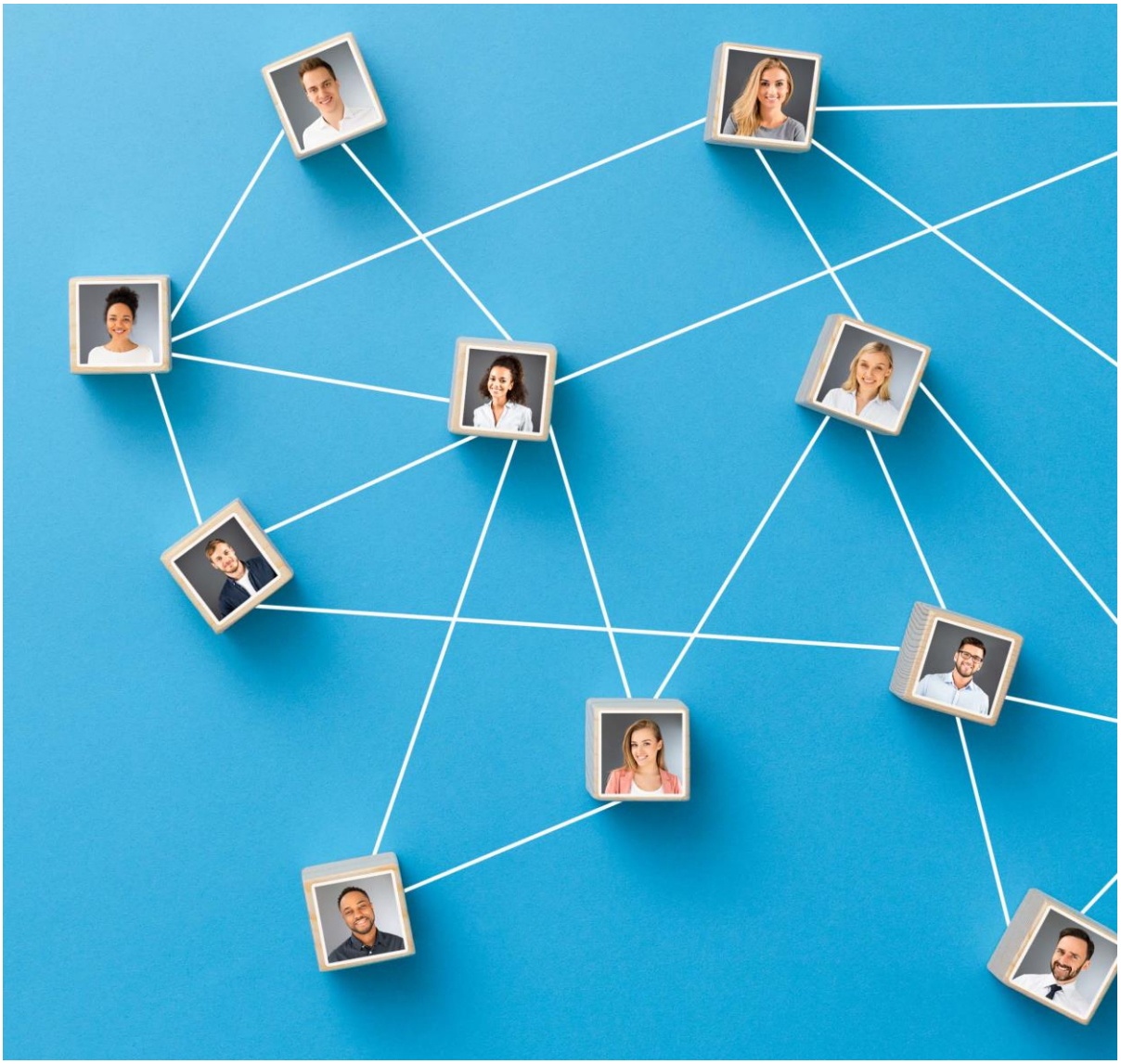
Primary Care Alliance

THE INTEGRATED HEALTH NEIGHBOURHOOD OF THE FUTURE

White Paper on Transforming Primary and Community-Based Care



About the Primary Care Alliance

The Primary Care Alliance (PCA) provides a forum for the unified voice of primary care physicians to advance their common interests and shared goals in primary care. The Alliance's goal is to foster a coordinated and aligned approach to meet the needs of patients, caregivers, families, primary care teams, PCNs and the healthcare system today and into the future.
https://www.albertadoctors.org/leaders-partners/innovation-in-primary-care/primary-care-leaders-partners/pca

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1. Why This White Paper?

1.1 The Challenges

The Primary Care Alliance has developed this white paper to advance primary, specialist and community-based health and social care in Alberta to a transformed state in 2030 and beyond. Through the requirements and recommendations proposed herein, this paper challenges the status quo in Alberta's health care system and aims to serve as a bold, thought-provoking tool. There are both opportunities and challenges ahead for anyone working in health care. Some of our ideas and proposals will make health care providers, delivery organizations and patients uncomfortable, but it is time for all Albertans to consider some fundamental shifts if publicly-funded universal health care is to remain a viable and preferred option.

"The prevailing culture surrounding Alberta's health system is defined by many as being risk averse. The level of transformation envisioned by Alberta's future vision for better and more sustainable healthcare will require responsible, but bold action." [1]

There is generally agreement across stakeholder groups about the various strengths and weakness of Alberta's health care system. Most agree that the current way in which health care is organized and delivered in the community and beyond will not meet the needs of our population as we move into the future, and the pressures facing health system need to be addressed now. We need a future system that meets our needs and is financially sustainable. To date, transformation and innovation have occurred around the edges. There have been multiple standalone initiatives to improve care, many of which have been successful. "*But, they have not fundamentally changed how care is organized, overseen and funded.*"[2] As a system, we need to move past incremental change and invest in large-scale transformative change.

A primary challenge to be addressed is our siloed and fragmented system of care, resulting from misaligned incentives (including varied and overlapping funding streams and disjointed team-based funding) and inadequate coordination and continuity (relational, informational and management) of care. The current system has an acute and episodic care focus, to the detriment of primary and community-focused approaches to care when we know systems with such an orientation perform better. Moreover, some Albertans are without a primary care provider, and many who do, have family physicians who do not routinely practice as part of an interprofessional team.

New approaches to workflow and the way in which services are delivered – which reflect patient preferences and provider satisfaction – are also needed. The extent and quality of care received (e.g., chronic disease management and palliative care) is inconsistent across the province, and the system is not driven from a population and social determinants of health perspective. A recent review of Alberta Health Services suggested that "*further provincial standardization of clinical care pathways and protocols was needed to ensure all Albertans have access to evidence-based, outcomes focused and cost-effective care.*"[3] Service delivery and outcome expectations have not been well laid out and are inadequately measured and evaluated.[4] As well, while there have been significant investments, the current technology is insufficient. Many of the information technology systems remain incompatible across organizations and sectors, providers have difficulty accessing data quickly and regularly, patients do not have ready access to their own data, and better use of population and patient-based performance data over time is needed. Additionally, there is no general consensus and guidance on what measures (e.g., accountability, improvement, research) are best to support decision making at the provider and policy level.

Finally, the health system needs a clear vision that is co-created and shared by all. Currently, there is inadequate community, patient and caregiver engagement. There have been limited opportunities for such input, and patient groups have been rightly critical about their limited say in the planning, design and deployment of health and social services. We need representative governance and leadership that promotes partnerships among all stakeholders to achieve the health system's vision and goals. These partnerships have been fundamental to achieving truly transformed and high-performing health care systems elsewhere in the world.

There are also issues facing our health system of particular concern to certain groups, as outlined below:

The Public

The public wants a high-performing universal care health system that meets their needs – keeping them well in their homes on their terms and treating their illnesses in the most efficient and effective way possible. Many in Alberta report having unmet needs. While Alberta's population generally reports good health, there are several areas of concern, particularly those related to the impact of unhealthy behaviours and threats to the health of the most vulnerable in the province. The majority believe that the health system needs fundamental changes, especially those with a poorer health status.[5] The public wants the government and health care services to be good stewards of the system to ensure its sustainability. The public also wants to know that decisions at all levels are being informed by the best evidence and good data – not politics – and to have transparency and reporting on the management and impact of the system.

Patients

The patient experience is paramount, but this is often not at the forefront of planning, design and service delivery. While some progress has been made in this direction, there remains much to do. Consistently, the most important issues reported by patients in Alberta are accessibility to health services, wait times for those services, and having their own dedicated primary care provider.[6] [7] [89] [10] Albertans don't just want access; they want the services to reflect their values and preferences and show them respect as individuals. They want to know that their knowledge and insights are valued. For example, the current health care system does not respect the opportunity costs borne by patients. Long waits in the clinic and emergency department, unnecessary visits for prescription refills or vitals they could take at home, no one available when their child is sick after hours, health services far from their home or inaccessible by public transit, and too few virtual and technological options all have a cost, diminish patients and adversely affect other parts of their lives.

Patients want a consistent relationship with health care professionals who know them and their medical history. This reduces the number of times they have to tell their story and undergo duplicate interventions. Many in Alberta do not have a regular primary care provider even though the evidence shows that people who have a regular provider or team are more satisfied with their care, receive more preventative and chronic care, are more involved in decisions about their care, are in the emergency room and hospital less often, and have reduced morbidity and mortality.[11]

Additionally, many Albertans are not receiving the quality of care they deserve, experience disjointed care or fall through the cracks.[12] One in five reports that they experienced a medical error in the past five years. Patients want top quality care and a team of providers who, through increased collaboration and better communication, provide seamless care. They also desire better links between health and social care services. With access to a collaborative team and good information flow, patients are more likely to have support throughout their health care journey and reach their care goals.[13] Patients want to be confident that their health information is getting from one provider to another. As an example, patients want to know that their family physician or nurse practitioner knows what their specialist is advising. In fact, they would prefer that these clinicians work together transparently as a team, even sometimes providing joint consultations. Patients' concerns are warranted. Family physicians report communication and information exchange challenges with specialists, as well as home care and hospital inpatient and emergency services.[14] In addition, patients want ready access to their own personal health information. Evidence shows that patient access to their health records can reduce anxiety and improve their care and outcomes.[15] [16] [17]

Alberta Government/Alberta Health

Alberta Health has expressed concern about the mismatch between the current level of per capita of funding and expected outcomes. This problem is even more acute now that we have entered a time of significant fiscal pressures due to Covid-19. The government's focus is on return on investment and the sustainability of the health care system.

Importantly, they need to reduce fiscal uncertainty and have more predictable billing and other budgetary costs. Currently, there is inadequate accountability cascading throughout the health system. Government wants a better sense of how dollars are spent and to reach and exceed performance targets met by other jurisdictions. It also wants to have greater influence on tactics used to mitigate costs, such as reducing red tape, reducing over and under treatment, improving quality, controlling the physician workforce and its distribution, shifting from fee-for-service payment models, keeping the population well and out of facility-based care, and relying on other sectors to fill some of the gaps. To achieve many of its goals, the Alberta government wants a more robust primary and community-based care sector. More health professionals and managers are needed at the community level, especially increased numbers and expanded roles for interprofessional providers fully deployed and working to their full scope of practice. However, the imbalance of resources that go to the acute and other facility-based sectors has hindered progress. Alberta finds itself in the paradox of wanting to improve the delivery of care in the community, thereby reducing the burden on acute care, but continually pointing to unmet needs in the acute care sector as the reason it cannot make the required fundamental shift.

Alberta Health Services and Other Health Administrators

Alberta Health Services (AHS) and other health administrators are the interface between Alberta Health and much of health service delivery. They are accountable the government and the public. The creation of a single entity enabled AHS to streamline governance and accountability and increase standardization of provincially-delivered programs. However, a Health Governance Task Force review found that Alberta's health governance model "*has not fully evolved to align with its single health authority model,*" and that "*major players in the health system [are] stressed and confused about roles and responsibilities*." [18]

While there have been discussions in Alberta about strengthened and shared accountability, so far there has been limited progress in this regard. Even at the top, there is nowhere within Alberta Health that holds primary responsibility for accountability and engagement with AHS. Efforts are currently underway to improve the governance and accountability interface between Alberta Health and AHS by clarifying responsibilities, coordinating planning, and developing a financial and system performance management framework and reporting structure. Further, such efforts are required throughout the system.

While AHS plays a role in managing the Primary Care Networks (PCNs), as part of its role managing health services across the community and acute care sectors, Alberta Health is responsible for the primary care system. Alberta Health funds PCNs and physicians, and is responsible for developing policy and identifying desired outcomes. As a result, there is overlap and competing priorities in the roles and responsibilities of Alberta Health and AHS when it comes to developing the strategy, funding, managing and monitoring primary and community-based care. The recent review suggested Alberta Health Services should strengthen its integration with primary care and that such "*integration efforts should align to direction, policy and strategies from Alberta Health, who has primary responsibility for primary care*." The review also recommended that AHS "*develop a strategic vision and governance model to support its objectives both in the hospital and the community.*"[19]

Health administrators across the system are focused on managing their budgets and achieving value for money and optimal outcomes. Working in a complex and uncertain system, they are often faced with competing priorities and a number of unnecessary barriers to improving care quality and processes. Importantly, the health system needs transformational, supportive and visible administrative leadership, with improved connections with frontline staff.

Health Care Professionals

Overall most health care professionals – physicians, nurse practitioners, nurses and other health professionals alike – see the benefit of their patients to being attached to a robust and comprehensive Patient's Medical Home as a way to improve the way they experience health care services and achieve better outcomes. Workplace and job satisfaction are also important to health care professionals, as is their safety and security. However, the ways in which the health system and services are currently structured make their work life more difficult. While Alberta's family physicians give

the highest rating among all provinces to the overall performance of the health care system, their top priority is greater integration of primary care with specialists, mental health services, hospitals and community-based social services. Many health care professionals are frustrated because the best experience, care and outcomes are not assured for their patients as they transition through the system. Four out of ten family physicians reported that their job is extremely or very stressful.[20] Many experience burnout trying to meet patient needs, with inadequate system structures and resources to support them, including interoperable health information systems. Moreover, specialists, specialized services and hospitals struggle to ensure optimal care and management continuity for patients without a regular primary care provider.

There are insufficient interprofessional providers to deliver a full range of community-based services.[21] [22] Moreover, many primary care practices with access to teams have not optimized their services; several Primary Care Networks (PCNs) still operate in parallel with physician practices. Also, primary care practices are often not well-integrated with other community-based services. These factors compromise the comprehensiveness care patients receive. Physicians want a predictable and secure income stream. However, they have come under scrutiny for failing acknowledge the negative aspects of fee-for-service and adopt new remuneration models (e.g., blended capitation and salary) which would provide greater income predictability and facilitate teamwork and interprofessional care.

A greater understanding of health system workforce recruitment and retention is required, and the competencies developed in the health workforce education system must to meet future needs. New graduates should be able to find a place for themselves in primary and community-based care, but the way in which the system is structured does not always meet their needs. For example, burnout and the recent experience of family physicians in Alberta has resulted in declining interest in family medicine among medical students, as well as less interest in comprehensive care among new graduates.

Health care professionals are generally open to opportunities to support improvement and design their services in a way that is adaptive and accountable to patients and the community. However, uptake of quality improvement initiatives has been inconsistent and not always sustained. Standardized and more robust supports for quality at the frontline are needed. However, there has been resistance to change at the system and service levels. Not all health care providers agree that change is actually needed, or on the best way to improve. There are also different views among health disciplines about the best way forward and who should be involved. Hence, a new culture, mindset and approach with regard to leadership, governance and co-design among service providers are required.

1.2 The Solutions

This white paper addresses the reasons why transformation across the entire health care system is required and proposes a new way forward. As part of an evolution towards a fully integrated system, the paper describes a new model for aligning and organizing primary and community-based care that is more comprehensive and better able to manage transitions and continuity for patients across their entire health care journey.

The paper is anchored in the lessons learned from Alberta's past and current primary and community-based health care transformation efforts. (See Appendix A for a summary of Alberta's 20-year primary care and community care transformation journey). It builds on these lessons, with applicable learnings and evidence from high-performing health systems, and the knowledge, ideas and experience of the members of the Primary Care Alliance and other health care thought leaders in Alberta and elsewhere.

The content that follows revolves around the patient and provider experience in a transformed system. Reflecting upon their input and stated needs, the requirements and recommendations outlined in this paper include an analysis and discussion on what is needed and proposed for a transformed health care system and integrated service design, as well as the factors that will facilitate its transformation.

2. A Patient and Provider Experience Transformed

As stated above, this paper focuses on the patient and provider experience in a transformed system. The following four vignettes provide examples of a future with a very different patient experience from that of today. Our proposed future will also result in a change in the way providers work and engage with each other. The fifth and sixth vignettes illustrate some of the ways providers will experience their work day in our proposed new model.

2.1 An Experience Transformed for Kris and her Family

Kris and her husband run a construction business. She is the mother of a young, generally healthy family: Jay 2 months, Lee 4 years and Madison 8 years. Kris visits the clinic with Jay for well-baby visit with Jean (formerly a public health nurse and now a fully integrated member of the team at the Patient's Medical Home). Kris knows Jean from similar visits with Lee and Madison. Plus, Jean gives health education sessions at Madison's school. Jean checks Jay's height, length, weight and immunization status, meanwhile checking in on how Kris is doing. While technically on maternity leave, Kris still has to maintain some of her responsibilities in the business and is finding it more stressful than when her first two children were infants. During their conversation, Kris shows signs of mild postpartum depression. The family physician joins briefly to review the chart, get an update on key issues discussed and do a medical assessment for Jay (with no duplication). A four-month well-baby follow-up appointment is booked for Jay. They remind Kris about the immunizations and developmental screening for the other children and book the relevant appointments. They also develop a plan to address Kris's concerns and refer her to the mental health team member for her depression. Because they have a rapport, Jean checks in with Kris by phone over the coming weeks and also gives Kris her number to call if necessary.

2.2 An Experience Transformed for Al

Al lost his job during the 2008 recession and has not been able to find work since. Because of his low income, he is sometimes unstably housed and often relies on a foodbank. The stress has led to an increase from his previous occasional smoking to several cigarettes a day. Formerly, an unattached patient, he has just joined a Patient's Medical Home. At his intake assessment, his medical and social histories are documented in his medical record, including the results of standardized risk factor screening. As well, medical information from frequent emergency department visits is imported into his local record, along with service data from previous visits to other health services. His core medical team reviews the results of laboratory and other tests completed prior to his appointment, which reveal he has COPD as an underlying condition. Al is asked about his smoking cessation and COPD treatment preferences. He says he can't stop smoking or really deal with his health issues until he has a stable income and housing, as well as food security.

An integrated primary and social care team is identified, and Mia (a mental health and social work professional) takes the lead as Al's main support and contact person. Al is provided with a mobile phone and Mia touches base with him regularly regarding his placement in social housing and job search. During one of these calls, Mia learns Al experienced trauma during childhood. Subsequently, he agrees to speak with a peer support worker regarding his experiences and this is arranged through the medical home. Later, once Al has secured supportive housing and food security, Mia reviews his care goals with him again, and together they agree that he will commence a smoking cessation program. Shortly thereafter, his clinical team works with him to develop a COPD care plan, including a plan to respond to acute changes in his condition effectively from his home. Importantly, they ensure Al has coverage for adequate baseline therapy.

2.3 An Experience Transformed for Benita

Benita immigrated to Canada from St. Lucia when she was a student. She and her husband have two married children. Benita worked as an administrative assistant in the provincial government. Now retired, she has advanced congestive health failure (CHF). Based on a recent emergency department visit and her latest test results, Benita's CHF prognosis and care requirements have changed. As a result, care is now formerly shared among an expanded team. In addition to a dedicated, wraparound Patient's Medical Home team, there is joint management and coordination with home care, the cardiologist, the cardiac care centre and a palliative care team. Yaritza is identified as the dedicated point person and care coordinator for Benita and her family members. The tailored care plan is revised, reflecting the option for Minimally Disruptive Medicine (based on outcomes that matter most to Benita and a minimized burden of treatment). Office visits are minimized because there is ongoing home monitoring and virtual care. The palliative care team, supported by Yaritza, consults with Benita, her husband and children, tells them what to expect, documents their wishes, and develops a mutual care plan that includes roles and supports for family caregivers.

2.4 An Experience Transformed for Muriel and Frank

Muriel and her husband Frank live in rural Alberta. Frank was a farmer and always healthy and active. Since Frank developed Parkinson's disease, he has had a significant decline in his physical and cognitive functioning, and has good days and bad. Muriel is his caregiver and has taken on most of the work around their home. She has really struggled managing Frank's condition and they often end up in the emergency department and at their doctor's office. During one of these visits, Muriel learned about an opportunity to provide input on improving services for those in similar situations. So she started attending meetings and found that she wasn't just expected to tell her story or respond to a proposed service model, she was involved in a structured process, working with other caregivers, patients and health care providers, to co-design a better service. Now, with the newly designed service in place Muriel has easy access to information and advice about Frank's condition either online or from a dedicated health care team readily available by phone. Through the support she has received, she now has the agency to monitor Frank's vitals, know when his medications need to be adjusted, ascertain what activities Frank can tolerate and to determine whether they need to seek health care services. Since starting the program, Frank and Muriel have not been to the emergency department and they have seen their family physician half as often over the past year. Both are managing their lives better and with much less anxiety.

2.5 A Day in the Life of a Core Interprofessional Primary Care Team

Brian (a registered nurse and chronic care specialist), Mia (a mental health and social work professional), and Yaritza (a medical office assistant) are part of the core team that works with Dr. Ava Tarr in a comprehensive primary care practice. They have been working together for a few years and have developed a rhythm in supporting the patients they serve. Working together to provide services tailored to their patients' needs, each works to their full scope of practice and takes on a wide range of roles, based on their own expertise and interests. There is a blurring of boundaries of their scopes of practice in many instances, and their skills are utilized in effective and innovative ways.

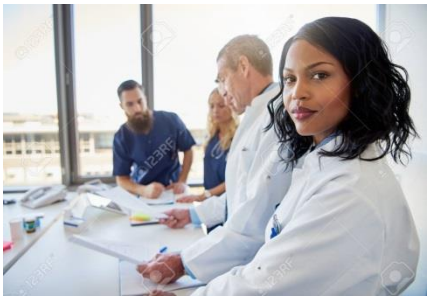
They are full partners in patient care with Ava and work closely with her in delivering direct patient care, (e.g., providing patient education, taking vitals, reviewing laboratory results, providing wound care and other procedures, participating in case conferences, following up on referrals, etc.). Both changes to the regulatory framework and expanded protocols for delegated acts (e.g., some medical procedures, ordering laboratory tests, prescribing medications and vaccinations) have proved foundational in terms of the team broadening their scopes of practice, using their skills effectively and integrating new roles into the practice. Protocols, outlining delegation by Ava to her team, are created for controlled acts typically performed by physicians and not authorized to another health professional's scope of practice.

For many patients, Ava is always not the first point of contact; the team has developed expertise in closely matching patient needs with the most appropriate provider. As a team, they monitor chronic patients, run group programs, provide triage services, manage the virtual care services, and conduct home visits. They work collaboratively with patients to address their health concerns and use group sessions to focus on common risk factors and healthy lifestyles. A member of the team can often be readily available during the day, so patients can phone them or see them that same day. The team also works with their broader team of clinicians to offer services such as well-baby and well-women clinics, smoking cessation and other specialized programs. Standard communication protocols, warm handoffs between team members and a truly interdependent work flow are keys to this team's success.

Although Ava is the most responsible provider, the team seamlessly provides much of the ongoing support and care for many patients, especially those with chronic conditions. Brian monitors patients with chronic conditions that are generally well-controlled based on a mutually agreed upon algorithm, whereby Ava sees the patient at least once a year and the team provide the remainder of the care. Brian provides the initial education for newly diagnosed patients and sees them regularly in the beginning as they adjust to their medication and lifestyle changes. When minor changes to medications are required Brian is able to make those changes and keeps Ava informed of the patient's clinical condition. If patients experience difficulty managing their chronic condition, they see may see Ava and other members of the team for more intensive treatment and support. When Brian determines that there are psychosocial issues, he refers patients to Mia. She also steps in as required to provide education and lifestyle counselling. Yaritza supports patients when they need services elsewhere in the medical home or externally, and has a breadth of skills to support Mia and Brian with patient care.

2.6 A Day in the Life of Dr. Ava Tarr and the Patient's Medical Home Team

Ava has always dreamed of working in comprehensive family practice. During training, she was concerned that her responsibilities to her aging parents, her passion for volunteering and desire for time outside medicine would create barriers to that becoming a reality. She was able to join a family practice will colleagues who held similar goals, created time and space for her passions outside medicine, and supported her transition to practice. The team-based philosophy allowed Ava to work comprehensively in a supported environment.



As an example of her role on the team, Ava's day starts with huddle with her core team to review the patient appointment list, discuss their care needs and what each member of the team will do today. Most of the team are present in the practice, but a couple join the meeting by video since they are working offsite doing virtual and/or home visits. Ava welcomes Jen, the new peer-support worker who will be running the group self-management programs and providing guidance about, and navigation to, community resources. The extended team has further discussions about the more complex patients. Their EMR allows the team to communicate seamlessly throughout the day on desktops, tablets or phones.

The first patient Ava see has complex needs and was recently hospitalized. All the medical records from the hospital visit, a recent cardiology follow-up and yesterday's DI results are at her fingertips. The patient has developed an additional concern and is also feeling depressed. Ava can spend the extra time required to make a diagnosis, consult the cardiologist (funded as part of an integrated health neighbourhood) and submit a prescription. Then, Ava walks the patient down the hall to touch base with the clinic behaviourist for support with his depression. A shared care plan is developed that includes social prescribing to community services.

Once Ava is notified that the patient is "ready on screen," she conducts a virtual visit with her second patient who was recently diagnosed with diabetes. Before the visit, Ava reviewed the pre-visit health journal the patient submitted via secure messaging, the patient's chart and recent lab results. She discusses the patient's diet and experience with the chronic disease support program. Ava orders a prescription, which is sent directly to the pharmacy.

Ava sees several more patients in-person and virtually during the day. She also checks in quickly with a nurse on the team seeing an elderly patient in case she is needed. In between, she has time to respond to a secure text from a team member doing a home visit with a complex patient, review lab results and message two patients to let them know the results and next steps. She saves time by using dictation and real time voice recognition capture, and by enhanced templates that make documentation easier.

Towards the end of the day, Ava has scheduled time to work on the new clinic quality improvement project which she and the quality improvement team had identified based on their access to aggregated clinic data. She leaves on time; her colleague is covering their shared after-hours services this evening. Later, when she has time, she quickly checks the virtual monitoring information of one of her patients she saw earlier in the day who was very anxious about changes in their monitored results. Based on the information, she follows up briefly with her patient by phone to allay their concerns. Ava has found the flexibility of doing work of this type from home after hours beneficial for her personally. This strategy has helped her create blocks of unscheduled time during daytime hours to pursue her other passions and run errands for her family members.

3. Foundation for a Transformed Health Care System

3.1 Attributes of High-Performance

Figure 1. Key attributes to high-performing health systems, with a focus on the patient, family and community

While health care systems may differ in their structure and delivery systems, there are several key attributes that ensure high performance. This white paper acknowledges and embraces these attributes throughout.[23] [24]

3.2 Patient's Medical Home and Integrated Health Neighbourhood

The Patient's Medical Home is the vision for the future put forward by the College of Family Physicians of Canada, and embraced by the Alberta Medical Association's Accelerating Change Transformation Team (ACTT). The Patient's Medical Home model, which emphasizes team-based, comprehensive, high-quality primary care, is the foundational and aspirational model for all in Alberta (Figure 2), and has been the basis of primary care transformation efforts in the province to date.

Figure 2. Alberta's Patient's Medical Home Model

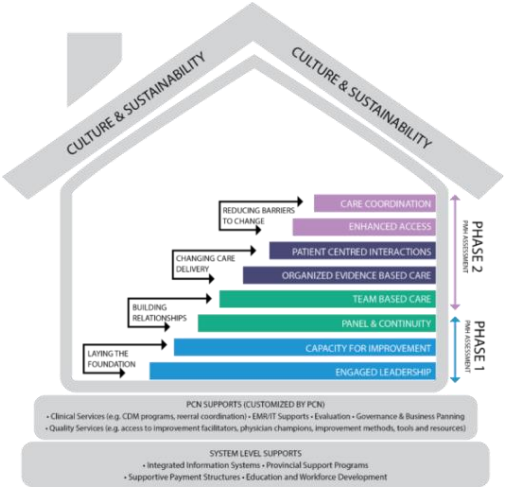
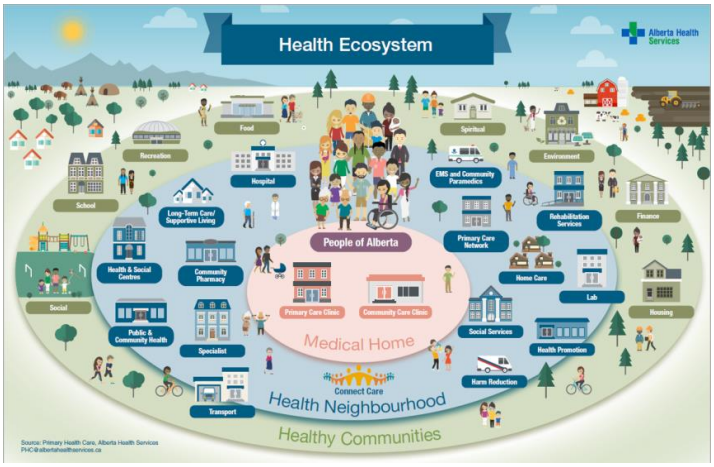


Figure 3. Alberta Health Service's Integrated Health Neighbourhood



The concept of an integrated health neighbourhood takes comprehensive team-based care in the Patient's Medical Home further to include a network of providers and services outside the medical home. The medical home acts as a hub for coordinating care within the neighbourhood, including referrals to other health professionals, specialists, hospitals and home care, and to broader social and community supports, such as community-based mental health and addictions and social services (Figure 3).[25] [26] The Patient's Medical Home and integrated health neighbourhood are integral concepts in this paper, and we propose significant shifts in Alberta's health system organization, service delivery and relationships in a future state in order to achieve their goals.

4. A Health Care System Transformed

Transforming Alberta's health care system requires both a new system and service design.

A transformed *system design* will be characterized by evolving health care structures and organizations, which increasingly will be community and population-driven and have a primary and community-based care orientation.

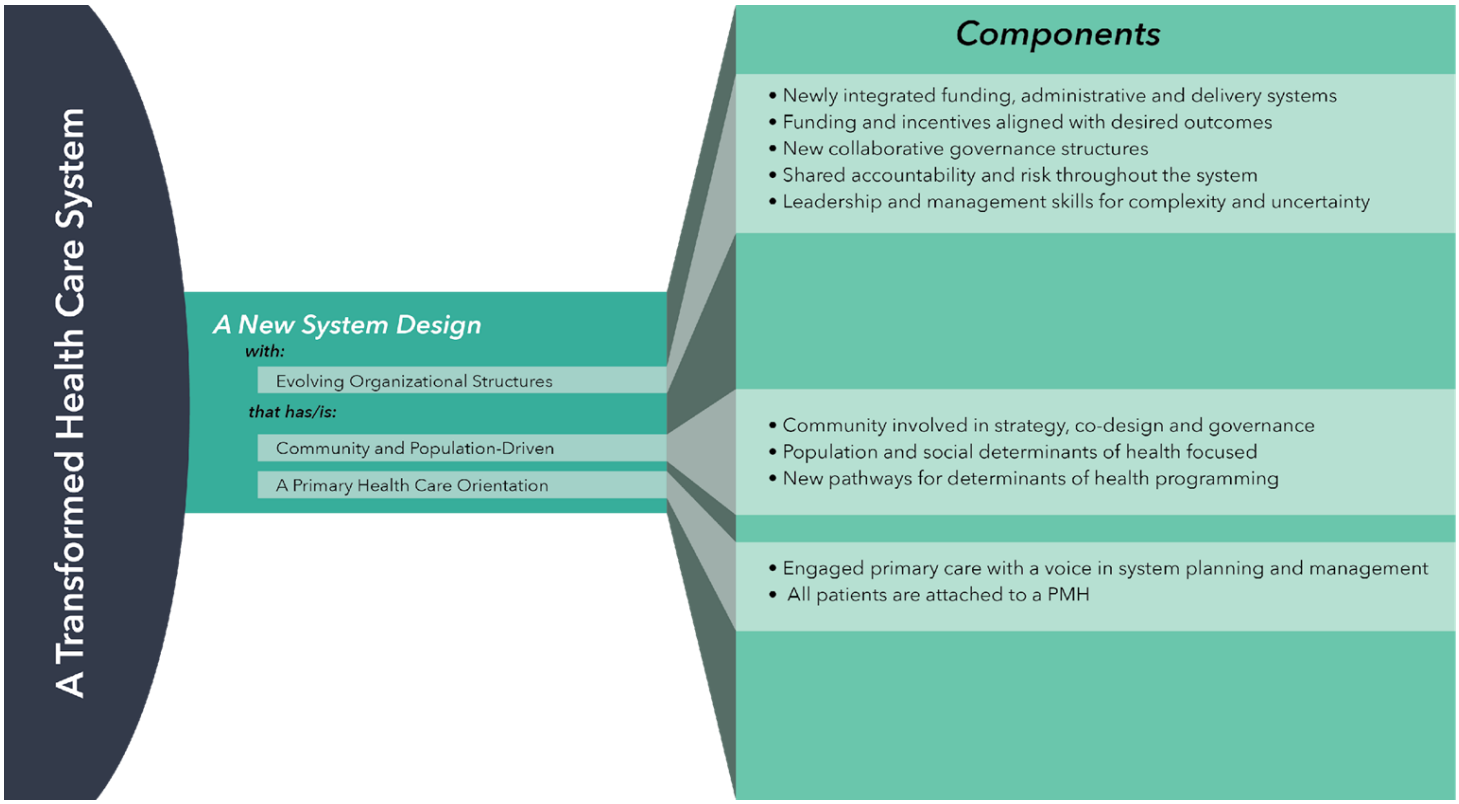
In a transformed health neighbourhood with an *integrated service design*, primary, specialist and other community-based health and social care will be characterized by patient-preferred services, cohesive, versatile and motivated teams, information and management continuity, and continuous quality improvement.

This section elaborates on the various components of each of these attributes for a new system and integrated service design.

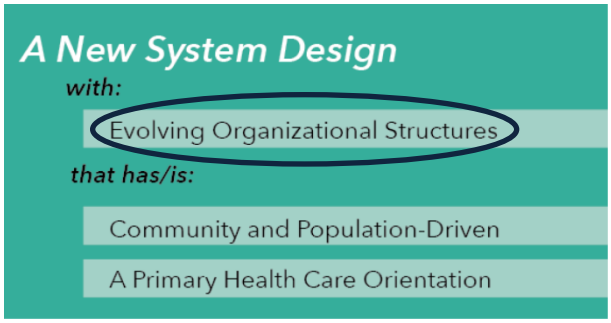
4.1 A New System Design for a Transformed Health Care System

High-performing health systems are integrated, with streamlined funding and service delivery, and they have a primary and community-based care orientation.

Better quality, population and patient outcomes and value for money can be achieved through a reallocation of resources and changed health system structures and processes. The proposed new design for Alberta's health care system entails an evolution from existing organizational structures towards full integration, with an important first step of integrating and improving primary and community-based services.



A New System Design: Evolving Organizational Structures



To achieve system transformation goals, changes to the existing provincial, regional and practice-based organizational structures are required.

A New Provincial System Design

A New Structure and Agencies

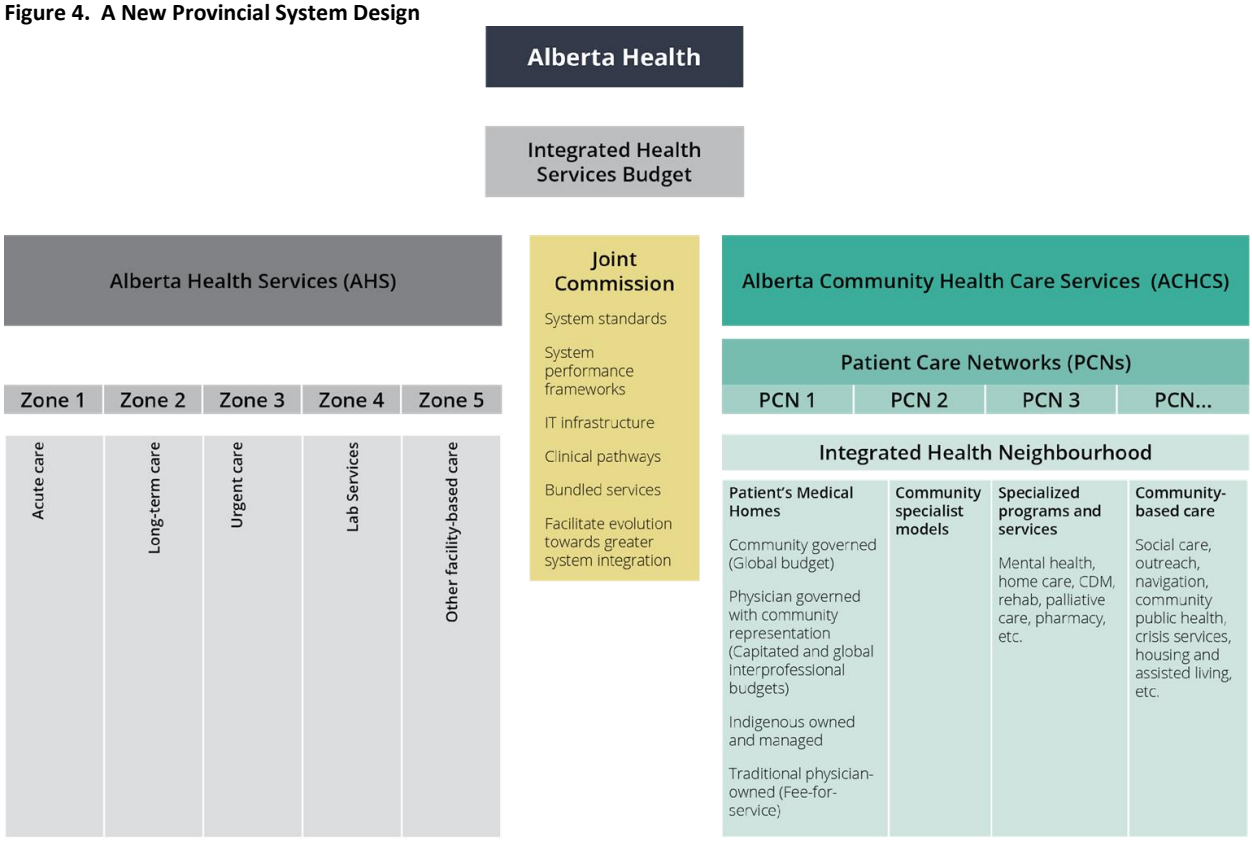
We propose a newly integrated funding, administrative and delivery system for community-based health care services, with oversight by a new provincial agency as shown in Figure 4 below. Called Alberta Community Health Care Services (ACHCS), this agency will – like Alberta Health Services (AHS) – be a subsidiary of Alberta Health, with independent management, accounting, legal liability and board of directors. Taking on some of the services currently under Alberta Health's and AHS's mandate, Alberta Community Health Care Services will provide province-wide strategic leadership and planning for community-based health care within a global budget – including primary care, community specialists and other community-based services. Its work will be supported through stakeholder engagement, joint planning and collaborative partnerships. AHS will provide similar oversight for acute care, urgent care, long-term care, laboratory services and other facility-based care.

The Case for Incremental Integration

Many health systems across the world have moved to fully integrated health management structures and service delivery at the local level. Some have introduced this model in one reform effort; others have moved in this direction incrementally. Acute care tends to dominate reform discussions, and there is often a power imbalance in its favour in planning and implementation. Thus, we propose the establishment of Alberta Community Health Care Services – in parallel with AHS as the acute and facility-based care agency – as an initial step to allow for a focus on the integration of community-based services and a strong voice from local health services and community members in service design and implementation. Having dedicated infrastructure will give primary, community specialist and community-based care a place to define their vision, plan and develop new models for addressing the problems they face. In some rural areas, the smaller geography and already closer interaction between acute and community-based care, it may make sense to move more quickly towards an integrated model with single budget that includes the acute care services. Governance and oversight would be aligned with that of Alberta Community Health Care Services and local Patient Care Networks.

Given evidence and experience from other jurisdictions indicates that ideally organizational structures would evolve to become fully integrated, our proposed initial step includes a Joint Commission to support overall system integration and alignment. The Joint Commission will: set overall system standards, performance frameworks and clinical pathways; support information technology infrastructure; facilitate the provision of bundled services across health sectors; and support the evolution towards greater system integration.

Figure 4. A New Provincial System Design



Budgeting and Funding

The newly proposed organizational structures will be characterized by funding and incentives that are aligned with desired outcomes. There will be well-defined budgets, with adjusted per capita allocation of resources, and a focus on value-based care, considering cost and outcomes of importance to patients. Alberta Community Health Care Services will set a risk-adjusted per capita global budget for each region or *Patient Care Network*, with funds reallocated from Alberta Health, AHS and the Physician Services Budget. It will also contribute to setting provincial health human resource remuneration rates, including fee-for-service rates, capitation rates and salary bands.

Governance and Accountability

The new system design will have an inclusive governance structure. New collaborative governance structures will consist of joint planning and collaborative partnerships, with the aim to bring more voices to the table, clarify roles and responsibilities, better align services and share accountability. New alliances and a cross-sectoral approach will include health, social and other sectors, along with patients and community. The governance model for the Patient Care Networks is described below.

A transformed system needs strengthened and shared accountability throughout. Alberta Community Health Care Services will manage and monitor fiscal accountability and the performance of the Patient Care Networks. In its oversight role, it will ensure regulatory alignment, set core clinical standards, requirements and directives, and undertake audits. Building on the current efforts to improve accountability mechanisms between Alberta Health and AHS, the proposed new structure will be characterized by common performance frameworks throughout the system, with clearly defined accountabilities for system performance and patient outcomes. Other jurisdictions with integrated care systems have introduced performance frameworks with shared accountability across the health system, with core measures for performance and outcomes (e.g., health outcomes, quality and experience, cost and sustainability) that align with overall system goals and strategies. Additionally, there are performance requirements within sectors (e.g., acute care, long-term care, mental health, primary care). We propose this model for Alberta. The province – led by the Joint Commission with input from Alberta Health, AHS and ACHCS – will set the overall health

system goals and develop provincial and sectoral accountability frameworks that are aligned with system goals and have clearly linked and measurable targets. The framework with allow for flexibility in the manner in which the overall goals and targets are achieved, and include requirements to develop additional performance goals and measures that reflect the local environment. Accountability frameworks and the desired outcomes will have to be reflected in governance structures and contractual and collaborative care agreements. There will be clear criteria and standards for performance monitoring, and reporting will be timely, relevant and transparent. Overall performance in the acute and facility-based care sectors and Patient Care Networks will be reported publicly, including how funds are spent, service delivery and, where possible, improvements to patient outcomes. The Health Quality Council of Alberta would continue to play a key role in the independent assessment and reporting of performance.

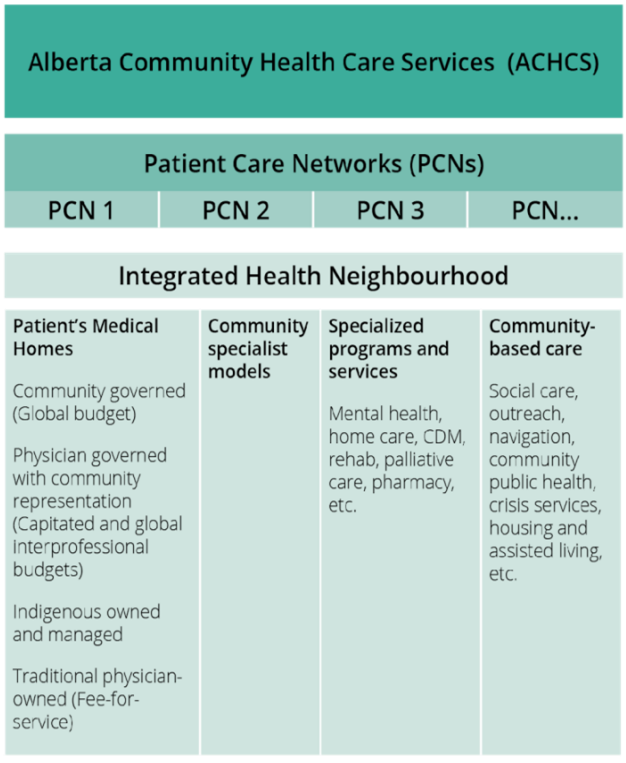
New Leadership Capacity

This transformation will require more capacity and an expanded set of leadership and management skills at all levels of the system. Distributed leadership and dynamic network structures will be comprised both of leaders with institutional memory and emerging leaders who have defined, stable and remunerated roles. Importantly, the new distributed leadership structures will emphasize leadership continuity, meaning that leadership roles and responsibilities will be aligned and cascade throughout the system. In addition to having the requisite skills for planning, implementation and quality improvement, they will need the skills to manage complexity and uncertainty. Such leaders will need to consistently promote and work towards the shared vision for a reformed health system, take a whole-system approach that involves diverse stakeholders, promote creativity and allow for risk taking. They will need to develop an understanding of others' beliefs and priorities so they can support them in adapting to and embracing change. At the same time, they will be charged with maintaining accountability to system goals.

A New Regional Design to Manage the Integrated Health Neighbourhood

At the regional level, we propose new agencies – *Patient Care Networks*. They will be tasked to lead bold change at the local level and advance shared governance and accountability. This new structure will allow, for the first time in Alberta, the emergence of a truly integrated primary and community-based system of care, and open new possibilities in terms of the orientation, arrangement and delivery of services.

Figure 5. A New Regional System Design



Budgets and Funding

While currently primary and community-based care funding mainly flows directly to clinicians, clinics and health care agencies, Patient Care Networks will hold the entire budget for community-based services and service providers within its network or *integrated health neighbourhood* (Figure 5). The Patient Care Network budget will be set by Alberta Community Health Care Services (ACHCS) and be a combination of risk-adjusted per capita and fixed-cost core funding. The networks will be responsible for strategic planning, budget allocation and oversight, allowing for the development of infrastructure and resource allocation based on the best evidence and local population needs. Importantly, they will facilitate collaboration based on economies of scale and manage integration of back-office functions.

A Broad New Mandate

Patient Care *Networks* will have a broad mandate and operate under new budgetary, governance, management and oversight models. Importantly, and as a change from the current structure, they will be responsible for health

workforce planning and management within their jurisdiction and allocating resources accordingly. They will fund all local community-based health services – Patient's Medical Homes (including physicians and expanded interprofessional teams), community specialists, specialized programs and services (e.g., mental health, home care, community pharmacy) and other community-based care (e.g., outreach, navigation, community public health and some social care). Patient Care Networks will facilitate service integration across the integrated health neighbourhood, guide and oversee service delivery, potentially deliver some services directly, and ensure consistency and interaction among Patient's Medical Homes.

Additionally, these new regional entities will have the structure and leadership capacity to proactively reach out, consult and formally partner with other community-based agencies, social services, NGOs, municipalities, schools, housing, justice and other services. The synergies created from improved partnerships and integration with services traditionally outside the health system, but a critical part of comprehensive care, will lead to new service delivery models and many benefits to patients.

Building on the Primary Care Network (PCN) Model

Patient Care Networks will have the important role of furthering the evolution towards the Patient's Medical Home. The Primary Care Networks (PCNs) have been effective models for attaching teams to previously solo physicians and bringing family physicians into a network that provides them with important supports, such as coordination of after-hours coverage, interprofessional teams and quality improvement initiatives. However, physician membership in PCNs is voluntary, and thus not all Albertans have access to such teams. Moreover, not all physician members have fully integrated PCN team members into their practice. As well, because interprofessional team members are often not co-located with physicians and are not available on a full-time basis, the potential benefits of team-based care have not been fully realized. Some PCNs have achieved greater integration of team-based services than others, and many have designed programs to specifically address local needs. However, the "*geographic dispersion of PCNs and the lack of a coordinating governance structure across PCNs created challenges in standardizing services and spreading innovation.*" [27]

The proposed change is significant and will go far beyond the current Primary Care Network (PCN) mandate and capacity. Thus, Patient Care Networks will incorporate existing PCNs into an expanded, integrated network of community-based service delivery. In some instances, high functioning PCNs have the requisite infrastructure to expand their mandate and evolve into Patient Care Networks; others may merge and expand their mandate in this regard. In some instances, new entities may need to be formed as Patient Care Networks. The introduction of Patient Care Networks will require significantly different and more inclusive governance and management structures than the current PCNs. Those that evolve into Patient Care Networks will need to build the capacity to support and manage the transition, as well as the services in the new integrated health neighbourhood.

Performance and Accountability

Regarding performance and accountability, in 2012, the office of the auditor general reported that there were "*no set service delivery expectations, performance measures or targets for any of the PCN [Primary Care Network] program objectives"* and *"no standardized information was required or generated across PCNs.*" [28] Upon follow up, Alberta Health had developed key performance measures and some physicians and PCNs had made progress measuring performance. However, this was inconsistent across the province, including wide variation in physician participation in the measurement of access, screening and patient satisfaction. Targets for PCN performance measures were not set and results were not publicly reported. Services funded within the Patient Care Network will be required to develop a performance measurement plan, identify targets for each measure, and report results in relation to the targets. The new Patient Care Networks will be responsible for the oversight of performance measurement and reporting, including public reporting. They will be required to report on the core health system measures and targets outlined in the provincial performance framework, as well as the measures for specific services (primary care, mental health, home care, etc.) within the network.

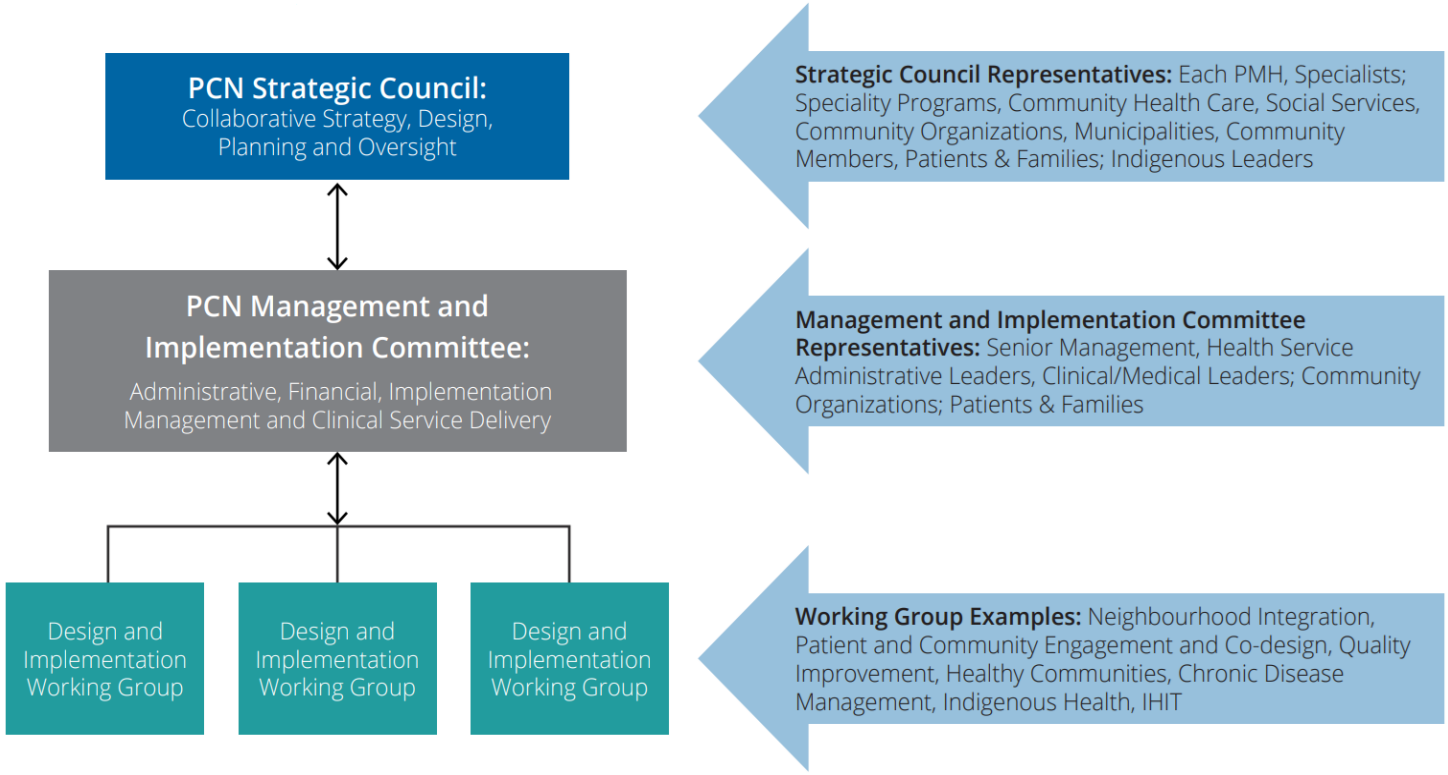
Inclusive Governance

The Patient Care Networks will have inclusive, transparent governance models that support collaborative decision making. Governance at this level will include: responsibility for defining and living by its vision and goals; financial management and resource allocation decisions; monitoring shared accountabilities, integrated service performance, and quality and impact measures; reporting; and dispute and conflict resolution. Figure 6 outlines the proposed two-tiered Patient Care Network governance structure that will have both a strategic and management/ implementation arm.

The new governance model will take the current zone PCN Committee model into consideration. The current model has physician representation, as well as some other community-based providers and community members. These zonal committees plan and coordinate efforts to align with Alberta Health and provide direction to individual PCNs. Given that many view the dominance of current PCN governance by physicians as inappropriate for the future, new governance structures will have broad equitable representation. The governance structure and membership will be designed to ensure leaders from the various health and social services within the integrated health neighbourhood, health care professionals, community members and organizations, and patients and caregivers are able to engage in deliberative, consensus-oriented decision making. Both the strategic and administrative governance arms will include community, patient and health and social service provider representatives in system co-design. As well, the Management and Implementation Committee will be guided by topic-specific Design and Implementation Working Groups.

The governance arrangements will be established in writing. This document will address governance composition, including the number of representatives, what bodies the members represent and how they will be selected. Provincial priorities, network governance accountabilities, and how to address non-compliance and poor performance by members will also be documented. As well, existing power imbalances and how collaboration and advancing the integrated health neighbourhood will be balanced with health service autonomy will be explicitly discussed.

Figure 6. Patient Care Network (PCN) Governance Structure



A New Integrated Health Neighbourhood

There will be a shift in orientation and community-based services and supports will reflect population needs and patient preferences. There will be change in how health professionals work and new collaborative care pathways.

The Patient's Medical Home

Newly designed Patient's Medical Homes will be central to the integrated health neighbourhood. Alberta has made significant inroads in the evolution towards the Patient's Medical Home, but significant change in the way primary care practices are funded and managed is required to fully achieve the aspired system design and outcomes.

In the new service model, Patient's Medical Homes will receive funding from the Patient Care Networks for practice infrastructure, administration roles, clinical leadership, health professional remuneration (physicians, nurse practitioners, nurses and other interprofessional team members), change management and quality improvement. Taking into consideration fixed costs, the budget will be set based on parameters set at the provincial and network levels, a business case and operational plan developed by each medical home, the risk-adjusted patient population served, special population requirements, infrastructure needs and the number and type of interprofessional team members required. Patient's Medical Homes will be expected to design services that reflect their patient's needs and will have the flexibility to allocate their budget and deliver services in a way that meets those needs. They will be accountable to the Patient Care Networks to demonstrate that they have achieved their goals.

While they will vary within and among networks, Patient's Medical Homes will ideally house a significant portion of the services in the integrated health neighbourhood. In addition to their core medical team, Patient's Medical Homes will serve as the hub for patient access to other health and social care providers they need. Some Patient's Medical Homes will have the services provided by many health care professionals co-located and covered within their global budget. Elsewhere, health professionals in the integrated health neighbourhood will serve multiple Patients' Medical Homes, funded either directly by the Patient Care Networks or jointly by a group of Patient's Medical Homes. Interprofessional supports will be deployed across medical homes based on local population needs and input from stakeholders – including patients and the community. It will be the role of the Patient Care Network to work and coordinate services with and among the various Patient's Medical Homes to best match the needs of the populations served.

Recognizing the significant evidence that the traditional standalone, fee-for-service models are not conductive to comprehensive primary care, three additional types of Patient's Medical Home models are proposed, as summarized in Table 1. Each will be independent entities, with an accountability and performance contract with the Patient Care Networks and community and/or patient representation in their governance and/or mechanisms for incorporating patient feedback into their operations. These models could potentially include focused practices. The current fee-for-service structure would remain as an option in the interim, recognizing moving to new models will be an evolution and that there may be a continued role for fee-for-service models in certain circumstances. Built into the design will be supports and mechanisms to help fee-for-service practices further evolve towards the Patient's Medical Home vision and integrate into the health neighbourhood, including shaping the payment schedule to support integration and more comprehensive care and to ease their transition to a new model.

Table 1

Model	*Contract and Budget*
Community-governed Patient's Medical Home	Contractual and accountability agreements with the PCN (Could be managed by the PCN in certain instances) Budget allocated within provincially and PCN set parameters Budget based on an operational plan and defined basket of services One contract and global budget for **salaried clinical staff (physicians and interprofessional team)**, management and administration, clinical leadership roles, overheads, quality improvement, IT, etc.
Physician-governed Patient's Medical Home, with community representation	Contractual and accountability agreements with the PCN Budget allocated within provincially and PCN set parameters Budget based on an operational plan and defined basket of services Two contracts and budgets: 1. Contract with the PCN for **physician services** and an age, sex and risk group **adjusted capitated budgets based on a patient roster**, including physician remuneration and basic infrastructure, such as overheads, administration, after hours, EMRs, etc. Physicians could be paid on a salaried, capitated or other basis and monies allocated based on agreement among physician owners 2. Contract with the PCN, similar to the community governed model contract, which includes **funding for interprofessional team member salaries**, clinical leadership roles, overhead, management and administrative support for the team, change management, and quality improvement. Another option could be an adjusted per capita global budget that includes physician remuneration based on the patient roster and covers overheads, administration and the interprofessional team
Indigenous owned and managed Patient's Medical Home	Design, contract and remuneration models will be **defined by Indigenous leaders and PMHs based on a provincial framework** developed by Indigenous community leaders that outlines the unique features of Indigenous owned and managed health services and addresses and harmonizes the intersection between federal and provincial funding The Indigenous PMHs would enter into an agreement with the PCN based on a mutually agreed upon performance and accountability contract
Traditional physician-owned Patient's Medical Home	Contractual and accountability agreements with the PCN, with many of the same – but not necessarily all – contractual requirements as the other models* **Fee-for-service payment** based on fee codes Would have access to interprofessional teams and other community-based services based on a model designed and implemented by the PCN and the same contractual and performance requirements as the other models

* Could include focused practices

Alberta has a mixture of practice sizes, from very large practices to small or solo-practitioner practices. The complexity and team support and other infrastructure requirements preclude very small practices from being successful as we move to this described future state. The evidence shows that small practices have insufficient infrastructure and staff to respond to new service, clinical, administrative and regulatory demands. But, the proposed model will allow for their evolution into larger interprofessional entities and will maintain the current networks which connect previously isolated practices.

In other health care systems, medical agencies or groups hold and administer contracts for large groups of clinicians and hold responsibility for a defined patient group. Permanente Medical Group is an example in the United States. Various types of groupings of primary care practices have been established across England. They include large formal partnerships with merged contracts and administration and pooled income and risk; multi-site practice organizations where directors hold the contracts with family physicians, employ staff and manage multiple practices and services; and individual practices holding the contracts, with some collaboration, joint activities and income or risk sharing across practices, either through informal linkages (networks) or formal contracts (federations). Reviews have found that the informal networked models can only take transformation so far. Significant effort and resources are required to create larger single practices through mergers. But closer alignment of decision making and a shared risk/reward approach allowed for more innovation and expanded patient services.[29 30]

With regard to the physician-governed Patient's Medical Home (with a dedicated capitated budget for physician remuneration), similar to the current alternative relationship plan (ARP) models in Alberta, the contract with the Patient Care Network could be held at the practice/Patient's Medical Home level. However, a group of Patient's Medical Homes could also hold the contract with the Patient Care Network on behalf of physicians in those medical homes. These medical groups could include various types of physicians in the integrated medical neighbourhood.

Moreover, the provision of additional services by family physicians, such as obstetrics, palliative care, and urgent and emergency care, could be added to the base capitation agreement. This group approach to budget holding would have the benefit of increased effectiveness and efficiency by facilitating centralized administration and supports for several practices, including centralized health human resource management, standardized health information and information technology tools, joint management and support (e.g., a shared chronic care or health promotion lead), and group quality improvement initiatives. Additionally, groups of networked Patient's Medical Homes may opt to jointly contract for other health services in the integrated health neighbourhood, IMIT, and back office and management services.

The new payment models present opportunities for budget holders to assume risks and gain from efficiencies achieved. There have been discussions in Alberta about risk and gain sharing, but they have not gained traction. The current alternative relationship plans (ARPs) devolve risk to providers (e.g., negation, transition costs), but not the potential benefits. Moreover, the existing negation approach is considered overly punitive. Funding in the current capitated model is not based on delivery on system priorities and outcomes, rates are simply derived from historical fee-for-service utilization. Moreover, the current remuneration model does not incent reducing overtreatment and overuse, and any savings achieved cannot be reallocated to address patient needs. Other jurisdictions have demonstrated how this approach can work. For example, Pegasus Health – the general practice and community-based services agency in Christchurch, New Zealand – negotiated holding its patients' pharmaceutical and laboratory budgets. As a result, the group incurred great cost savings in these areas and was able to reinvest the funds towards a suite of community-based services to reduce hospitalizations, developing care pathways, and discretionary funds to provide additional support to patients (e.g., dietitian services, medical devices, home care, etc.).

An additional consideration related to remuneration includes incentive payments and their effectiveness. Many Accountable Care Systems, like Kaiser in the U.S., include a small team-based bonus for meeting performance targets. Others, like Geisinger, which pays physicians by salary, recently removed incentive payments. In the Southcentral Foundation Nuka Model teams receive a portion of the cost-savings accrued from improvement activities. The evidence indicates that incentives focused exclusively on clinical process and outcomes measures tend to be less effective than those that are:

- Large-scale and high profile
- In support of an accepted mission
- Focused on a select number of well-planned, substantial change initiatives
- Part of a multifaceted improvement strategy
- Attentive to the technical design of indicators and measurement methods
- Consider interaction and the multiple factors that could be impacted [31]

A significant transition from the current state is required to achieve the Patient's Medical Homes of the future. That change will occur at different rates and in different ways within an integrated health neighbourhood, and within and among the medical homes. Uniformity is not desired if we aim to build the medical homes around local context and population needs. However, there will be core contractual requirements for all Patient's Medical Homes, including:

- Establishing a common, vision and shared goals
- A focus on patient-preferred design
- Developing a business case and operational plan with clear goals and objects
- Governance requirements
- A minimum number of patients
- A minimum number of physicians, nurse practitioners, nurses and other health professionals
- An enhanced comprehensive, interprofessional team with core, specialized and contracted members
- An integrated administrative team
- Outlined service modalities
- Hours of operation and after-hours requirements
- Accountability and performance expectations

Specific performance and accountability requirements would include:

Focus	Required measures
Quadruple AIM	Select measures for overall quality and outcomes (e.g., prevention, appropriateness, clinical outcomes), patient satisfaction, provider satisfaction and total patient cost
Continuity of care	Demonstrable measures of improved relational, management and information continuity
Complex and socially isolated populations	Service delivery models with both proactive and responsive plans that include bundled interventions. Approaches that include 1) a case management approach; 2) increased ability to rapidly assess in place, including providing same day home care and mental health services; and 3) a formal link to social services.
Marginalized and vulnerable populations	Service delivery models with both proactive and responsive plans that address the social determinants of health and take a health equity and culturally appropriate approach
Alternatives to in-person visits	Commitment to e-mail and messaging, telephone and videoconference visits (with technology that supports workflow integration), and expanded interprofessional team visits
Expanded access	A commitment to extended and after-hours hours coverage and accommodating urgent primary care needs the same day within the clinic for a reduction in emergency department use
Hospital to community transitions	Active discharge identification, planning and follow-up processes Community diversion plans Acute care utilization avoidance

Community Specialists

Many jurisdictions around the world have moved to integrated or accountable care systems, which include specialists within an overall global budget. In these models, all primary, secondary and tertiary care physicians share the budget and responsibility for patient care. Many physicians in these arrangements are on salary; some of their remuneration may include a small incentive payment for the team or individual. In some places, specialists are involved in bundled payments for defined episodes of care or patient groups, crossing traditional organizational and budget silos.

Specialist services remain siloed in terms of funding and delivery in Alberta. The new integrated health neighbourhood will have various options for community specialists and it is anticipated that they will become increasingly integrated into the medical home and neighbourhood teams. Rather than Alberta Health, these specialists will be paid by and have contractual agreements with the Patient Care Networks and/or Patient's Medical Homes. As discussed above, specialists may be funded by and work within a large Patient's Medical Home or they may support a group of Patient's Medical Homes. Their hospital-based services will continue to be funded by Alberta Health Services.

Community-based Health and Social Services

Community-based health and some social services will share the overall Patient Care Network budget and accountability with Patient's Medical Homes and specialists. The Patient Care Networks will have contractual agreements, similar to those with medical homes, with most of the community-based health services (e.g., mental health, home care, palliative care, rehabilitation, specialized chronic care) currently held by Alberta Health Services. Patient Care Networks will provide administrative oversight and – depending on the circumstances within the network – potentially deliver some of this care. Their budget and oversight responsibilities may also include outreach, care navigation, community pharmacy, community public health and social care services. Community-based providers and services will be represented on, and expected to bring their perspectives to, network governance and decision making, with a focus on value and outcomes of importance to their patients. Even in instances where these services are not funded through the Patient Care Network, community services will be partners in the integrated health neighbourhood and have strong representation in their governance structures.

Additionally, Patient Care Networks will have the structure and capacity to proactively reach out, consult and formally partner with other community-based agencies, such as social security and employment agencies, municipalities,

NGOs, assisted living, crisis services, housing supports and homeless shelters, food banks, child care and schools, friendship centres, youth programs, legal aid and others to facilitate synergistic and innovative approaches to providing health and social care in their jurisdictions. The importance of such partnerships, especially in neighbourhoods with socio-economic deprivation, has been highlighted during Covid-19. Community organizations, charities, health centres, social services and others have come together to develop strategies with the local communities to provide informational outreach, alternative testing and health service sites, and wraparound and targeted supports – including food, rent and mobile phones – to families affected in various ways by Covid-19.

As stated previously, the goal is to move away from siloed local service delivery towards a team-based approach to integrated delivery. This means that community-based health and social services will be streamlined and delivered in collaboration with the Patients' Medical Homes. In fact, there may be instances where these services contract directly with medical homes. The new system structure will require several changes, including:

- A shift in orientation and building community supports to reflect population needs and patient preferences
- A change in where and how health professionals work
- A focus on upstream interventions to keep Albertans well, rather than responding to system failures that result in acute decompensation and hospital and other facility admission
- Increased recognition of and robust supports for lay patient and family caregivers
- The development of collaborative care pathways
- Clearly outlined communication expectations and protocols, including physician responsiveness to requests from other care providers in the community
- An integrated performance and accountability framework with comprehensive outcome measures and targets, in addition to or in place of traditional key performance indicators by service type
- Participation of community-based health and social services in the governance and operations of the Patient Care Networks

Acute Care and Other Facility-Based Services

The new agency, Alberta Community Health Care Services (ACHCS), will work with Alberta Health Services (AHS) and through the Joint Commission on initiatives to improve information management and transitions in care between the acute and community-based care sectors. Ideally, this work will be advanced by standardized performance and accountability frameworks, clinical pathways and information technology.

The Patient Care Networks and services within the health neighbourhood will work with other health services (e.g., acute and other facility-based care) in their locale, and with outside referral centres in the case of peri-urban and rural areas. They will work together to find ways to optimize communication, coordination and continuity of care. Through this interaction, they will identify opportunities for designing and implementing approaches to improve integration that make sense within their jurisdiction, including introducing bundled care models in select areas. These efforts will lay the groundwork for a fully integrated system and service design in the future.

Summary of Alberta Community Health Care Services (ACHCS), Patient Care Network and Integrated Neighbourhood Health Service Mandates and Functions

Table 2. A health system transformed mandate and functions

	ACHCS (Provincial)	Patient Care Network (Regional)	Patient's Medical Home (Local)	Specialists (Local)	Specialized Programs and Services & Community-based Health Care (Local)
Mandate	• Province-wide strategic leadership and direction • Stakeholder engagement, joint planning and collaborative partnerships	• Strategic, and some operational, planning • Funds and oversees health service delivery within a geographic area • Stakeholder engagement and joint planning	• Comprehensive, integrated primary health care delivery • Primary care (potentially including mental health, home care, palliative care, specialists, etc.)	• Integrated community specialist services • Comprehensive specialist services based need and availability	• Specialized services, e.g., mental health, home care , CDM, rehab, palliative care, community public health, outreach, care navigation, social care, etc.
Governance	• AH subsidiary (like AHS) • Independent legal liability and Board • Separate leadership & management	• Independent corporation • Local health care services and providers and community representatives • Flexible within set ACHCS parameters	• Independent, self-governed incorporated entities • Community representation	• Integrated within the PMH *or* • Self-governed incorporated group of specialists	• Contracted by PCN *or* • Employed and managed by the PCN
Budget	• Sets a risk-adjusted per capita global budget for each PCN based on PCN proposals • Sets budgetary and financial accountability requirements	• Allocates a budget for primary, speciality and community-based health care within the network • Sets budgets for PMHs and other health services based on submitted budgets & business plans • Provides fiscal oversight based on ACHCS financial accountability requirements • Supports shared back • office services • Supports joint ventures, e.g., cross-sectoral bundled care	• Develops a budget and operational plan for submission to PCN • Manages a budget for a • defined patient population • Allocates budget based on local circumstances, within ACHCS/ PCN parameters • Budget includes: clinic infrastructure; • administration roles; clinic leadership; physicians; Interprofessional teams; Change management, QI	• Integrated into the PMH budget *or* • Manages a budget for • defined patient population • Covers administration and service delivery	• Manages a budget for • defined patient population *or* • Funded and managed by the PCN *or* • Integrated into the PMH
Accountability	• Defines fiscal accountability and performance frameworks • Monitors and audit PCNs	• Formal service agreements and contracts with service providers • Direct employment of • some providers • Management and monitoring based on provincial accountability and performance frameworks	• Accountability and performance contract with the PCHN • Performance measurement and reporting to PHCNs • Joint accountability across the neighbourhood	• Accountability and performance agreement with the PCN • Performance measurement and reporting to PCNs • Joint accountability across the neighbourhood	• Accountability and performance contract with the PCN • Performance • measurement and reporting to PCNs • Joint accountability across the neighbourhood
Service delivery	• Sets provincial service delivery framework, regulatory alignment, clinical standards and requirements, directives • Health human resource planning	• Guidance on and oversight of service design and delivery • Depending on region, may • directly fund and deliver care, incl. mental health, home care, CDM, social care, rehab, palliative care, community public health • Ensures a regional approach to coordination of care across PMHs and neighbourhood	• Designed for local circumstances based on provincial regulations and guidelines and PCN guidance • Mandate and key components outlined in contractual agreements	• Co-located within PMH • And/or • Specialist group practice • Mandate and key components outlined in collaborative care agreement	• Designed for local circumstances based on provincial regulations and guidelines and PCN guidance • Mandate and key components outlined in contractual agreements
Remuneration	• Sets provincial health provider pay scales • Sets physician payment	• Allocates PMH and other service budgets based on provincial pay scales and remuneration agreements	• Develops a budget and pays staff based on provincial pay scales and remuneration rates	• Salary or FFS paid by PCN *or* Fixed rate or salary paid by PMH • Based on provincial pay scales and remuneration rates	• Staff budget based on provincial pay scales and remuneration rates

Future Role of the AMA in the New System Structure and Organizational Design

This paper serves to stretch the thinking of providers, funders and health care delivery organizations as we move into the future. Likewise, we need to examine how existing Alberta Medical Association activities and services will need to evolve to support this future state. Maintaining the role of advocate would be an expectation of any professional association and this will remain into the future. There is a need to ensure the newly evolving structures do not create conditions that would jeopardize the clinical autonomy required to protect patients, nor create an uneven playing field for existing or new physicians, such as the creation of a corporate monopoly on service delivery.

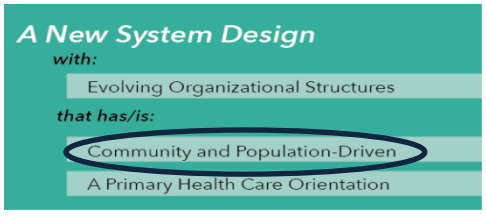
It is our hope that the board and executive leadership of AMA will promote and advance the vision and concepts outlined in this paper, through its current partnerships with Alberta Health, Alberta Health Services and other organizations, as well as consultations with physician groups in the province. Given the long history of financial expertise as it pertains to community-based practices, we believe the AMA should maintain a strong role in negotiating and stewarding the provincial framework for physician compensation, regardless of delivery model.

There are additional activities which would require greater support from the AMA. We anticipate that it will grow its expertise to support physician groups through the contracting processes outlined in this paper and in taking on expanded accountabilities that require different types of measurement, reporting and human resource management. While large physician groups may over time develop their own expertise in this regard, the transition will require many years of support, and subsequent shifts in expectations and accountabilities would require recalibration, which the AMA would support.

In addition, the AMA could become a valuable repository of physician expertise and feedback both in terms of success and challenges with these emerging models. Playing a consultative role in the set-up, operation and refinement of the Alberta Community Health Care Services and Patient Care Networks would be invaluable.

Lastly, our experience in Alberta has shown that local expertise and facilitation of quality improvement initiatives are required to deliver on transformation and emerging provincial priorities. Without provincial framing and thought leadership - like that of the Accelerating Change Transformation Team (ACTT) – and some standardization among health service delivery sites, wide variation in activities, improvements and patient outcomes will result. Such a scenario also limits the ability to learn from others across the province. We can avoid some of the challenges that will faced by the Patient Care Networks as they evolve by maintaining the AMA's ability to champion change, act as a connecting agency and support change management and quality improvement. In particular, it will play a supporting role in the implementation, coordination and streamlining Patient's Medical Home models and services within the integrated health neighbourhood.

A New System Design: Evolving Organizational Structures that are Community and Population Health-Driven



Health care structures must be designed to reflect the communities they serve and a population health approach.

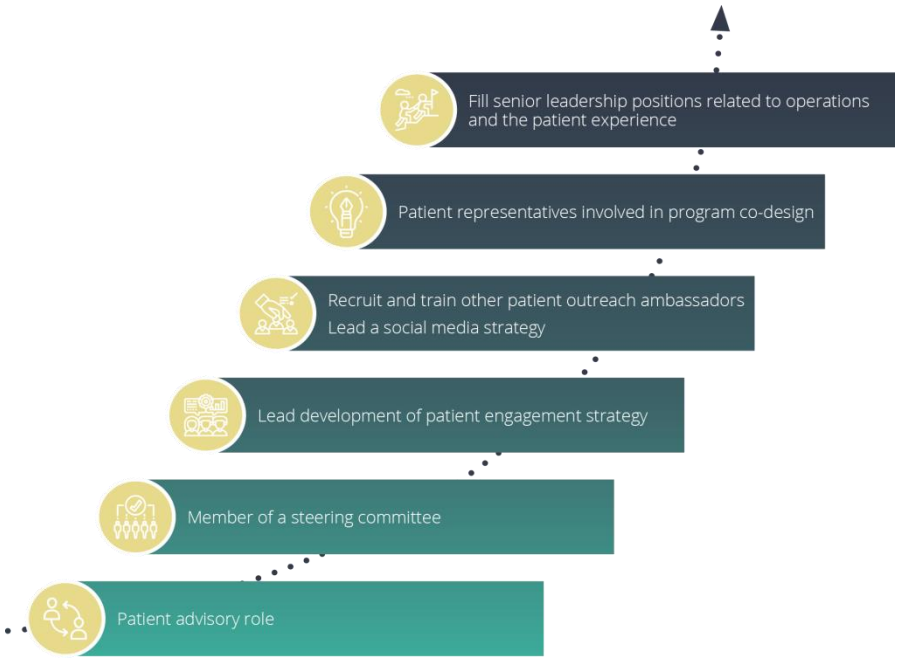
Community-Driven: Patients and Community as Partners in System and Service Design

The design and function of the organizational structures in the new system will be community-driven. The new system will be built on partnerships, collaboration, trust, communication and mutual respect among communities, patients, caregivers and providers. The aim is for health care organizations to be community adaptive, characterized by bottom-up innovation driven by local need. Community members will become partners throughout the health

system and patient engagement will be embedded in the culture of health services. Individuals, families and communities will gain agency to optimize their health, as advocates for policies that promote and protect health and wellbeing and as co-developers in service planning.[32] Patient engagement efforts are increasing in Alberta. For example, the Strategic Clinical Networks (SCNs) have embedded about 150 patient and family advisors as members of various leadership teams, committees and working groups. They contribute to policy development, priority and agenda setting, and health system research and innovation.

As exemplified in Figure 6 above showing the Patient Care Network governance structure, the community and patients will be involved in strategy, design and implementation. Dedicated and committed health system leadership will be a key support to an increasing community and patient role.

Figure 7. Spectrum of Community and Patient Involvement



Community and patient involvement will run across a spectrum of intensity from advocacy and consultation to increasing representation, co-design and leadership. As shown in the example in Figure 7, they will no longer simply tell their story, receive information to comment on and have advisory roles; their roles will evolve into co-design and leadership positions. Importantly, patients and community members will be involved in identifying and co-defining the problems to address and then be partners in developing solutions.

The expertise and knowledge of community members and patients will be heard and respected as the team learns and design together. Those in new roles may require leadership training and support, and potentially remuneration for their expertise, when involved in this work.

The evidence shows that such an approach improves patient experience, patient-provider relationships and outcomes. When those who are marginalized and most at risk are involved as partners, they have greater access to the services they need and gain greater agency on their own care. There are a number of ways in which to engage patients and the community, and health systems are increasing taking a collaborative approach. However, few have truly resulted in full partnership. As stated above, there will be patient and community representatives on Patient Care Network and Patient's Medical Home governing bodies and working groups. Patient Care Networks and health services in the integrated health neighbourhood will be expected to take the lead from existing patient leaders and advocacy groups on the most appropriate approaches. Each Patient Care Network will be expected to form a Patient and Community Engagement Working Group to develop a plan for ensuring their involvement in strategic and operational planning. Plans should also entail approaches for identifying and building capacity in more patient leaders, potentially in conjunction with developing leadership capacity in more clinician leaders, such that they will be able to fill senior leadership roles.

Innovative approaches to patient input and co-design will be taken. Transparency via public reporting and feedback mechanisms will become the norm. For example, social media and digital activism is changing the way patients interact with each other and engage funders, decision makers and health care providers. Through these media patients and the public are influencing conversations and change. Recent examples related to Covid-19 include crowdsourcing novel ideas for scaling testing in the U.K. and a user-developed resource to support patients make the transition to virtual care in Sweden. It is anticipated that this mode of interactive communication will grow. As well,

there are a number of emerging approaches which enable patients to co-design services and care pathways in partnership with health services, such as those outlined in the Design Justice Network principles, the User-Centered Design and Participatory Action Research frameworks, and Experience-Based Co-design (EBCD) toolkit developed At the Point of Care Foundation in the U.K, which uses a structured process to capture and share patients' emotional experience.[33] These approaches, along with others, will be contemplated for application in Alberta.

Population and Social Determinants of Health Driven

The proposed new health system structure is designed to improve the health status of the Albertan population by addressing the interrelated conditions and factors that affect health. The future design will reflect the communities served and ensure accountability for the health and wellbeing of the entire population. Importantly, lessons from other jurisdictions indicate that the types of services and health professionals deployed should closely match the characteristics and needs of the population, rather than simply the needs of contract holders or health professionals.

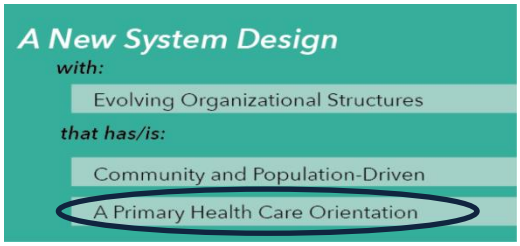
Some of the population health issues in Alberta that need to be addressed

16% families with a low income
19% of people 65 and older live alone
3% Indigenous and 24% of population in private households are visible minorities, many of whom have inequitable access to care and health outcomes
28% obesity
17% inactivity
13% daily smokers and 19% heavy drinkers
4% with three or more chronic conditions
13% with an acute mental health diagnosis
Top reason for emergency department and hospital admission is mental and behavioural disorders due to substance use

A population and determinants of health approach will mean realigning the funding flows and incentives to incent new approaches to improve health and wellbeing across the integrated health neighbourhood, underpinned by a performance and accountability framework. Population health management will be data-driven, and data – along with patient and community input – will guide planning, resource allocation and delivery of care, as well as the proactive identification of those most at risk.

High quality, comprehensive primary and community-based care *for everyone* will be the guiding principle. Attention will be given to health equity, social justice and the most vulnerable, with a focus on the moral determinants of health.[34] It will be important for agencies that plan and implement primary and community-based health services to understand the socioeconomic and political context (e.g., policy, governance, social norms) in which they operate and to advocate for their patients and community. Cross-sectoral, coordinated strategies and policy initiatives will be employed to address and improve population health and health inequities, including more inter-sectoral linkages, new integrated funding models, and sector-wide continuous quality improvement and evaluation. With the evidence base underpinning its principles and attributes, and informed by population-based data, there will be new pathways for determinants of health programming. Programs and services will be strengthened by improved relationships among health and social care and primary care and public health, as well as improved linkages to community organizations and greater input from communities most at risk.

A New System Design: Evolving Organizational Structures that have a Primary Care and Community Orientation



The evidence is clear; a health system with a primary and community-based care orientation has better patient outcomes, better access, reduced health inequities and lower costs.

A robust primary and community care system reduces the strain on the acute care system, "*while improving the health of communities and the medical journey of patients.*" [35] In the proposed new system, the Patient's Medical Home will be recognized as the central hub and all Albertans will be attached to a medical home.

A health system with a primary and community-based care orientation is characterized by a highly engaged sector, with a strong voice in system planning, design and management. The future system will be an enabling environment and health care organizations and professionals – family physicians, nurse practitioners, nurses and other health professionals – will be represented and have input throughout the system, including in key leadership roles. In addition to representation in Patient Care Network and Patient's Medical Home governance structures, there will be opportunities for engagement at various intersections in the system. Such opportunities will be informed by existing structures, such as the PCN networks and the physician leadership network.

Greater value will be placed on clinical leadership. There will be supports for skills and capacity building and remunerated positions within the Patient Care Networks and integrated health neighbourhood, including dedicated leadership positions for clinicians in and across groups of Patient's Medical Homes. The governance and leadership structures will be transparent and everyone will know who represents them and the mechanisms by which to have their voices heard. Additionally, the important role of informal leaders and influencers will be recognized. There are a number of models to consider. As an example, in the U.K., family physicians are represented in the governance of the Clinical Commissioning Groups (CCGs) and on members' councils that represent practices within the CCG. The family physician representatives on the councils are expected to act on behalf of their practice and provide information to other members. The responsibilities delegated to members' councils differ, but often include approving changes to the CCG constitution; agreeing on the vision and values of the CCG; approving the commissioning plan, annual reports and budget; and approving NHS initiatives.[36]

While leadership capacity is critical across health professional disciplines, the extent of physician engagement and leadership can make or break a reform effort. The evidence shows that having physicians in formal and informal leadership positions improves performance. Supportive environments and effective practice settings, such as team-based organizations, clinical units and clinical management systems, can play an important role in generating physician engagement and realizing physician leadership.[37] At Kaiser Permanente in California one-quarter to one-half of all physicians have a formal leadership role and other physicians play a role through other activities, such as developing drug formularies, clinical guidelines and related activities. The result is that these physician leaders work with others in close partnerships throughout the organization. "*The significance of this is that medical leadership is not an activity undertaken by a small proportion of the medical group, but becomes part of the expectation of those working in the group and 'the way business is done around here."* [38] Additionally, increasing attention will be paid to clinical microsystems and new models of leadership (e.g., dyads and other forms of distributed leadership). The evidence shows the efficacy of models of diffused leadership, where influence is exercised across relationships, systems and cultures, is enhancing clinician engagement.[39] [40]

Clinicians – physicians, as well as other health professionals – are often poorly equipped to take on leadership roles. To do so, they require skills in leadership, strategic planning, systems thinking, change management, project management, communication and team building.[41] Training to develop new leadership competencies can include:

formal training; exposure to interprofessional experiences; cultivating clinician-manager dyads; working in partnership with decision-makers; and taking on policy and strategy roles. Formal training should also increase participants' understanding of how government and the health system functions, as well as its current challenges, management fundamentals, improvement models, and data and measurement.[42] Training in diversity management, cultural competency, emotional intelligence and conflict management are shown to help physicians improve working relationships and enhance their willingness and ability to engage in initiatives to improve services.[43] Table 3 outlines the key factors from the evidence that support and promote clinician engagement in system and service improvement and management.

Table 3. Factors that support and promote clinician engagement in system and service improvement and management[44]

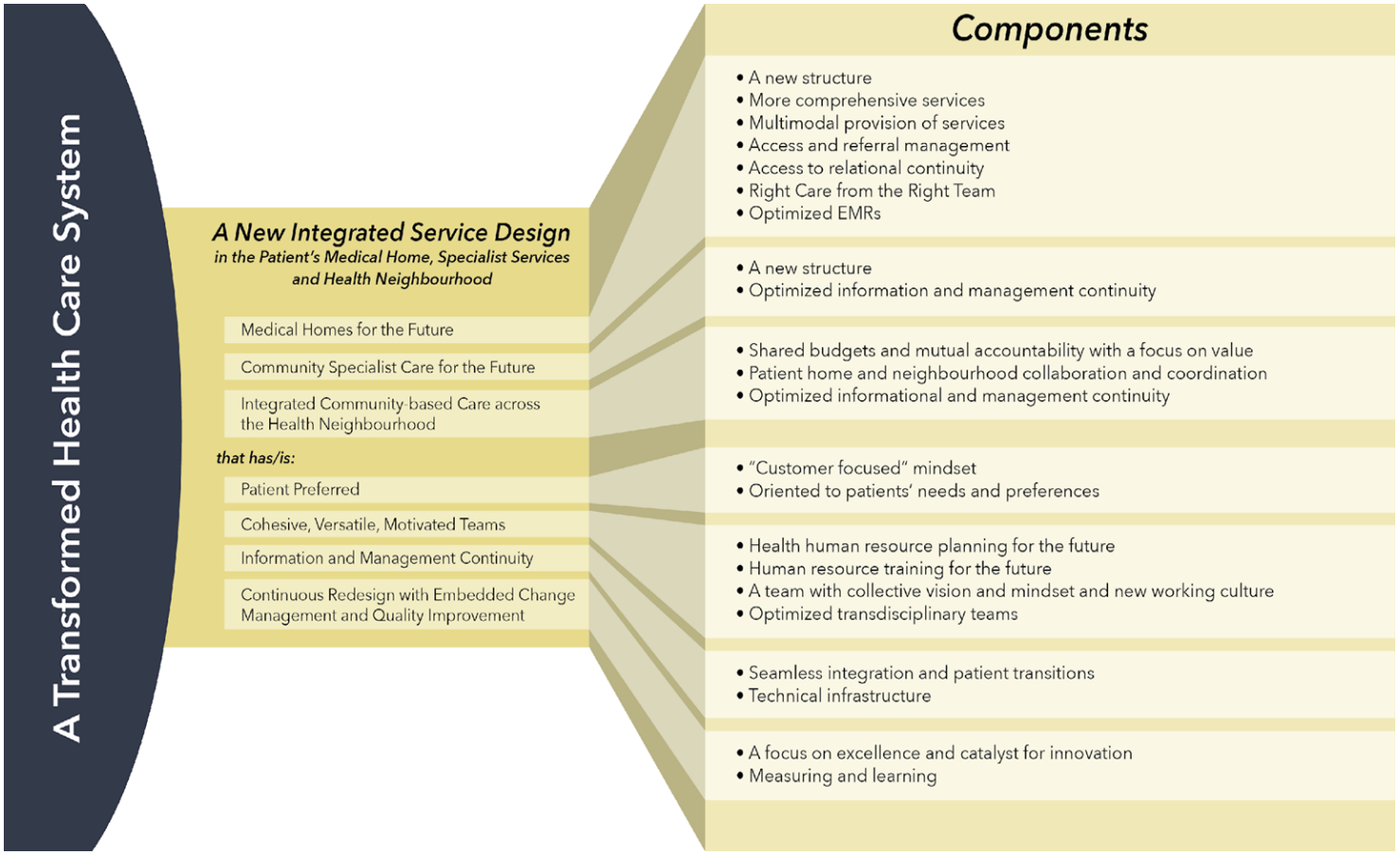
Culture • A shared vision and belief the organization is committed to high-quality patient care • Future-focused and outward-looking cultures where clinicians increasingly engage in the wider system • Mutual trust, understanding and respect • Shared common goals, openness, and transparency are emphasized • Supportive work environment • Collaborative, team-based care • Accepting of professional differences • Allow autonomy to pursue areas of interest • Balance of work and life responsibilities
Organizational practices • Senior managers lead by example and are visible and available • Clinician participation in management activities, decision making and change • Administration partnering and aligning with clinicians • Clear roles, responsibilities and expectations • Streamlined bureaucratic processes • Rapid decision-making deadlines • Formal clinician roles in developing protocols, clinical pathways, etc. • Setting expectations and enforcing performance and professional behaviour • Improving ease of practice
Communication • Effective communication and dialogue • Regular formal and informal meetings among clinician and senior leadership/management • Efficient meetings • Accurate and timely information • Extensive briefings and briefing materials from management
Health care provider leadership • Formal leadership roles for clinicians • Recognize the role of the physician and other clinician leaders • Selecting the right leaders • Physician and other clinician representation on governing bodies • Leadership development and training • Formal orientation programs with senior management • Adequate support for clinician leaders • Compensation for time spent on leadership activities
Training • Climate for positive learning • Capacity building and training • Team-building sessions, leadership meetings, etc.
Feedback • Managers value clinician leadership roles and acknowledge for their efforts • Formal feedback mechanisms • Feedback from supervisors and colleagues • Respect and recognition of engagement • Appraisal and rewards effectively aligned • Continuing medical education offered is useful

4.2 A New Integrated Service Design

Changes to the nature of health services are needed to achieve transformation goals for the future.

A new integrated service design will include fully realized Patient's Medical Homes, seamless care with community specialists, and collaborative community-based care across the integrated health neighbourhood. These services will:

- be patient preferred
- have cohesive, versatile, motivated teams
- have information and management continuity
- have continuous redesign, embedded change management and quality improvement



A New Integrated Service Design: The Patients' Medical Home

A New Integrated Service Design
in the Patient's Medical Home, Specialist Services and Health Neighbourhood

- Medical Homes for the Future
- Community Specialist Care for the Future
- Integrated Community-based Care across the Health Neighbourhood

that has/is:

- Patient Preferred
- Cohesive, Versatile, Motivated Teams
- Information and Management Continuity
- Continuous Redesign with Embedded Change Management and Quality Improvement

The Patient's Medical Home will be Albertans' point of access to the health and social care systems, and where a dedicated team of health professionals support them in accessing and navigating care to meet their health needs.

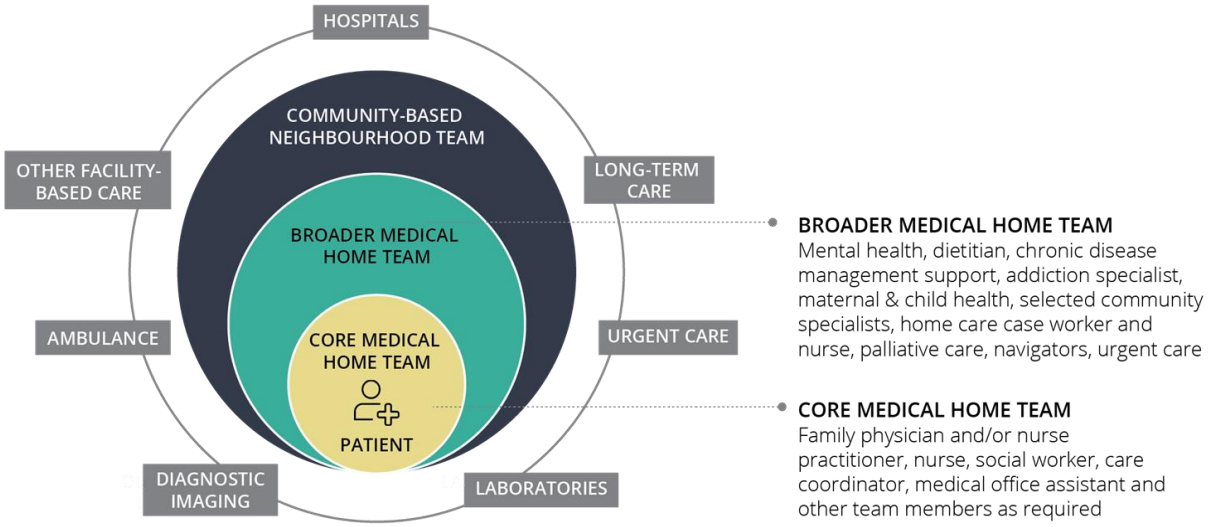
Adequately resourced and strong Patient's Medical Homes improve outcomes and reduce demand elsewhere in the system. Alberta has made great strides in its primary care transformation. But, primary care services are still evolving in aspiration of fully becoming Patients' Medical Homes.

As discussed above, in future, Patient's Medical Homes will have new governance and organizational structures – with empowered, innovative and effective leadership and management – and new compensation models. Services will reflect patient preferences and the work of cohesive, versatile and motivated teams. The care provided will be evidence-based, with a focus on continuous quality improvement.

Access is a top concern for patients. Sixteen percent of Albertans do not have a regular doctor.[45] [46] In future, all Albertans will be attached to a medical home, with a defined roster/panel of patients that the team knows and manages well. Relational continuity with the team will be the norm because in the Patient's Medical Home it results in better quality of care, reduced costs, increased patient and provider satisfaction, and fewer emergency department visits and hospital admissions.

Everyone in the Patient's Medical Home will have equitable and timely access to their own family physician or nurse practitioner, as well as other members of a core team (e.g., nurse, social worker, medical office assistant) tailored to meet their needs. If required, they will also have access to a broader team within the medical home (e.g., dietitian, pharmacist, gerontologist, social care) and navigators/care coordinators who will ensure coordination and continuity of care among core and broader team members, as well as across services in the integrated health neighbourhood (Figure 8).

Figure 8. Potential Core and Broader Patient's Medical Home Team Members



Many primary and community-based health care professionals and services will be available through the Patient's Medical Home, some within the medical home and others through an expanded range of integrated services available offsite in the health neighbourhood. Some providers may practice in both the medical home and offsite. The nature of this structure will depend on the Patient Care Network and Medical Home, and is likely to evolve over time.

In the future medical home, patients will have timely, multimodal access to care based on their needs and preferences, and clinical appropriateness. New team structures, processes and funding models will facilitate the seamless integration of virtual care into clinical workflows and the care continuum. Patients will continue to have access to synchronous virtual care via telephone or video, in addition to face-to-face access. Asynchronous care will also be available via secure messaging, virtual monitoring, online apps and websites that provide self-management support. As well, more face-to-face interactions will occur in patients' homes and in other community settings, and group visits will be offered face-to-face and virtually. Patients are highly accepting of virtual care and perceive this type of care as an effective option for meeting many of their health care needs. The evidence supports their preferences; virtual care can provide the same or better quality and outcomes for certain types of care when implemented within a comprehensive strategy that includes in-person assessment and follow up when required, and when the technology is used to maintain and enhance continuity, rather than supersede it.[47]

Patient websites and apps and remote monitoring also hold promise. However, there are many sites and apps, and they will need to be vetted and accredited to provide guidance on which are the most clinically accurate, appropriate and secure – e.g., an UpToDate medical app for patients. Remote monitoring will need to be integrated with the information systems at the Patient's Medical Home and an expanded provincial electronic health record (EHR). Patients will also have access to supports, such as active signposting, with information on local services, symptom checkers, maintaining health, specific conditions, etc.

Many patients, especially those who are highly engaged in their own health, will demand technology that meets their needs. Importantly, technology should be designed and introduced to reflect the needs of patients and providers. (Also see the section on patient preference below). For example, the approach to messaging will need to fit with the workflow and work style of team members. It will be important to develop boundaries, educate patients on appropriate use, and set expectations about times of access and turnaround. As well, it is important to acknowledge digital inequities and varying levels of patient technological literacy. Limited access to the Internet and the necessary hardware, as well as limited technical know-how, can leave patients behind.

A medical home should be welcoming and its services should be readily available. Fewer than half of Albertans reported they were able to see a doctor or nurse the same or next day. Moreover, just under than 60% always or often receive an answer the same day when they contact their regular doctor's office with a medical concern.[48] In future, appointment and referral processes – in the medical home and across the integrated health neighbourhood – will be equitable and customer-focused, with service-oriented reception, online appointment booking options, standardized patient referral pathways and flow processes, and wait time standards and guarantees, using state of the art queue management.

Having access to services after hours is of critical importance to Albertans. Only four in ten report that it is very or somewhat easy to get medical care in the evenings, on weekends or on holidays without going to the emergency department. As a result, Albertans are the high users of the emergency department in comparison to other countries, and 30% believe that their visit was for a condition that could have been treated by the doctors or staff at their regular place of care had they had been available.[49] In future, community-based after-hours services will be widely available throughout the province, based on community input and a broader set of data to determine local population needs and demands in relation to supply. After-hours' services will expand within the Patient's Medical Home, and through their collaboration with other medical homes and services in the health neighbourhood. Delivery options include expanded after-hours walk-in and scheduled appointments, ambulatory care hubs, on-call virtual supports, and rural and urban emergency departments. The mix of services will be coordinated by the Patient Care Networks and supported by 24/7 teletriage. All service delivery information will be fully integrated into the patient's

record at their medical home.

Improving access must be multifaceted, and is not just about office hours and scheduling. Access is improved by changes to service design and processes, augmented teams, and appropriate and comprehensive programs and services.[50] For example, how appointments are triaged and booked and how provider resources are used during and after office hours impact the extent to which timely relational continuity can be ensured and how patients use after-hours and urgent care. Patient's Medical Homes will also need to meet the needs of patient archetypes, such as patients who only access same day or urgent services or those who desire a primarily virtual experience. For example, patient bookings will reflect a balance between the desire for timely access and relational continuity, according to patient needs and preferences. Medical homes will also better meet the needs of marginalized groups, including enhanced outreach, case management, social support and navigation services. (Also see the sections on the integrated health neighbourhood and patient preferences).

What a Medical Home for the Future means for Gary

Gary is 78 year-old retired bus driver. His wife passed away two years ago. Over the years he has developed multi-morbidities and has worked to find balance in their management. He is relatively tech savvy and accesses an integrated online portal with a seniors' friendly tablet. He reviews his INR results, uploads his home monitoring data (e.g., BP and weight) and enters his current anticoagulation medication dosage. The entries are out of normal range, so a clinical alert is sent. Silas, a member of his core medical home team reviews his file and determines he should see his clinical team for an in-person assessment. Silas arranges an appointment, along with transport. Gary receives an e-reminder with the appointment and pickup times.At the appointment the receptionist welcomes Gary by name and guides him directly to a comfortable clinic room, with no waiting. Gary sees a Silas who completes a health assessment, discusses all his conditions and medications and identifies any new concerns. Together they review and revise his personalized care plan goals. Gary also updates Silas about how helpful the online chronic disease management group has been and how he has been able to contribute.

Silas reports the concern regarding Gary's rapid change in INR to Ava, Gary's family physician, while the pharmacist reviews all Gary's medications and dosages. They then have an e-consult with the cardiologist because the integrated patient chart shows she had recently changed one of Gary's medications. Thereafter, the team huddles with Gary, discusses his personal goals, provide advice and together create a new care plan. The new plan and medication changes are entered in Gary's medical record, readily accessible to Gary and his health care providers across the system. The new prescriptions go directly to the pharmacy. Gary receives a printout of his care plan, which he can also access and edit through the portal. Because one of his stated goals was to increase physical activity and social interaction, Gary receives a referral to a walking group. Silas follows up with Gary by phone two days later. Gary reports one of the new medications is not well- tolerated; it is changed and delivered the same day. Gary messages Silas the next day through the portal to confirm the medication arrived and has been well-tolerated. At the same time, he checks the results of his recent lab tests and uploads his most recent BP and weight onto the portal. Gary also starts to use a new app recommended by the team to help him manage his various conditions, which is integrated with a provincial health information library.

What a Medical Home for the Future means for Sana

Sana is a young, single woman who works in the tech industry. She has generally been healthy, but the long, hectic hours at work have meant that her diet and exercise have suffered. She was diagnosed with Type 2 diabetes after going to the clinic because she was feeling rundown. During the first visit after her diagnosis, she was introduced to her core medical home team of a nurse practitioner, a nurse specializing in chronic care, and a healthy lifestyle coach who provide her with the desired clinical and lifestyle support. This team reviewed her medical and social history and worked with Sana to develop a care plan around her stated goals and expectations.

Sana attended the initial education and lifestyle coaching sessions. She participated in these virtually because it was more convenient and better fit her scheduling needs. Concurrently, she wants more information and to research her condition further, including medical publications. Her team provides a tailored reference list and recommends websites and the health information app. She is also given the option to link with peer support and community lifestyle programs.

For her clinical needs, Sana mainly interacts mainly with Brian, the clinical nurse and chronic care specialist, and sees her nurse practitioner quarterly or less frequently, preferably via videoconferencing. She actively monitors her test results online; she learns how to take her vitals properly and enter them into an integrated portal. She frequently uses self-guided online care (an application recommended by the team) and "sees" specialized team members (e.g., the pharmacist, dietitian, endocrinologist) as needed, attending in-person only if required.

A New Integrated Service Design: Community Specialist Care

In the future, specialist care will be an integral part of the integrated health neighbourhood.

A lack of timely access to specialists and seamless communication, and the siloed nature of care, are all of great frustration to patients.[51] The concerns are warranted; half of Albertans wait four weeks or longer to see a specialist.[52]

In future, community specialists will be part of an integrated system of care, and have new roles and strengthened relationships as part of the neighbourhood team. They will be share the budget and have joint accountability along with the rest of the services within the Patient Care Network. They will have contracts with, and be remunerated by, Patient Care Networks and/or one or more Patient's Medical Home.

Without duplicating roles, community specialists will be part of the patient's broader care team, when required. There will be a fundamental shift from conducting individual referred consultations to specialists having a more integrated role in supporting health care delivery in the medical home in as close to real time as possible through innovative consultation relationships. Assisted by patient navigators/care coordinators and optimized information continuity, they will participate in managed and shared care with other members of the health neighbourhood team. Community specialists will provide guidance on some of the services delivered in primary care and timely e-consults with the medical home team members will become the norm. Like other health professionals, they will also be available virtually for e-visits with patients. This new approach will amplify and grow capacity in the Patient's Medical Home, while improving access to specialists, especially in managing complex and rare conditions.

While initially many specialists will likely maintain standalone practices (groups of one or more types of specialists) and hold collaborative care agreements with other services in the neighbourhood, increasingly they may become embedded or co-located within Patient's Medical Homes. Experiences in other jurisdictions and the evidence indicate that greater integration with specialists has a number of benefits for patients and other service providers.[53] [54] [55] [56] [57] [58] [59] Moreover, as they become a part of a seamless integrated neighbourhood team, they will benefit from shared operational, quality improvement, technology and infrastructure supports.

What the Integrated Health Neighbourhood means for Dr. Albert Chen

Dr. Chen is a community-based cardiologist who previously had a solo practice. He is now part of a group of specialists in the integrated health neighbourhood, with a contractual agreement with the Patient Care Network. He also has a collaborative care agreement with a Patient' Medical Home and is on-site part time. As part of the broader medical home team, Dr. Chen works closely with several team members. He works with them to develop their capacity to manage cardiac patients and has supported the development of the clinical pathways. He joins the core team in a huddle when a patient is newly diagnosed with a heart condition and contributes to the care plan. A family physician or nurse practitioner, chronic care nurse and dietitian make up the core cardiac care team, and consult with Dr. Chen as needed, including via e-consults and messaging within the shared EMR. If the patient's condition is complex or increases in severity, Dr. Chen takes an increasing role in the ongoing care.

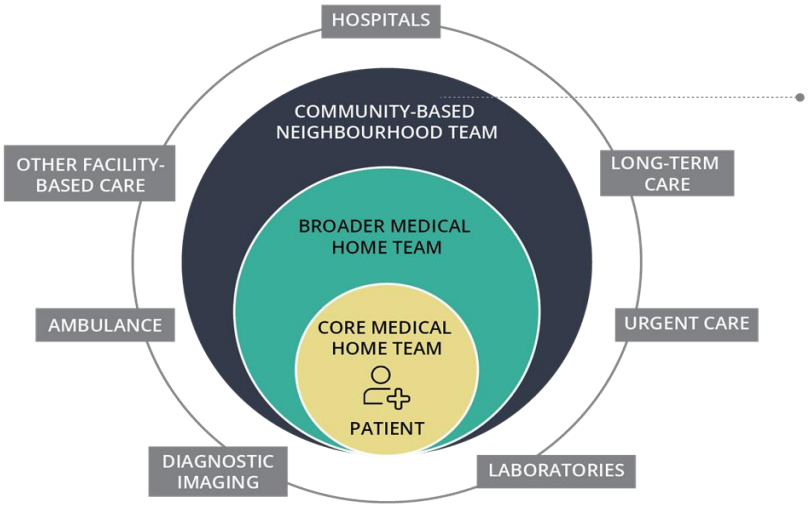
A New Integrated Service Design: Integrated Community-based Care across the Health Neighbourhood

In the future, health and social services in the community will be part of an integrated neighbourhood team. Services will be designed to ensure patients experience seamless transitions across providers and care settings.

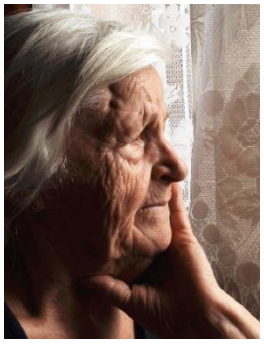
Patients want their health care providers to work together. Currently, many of the health and social services provided at the community level are disparate and uncoordinated. Some are provided by Alberta Health Services, some by Primary Care Networks (PCNs), some by community public health, and some by other community agencies. Patients often lack ready access to services they need (e.g., mental health, rehabilitation); others report limited coordination of care and sometimes even conflicting advice. There is limited coordination, indexing and understanding of these services among providers, leaving navigation and service wayfinding to patients alone.

The integrated health neighbourhood will be characterized by new roles and strengthened relationships among local providers. These health care professionals will collaborate to ensure seamless care across the neighbourhood. With a new integrated service design, specialized (mental health, rehabilitation, palliative care, home care) and other community-based services (outreach, navigation, community public health, social care) will be part of the integrated community-based neighbourhood team, sharing the Patient Care Network budget and accountability with Patient's Medical Homes and specialist services (Figure 9). As mentioned above, Patient Care Networks will also play a key role in developing formal and informal partnerships to develop and coordinate services with community-based agencies, social services, NGOs, municipalities, schools, housing, justice and other services external to the network.

Figure 9. Potential Community-Based Neighbourhood Team Members



What Integrated Community-based Care in the Health Neighbourhood means for Sylvie



Sylvie is an older woman who lives alone in the family home on a fixed income; her children are not in the same town. She has arthritis, hypertension, atrial fibrillation and some memory loss. She not tech savvy, does not have a computer and is not interested in videoconference appointments or researching her various health conditions. Sylvie is supported by the core team at her medical home and specialized team members in the community. She has a dedicated point person of her choice who is also her care navigator. Sylvie has quarterly clinic visits where she sees her physician and other medical home and neighbourhood team members as needed, including her specialist, Dr. Chen. Additional, timely appointments are made when any exacerbations occur. The team always calls the day before and on the day of the appointment and arranges transport. Recently, Sylvie reported she was feeling dizzy. Her various medications were reviewed by the team, including the community pharmacist. They decide to remove one and reduce the dose on another. A member of the integrated health neighbourhood team conducts a wellness home visit and, among other things, helps Sylvie set up a medical alert system. She also facilitates a call with Sylvie and her family to discuss Sylvie's future housing plans and help them start an advanced care plan. She links Sylvie to other community service providers who help her secure support with shopping, cleaning, maintaining her lawn and gardens, home maintenance and transport needs. Additionally, through a new social prescribing program, the care navigator introduces her to a cooking and sewing club once she determines Sylvie has been experiencing isolation and is lonely living on her own.

While ideally many of the services in the health neighbourhood would be fully integrated into the Patient's Medical Home, budgetary and service integration will evolve over time, with many services co-located at least some of the time. Colocation can improve interprofessional collaboration and team functioning.[60 61 62 63] It is also valued by many patients (especially those with complex chronic conditions), as in the case of Sylvie, whose core and broader medical home team is co-located. As well, the prevention and health promotion services currently provided by public health would ideally be an integral part of the Patient's Medical Home, as in the case of Kris's nurse Jean.

The levels of integration will reflect the circumstances in individual Patient Care Networks, Patient's Medical Homes and integrated health neighbourhoods. Collaborative models could be: i) consultative, where patients are seen outside the medical home; ii) co-located, where patients are seen on-site in the medical home; and iii) collaborative, with caseload consultation and providers working closely with the medical home team. Incremental changes towards increased collaboration could include: community-based providers visiting medical homes for one-off events (e.g., an educational event, complex case review or clinical consultation); dedicated on-site clinic time (e.g., a day a week); a co-located referral model with the provider in the same building or office space; and a collaborative, fully integrated team with shared case management. Some community-based service providers may be part of two or more teams. Models of greater collaboration are emerging in Alberta. For example, through the Facilitated Access to Surgical Treatment (FAST) program, a surgeon group developed a centralized referral system, provided on-site assessment at primary care clinics, standardized care pathways and provided education to the PCN providers.

Integration will be supported by shared accountability; effective leadership and management across the health neighbourhood; common standards for care and safety; quality improvement; an emphasis on communication and coordination; information and management continuity; and optimized technology that includes virtual care and home-based monitoring.

The Case for an Integrated Health Neighbourhood in the Provision of Complex and Chronic Care

Approximately 30% of Albertans report having at least one chronic health condition, three-quarters of those 65 years and older. An integrated health neighbourhood will play a critical role in the provision of high-quality, seamless complex and chronic care.

Many Albertans with complex and chronic conditions experience inadequate services and poor integration, including inadequate integration of standalone chronic care programs with primary care practices. According to Alberta's auditor general, complex and chronic care is inconsistent across the province, including across and within Primary Care Networks (PCNs). There is not a standardized process for identifying individuals with chronic conditions or determining demand for services. Moreover, there are insufficient interprofessional providers in PCNs to deliver the full range of chronic care services required, and practices not part of PCNs have even less support. Alberta Health Services provides care for patients without a regular physician, but it alone cannot ensure comprehensive and continuity of care.[64] Additionally, only two-thirds of Albertans with chronic conditions have had the same doctor or place of care for more than five years, many experience long waits to see a specialist, and those with multiple conditions tend to have even longer waits. Many with chronic conditions have multiple emergency department visits, especially if they have two or more chronic conditions, and 13% are readmitted after hospital discharge.[65] These situations could be avoided with more comprehensive and accessible primary and community-based care.

In addition, there is currently a greater focus in clinical practice on acute and episodic care than on health promotion and prevention. Greater efforts to implement a population health approach and include public health expertise could help to keep people healthy and to actively identify and support those most at risk – helping to mitigate chronic conditions, reduce co-morbidity and slow progression. Taking more of an upstream approach to care, predicting illness that will occur without intervention and acting before it occurs will require different types of information, planning, services, and provider roles than currently exist.

For complex and chronic care, there is limited sharing of clinical information (information continuity) among providers and patient access to their personal health information. Alberta Health has not set service and outcome expectations for physicians, PCNs or AHS, performance measurements and accountability mechanisms are not sufficiently applied, and chronic disease management services are not adequately evaluated.[66] In addition, Alberta Health's recent initiatives have not been widely adopted or well implemented. There are outstanding questions as to whether or not the Comprehensive Annual Care Plan (CACP) program for those with chronic conditions reduced hospitalizations, emergency department visits or physician visits, and it was recently removed as an insured service. Many care plans were implemented without facilitated support or ensuring the requisite attributes of the Patient's Medical Home were in place, including continuity of care.[67] [68] Instances where providers went beyond simply developing a care plan were more successful, as demonstrated by the AMA, AHS and HQCA initiative, Patients Collaborating with Teams (PaCT).

People with chronic conditions are more likely to be in good or very good health in jurisdictions with a strong primary care structure and superior comprehensiveness and coordination of care. People with more than two chronic conditions benefit most.[69]

Team-based complex and chronic care planning and delivery can improve patient and provider satisfaction, self-management, medication management and relational continuity.[70 71 72 73 74 75] In the future, this care will be patient-focused and evidence-driven. The following outlines the evidence and the key attributes for the design of future complex and chronic care in Alberta.[76 77 78 79 80 81] ***Many of these service attributes apply to other types of health and social care, but ensuring they are in place for the most complex patients can inform and serve as a foundation for designing services and support structures throughout the system.***

The services

1. Comprehensive, person-centred care reflecting patient preferences
2. Care coordination and continuity are prioritized
3. Integrated health and social services, and physical and mental health care
4. Proactive risk assessment and identification of patients in greatest need (including those with highest risk factors, multi-morbidities and the most complex)
5. Holistic models of care
6. Shared care planning and tailored care plans
7. Self-management programs and patient activation
8. Support for caregivers
9. Mutually agreed upon care pathways and decision support, including personalized approaches to multi-morbidity
10. Virtual and home-based monitoring
11. Strong quality improvement component
12. Funding and remuneration structured to incent meeting patients' needs

The team

1. Activated and empowered patients with agency
2. Team-based care coordinated through the Patient's Medical Home
3. Adequate supply of family physician generalists
4. Key nursing roles
5. Key social work/mental health roles
6. Care coordinators/navigators
7. Strong linkages with specialists
8. Peer support
9. Clinical and change management training and support

Information and communication

1. Emphasis on communication
2. Integrated information continuity
3. Optimized technology
4. Ready patient access to applicable health information and their own health information

A New Integrated Service Design: Patient Preferred Experience

A New Integrated Service Design
in the Patient's Medical Home, Specialist Services and Health Neighbourhood

Medical Homes for the Future

Community Specialist Care for the Future

Integrated Community-based Care across the Health Neighbourhood

that has/is:

Patient Preferred

Cohesive, Versatile, Motivated Teams

Information and Management Continuity

Continuous Redesign with Embedded Change Management and Quality Improvement

The Patient's Medical Home and integrated health neighbourhood of the future will put patients' needs and preferences at the forefront.

Albertans will be supported by health care professionals who respond to the unique needs of individuals, families and communities and respect their perspectives and choices. There will no longer be a typical mode of service delivery for every patient; services will be designed to meet the preferences of individual patients and the needs of archetypal patient groups.

Our Patient's Preferences

From our patient stories, here are some of their unique preferences.

Al wants to focus on finding a stable income and housing, as well as food security, before further addressing his smoking and COPD. He is working with a social worker and has peer support finding the social and mental health services he needs.

Benita with congestive health failure prefers a tailored care plan reflecting Minimally Disruptive Medicine (based on outcomes that matter most to her and minimize the burden of treatment). She has requested few office visits and to have ongoing home monitoring and home visits instead.

Sana, a young woman with Type 2 diabetes, mainly wants to interact with her clinical team virtually. She wants to research her condition further, including via trusted medical publications, and to use self-guided online care.

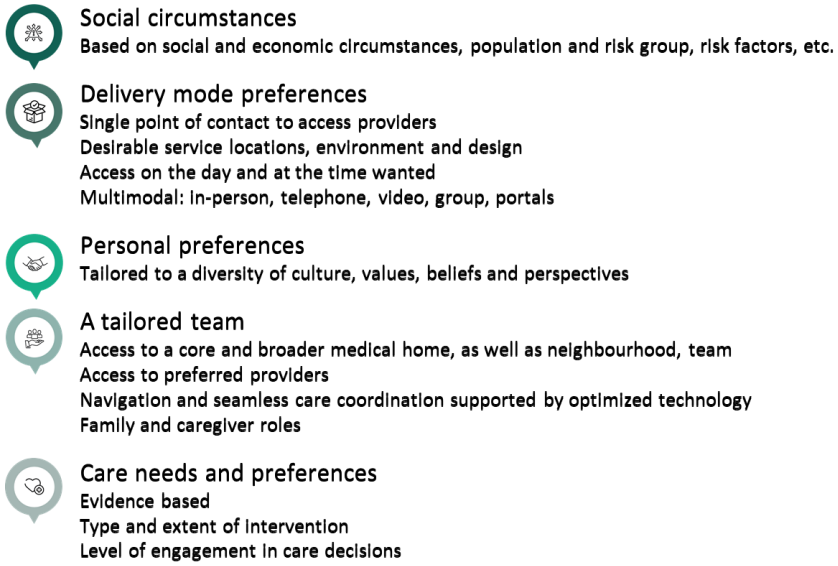
Sylvie, an older woman with multi-morbidities is not interested in videoconference appointments or researching her various health conditions. She wants a dedicated point person and to have "one-stop-shop" in-person appointments. She is grateful that her team helps her organize the community support she needs to stay in her home and increase social interaction with other women living on their own, as well as plan for the future.

Muriel wants the agency to manage Frank's Parkinson's disease at home, with fewer exacerbations and less anxiety, for as long as possible. She has access to a dedicated team if needed, and can monitor Frank's vitals, see when Frank's medications might need adjusting, and confidently decide whether they need to seek health care services.

Patients' Pathways to Care that Reflect their Needs and Preferences

The following are five types of patient preferences that will be addressed and reflected in their pathways to care (Figure 10).

Figure 10. Patients' Pathways to Care that Reflect their Needs and Preferences



1. **Social circumstances**

A patient's social circumstances will be a primary consideration in how they receive health services in the future. Having access to a regular primary care provider and team can mitigate the adverse effects of vulnerability and adversity on health. Such care should support individuals in the context of their socioeconomic status; housing status; community environment; childhood experiences; exposure to violence and trauma; gender and identity; race and ethnicity; immigrant status; disability; and frailty. Appropriate support and care are achieved by understanding the root causes of inequity and that exposure to a combination of risk factors (including stress associated with poverty, racism and trauma) can result in greater morbidity and differentiated outcomes in certain populations. As with Al and Sol, having a greater understanding of them as an individual allowed health care providers to tailor and calibrate services to their needs.

2. Delivery mode preferences

Health services in future Patient's Medical Homes and integrated health neighbourhoods will take a "customer-focused" approach. Location and physical design are important to patients, and a customer-focused service is one in which the practice location, design and environment optimize their experience. There will be an equitable distribution of health facilities, buildings will be accessible and their design will be welcoming, comfortable and allow for efficient patient flow. Patients will have an easily accessible point of entry to care, but no longer simply at the clinic. For some patients, alternative services sites improve access, continuity of care and health outcomes. As appropriate, services will be available through outreach clinics, culturally-specific clinics, workplaces, schools, homeless shelters, youth drop-in centres, public housing complexes, food banks, other public centres and in the home.[82] Patient Care Networks will play an important role in planning, integrating and deploying these supports, as appropriate for their jurisdiction.

The customer experience will rival that of other key service sectors. A team of health care professionals will know their patient roster well, and care processes will be respectful, effective and convenient. More appointments will be available on the day and at the time wanted, recognizing that some patients only want access the same day, while others prefer to book well in advance. The modality of service delivery will also reflect patient's preferences, from Sylvie who prefers only in-person visits (with telephone access to advice to allay urgent concerns) to Sana who prefers to receive most of her care virtually (either by telephone or video conference).

3. Personal preferences

Patients come for health services bringing a diversity of values, beliefs and perspectives. Some are less able to respond to health interventions as currently being delivered. Incongruities in social and cultural assumptions between health care providers and patients can lessen the effectiveness of services. Health care professionals, services and systems need to develop cultural competencies to understand the populations they serve and what influences health beliefs and behaviours. Language, communication and service delivery styles need to be reconsidered, and tailored to unique patient needs.

Adapting health services to meet social, cultural and linguistic needs could include: cultural tailoring of interventions; interpreter services; services delivered with compassion and respect; recruitment and retention of minority staff; cultural competency and anti-oppression training; building greater patient capacity for informed choice in treatment decision making; and including patients, family and community members in service design. These approaches help to address disparities and improve patient experience and outcomes. Furthermore, even those who appear to be well-served can have inadequate support or fall through the cracks of health and social services.

4. A tailored team

In future, patients will have ready access to a core and broader team in the Patient's Medical Home, as well as in the integrated health neighbourhood. They will be ensured navigation and seamless care coordination among team members, supported by optimized technology. Other important members of the care team can include social services, health promoters, community educators, teachers, lay and peer workers and traditional healers. The configuration of the team will be tailored to the patient. Our patient examples receive support and care from preferred providers and, as with Benita and Muriel and Frank, family and caregivers play integral roles.

5. Treatment and care needs and preferences

Future services will be more comprehensive and holistic, tailored to individuals' preferences and risk factors. They will address physical and mental health needs, and not just one condition at a time. Patients will have informed options in terms of service format, type and extent of the intervention. They will experience positive patient-provider relationships and have the option to take on new roles and partnerships with their health care team members. Services will be provided at their – as well as family and caregiver – preferred level of engagement in care decisions.

While individual patients will experience services uniquely based on their needs and preferences, Patient's Medical Home and integrated health neighbourhood teams will be equipped to effectively support archetypal patient groups in a consistent, comprehensive, evidence-based, state-of-the-art manner. Approaches to collaborative, coordinated service delivery will vary, but patients will receive care guided by standards, performance frameworks and accountability for fulfilling service goals. Health services will be tailored to patient groups, from supporting the needs of healthy families like Kris's and Sana who has a stable chronic condition to supporting those who need specialized chronic disease management services (like Sylvie, Frank and Gary) and those nearing end of life who need personalized supportive care (like Benita).

Figure 11. Sol's Preferred Pathway to Care

Social circumstances
Sol wants to improve his diet, but money is sometimes an issue as he only works part time

Delivery mode preferences
Sol makes an online appointment
After a telephone consult, an in-person appointment is recommended

Personal preferences
Sol prefers to have a friend attend the appointment with him
He wants to be involved in all decision making

A tailored team
A core team is identified after Sol is diagnosed with a hypertension
Sol selects the social worker as his main point of contact because she will also help him find income and social services

Care needs and preferences
Sol prefers to first try and management his blood pressure with diet before starting medication
He is equipped to self-monitor his blood pressure at home
His friend acts as a peer support mentor

Sol struggled during the COVID-19 pandemic. He lives alone and works part time as a carpenter. Previously, he had limited interaction with the health care system, but realizes he needs to focus more on his health as he ages and takes steps to be more proactive.

"It's easy to forget, in the heat of service efficiency and workload pressures that patients aren't widgets or that, because evidence is rarely definitive, people's preferences about their care matter. What doctors or other health professionals want isn't necessarily what patients want." [83]

Table 4 describes archetypal patient groupings and potential approaches to their care within the medical home and across the integrated health neighbourhood. Recognizing that many patients do not fall into a single category, providers will be mindful of biases in predetermining care pathways and ensure all patients receive the highest standard of care, while tailoring care to their unique needs and preferences.

Table 4. Meeting archetypal patient treatment and care needs and preferences

Patient group	What?	Who?	How?
1. Healthy individuals and families	• Health promotion and prevention • Support all family members and stages of life: maternal and child, youth, healthy families, healthy aging	• Integrated PMH, public health, social care, NGOs, healthy community as part of the health neighbourhood • Individuals empowered to improve their health and wellbeing	• Population health, health equity and social determinants of health approach
2. Rising risk (Genetic and modifiable)	• Targeted prevention for those at-risk • Risk factor screening and proactive case finding • Outreach and early intervention to prevent and/or manage emerging disease	• Core PMH team • Proactive Office Encounter Technician • Integrated PMH, public health and social care	• Screening: income, housing stability, food security (RIFS), child development (ASIS), family violence, mental health, addiction, cancer, vitals, etc. • Linkages with social support services • Lifestyle coaching, smoking cessation, early treatment • Group education and support
3. Acute and episodic	• Timely access for emerging problems	• Core PMH team • Referral to specialized care within PMH or neighbourhood, if required	• Expanded same day/urgent/acute care services at the PMH or coordinated among PMHs • Optimized and flexible team roles
4. Stable chronic condition(s)	• Individualized care plans • Monitor and manage • Patient activation and self-management support	• Core PMH team, with a dedicated contact person • Supported by specialized team members (e.g., pharmacist, dietician, mental health) • Engaged patients • Peer and lay person support	• Holistic models of care • Optimized and flexible team roles • Proactive team- and self-monitoring • Building health literacy • Lifestyle coaching • Self-management programs • Group visits • Virtual and self-guided online care
5. Chronic conditions with exacerbations and/or multi-morbidities	• Meet the frequent service needs • Individualized care plans and case management, with treatment goals that consider effects of treatment on daily living, patient priorities and preferences • Goal of staying well at home, through tailored responses to changes in clinical condition	• Core PMH team, with a dedicated contact person • Expanded roles for chronic care nurses, social workers, care coordinators/ navigators • Tailored broader PMH team (e.g., rehab, pharmacist, disease -specific) • Seamless coordination with specialists • Patient self-management • Family and friend caregiver supports	• Mutually agreed upon care pathways and decision support • Interpretive approach to guidelines, considering the interactions of different conditions and care processes, including overtreatment and polypharmacy • Mental health is key component • Team optimally manages the coordination and communication • Home monitoring and virtual care
6. Advanced chronic conditions (e.g., CHF, COPD, renal disease)	• Intensive and ongoing shared care • Tailored to preferences • Advanced care planning	• Expanded dedicated, wraparound care team, including specialists • Palliative care teams • Patient directs decision making • Family and friend caregiver supports	• Shared care and tailored care plans • Option of Minimally Disruptive Medicine (outcomes that matter to patients with reduced burden of treatment) • Home monitoring and virtual care • Coordination and collaboration with broader neighbourhood services, e.g., home care, hospices and hospitals
7. Catastrophic event (life-threatening)	• Prompt access to requisite PMH and neighbourhood team	• Core and broader PMH and neighbourhood team members • Palliative care teams, as required	• Coordination and collaboration with broader neighbourhood services, e.g., home care, hospices and hospitals • Home monitoring and virtual care

A New Integrated Service Design: Cohesive, Versatile, Motivated Teams

The medical home and health neighbourhood of the future will be characterized by cohesive, versatile and motivated teams that collaborate for the patient.

"[Patients] want us to talk to each other; work together; they want a functional medical home." [84] As summarized in Table 5, versatile teams will have a new way of thinking and working together to optimize their respective skills. Through trusting relationships, team members will be empowered with new roles and responsibilities, and distributed leadership will positively impact team effectiveness and the delivery of care.

Adaptive care teams will become the norm. Roles will be clear, yet flexible. Within the team, health care professionals will optimize their respective skills and scope of practice, with their roles reflecting their practice settings, requirements of the funder or employer, and the needs of their patients.

Table 5. Collaborative teams of the future

New ways of thinking and working together	Supported by:
• A collective vision and mindset • Responsiveness to the population served • New working culture • Collaborative, proactive core and broader team that has each other's back • Transdisciplinary teams, with both generalist and specialized skills • Clear, yet flexible, team roles • Empowered with new roles and responsibilities • Interdependence • Shared decision making • New roles for peer and lay workers	• Confidence patients' needs are being met • Clearly defined joint accountabilities to • patients, the public and the system • Distributed leadership • Trusted and sharing relationships • Working to full scope of practice • Clinical pathways throughout the system • Shared care plans • Shared medical records across the system • Optimized information and management continuity • Continuous embedded quality improvement • Adequate data and measurement, with audit and feedback • Patient and family feedback

Health human resource planning will be critical to meeting the requirements of the new integrated service design. This means having fully-funded teams whose number, mix and type of providers reflect community and practice needs. Attention will be given to providers' experience and their capacity to deliver requisite services. In this context, the report of the Expert Panel on Optimizing Scope of Practice describes transformed health care system as:

- Population needs determining models of care and professional scope, rather than professional supply
- Patient rather than professional focused
- Teams with conventional and non-conventional providers, rather than isolated, siloed professions
- Team-defined tasks to meet patient needs, with the team allocating resources and responsibilities, rather than simply adhering to historically credentialed scope of practice
- Funding groups rather than individuals
- Combined team accreditation, in addition to individual regulation
- Performance monitoring and evaluation aligned at the group level, reflecting these principles[85]

With Patient Care Networks taking on responsibility for health human resource planning and management throughout the neighbourhood, their managers will work with stakeholders to determine the right mix of health

professionals for the population. Planning will include determining: the right mix of comprehensive and specialized (e.g., sports medicine, addiction medicine, geriatric services, palliative care and chronic pain) family physicians; the type and number of specialists; and the range of interprofessional providers required. Finding the right balance between physician and other health human resources has been a priority for Alberta Health. An integrated approach will allow health human resources planning to be undertaken in a more comprehensive fashion, with greater flexibility to achieve the right balance and meet the needs of the local population.

There have been many efforts to optimize scopes of practice and embed new cadre of health professionals within models of care. However, they have often been introduced without a full description of how the new roles will be integrated and aligned with existing service delivery models or how they will impact the scopes of practice of other health professionals. Table 6 outlines barriers and enablers to optimizing team members' scopes of practice at the macro, meso and micro levels.[86]

Table 6. The barriers and enablers to optimizing team members' scopes of practice at various levels

	BARRIERS	ENABLERS
MACRO	***Health care professional accountability/liability concerns***	• ***Educating professionals and courts*** on changes to legislation that recognize the principles of shared care models
	Educational needs/requirements that inhibit professionals working to full or optimal scope	• ***Establishing practicums and residencies*** that foster inter-professional competencies • ***Post-licensure credentialing*** for continued competency development over the course of a career
	Rigid legislation/regulations	• ***Expanding adoption of more flexible legislative frameworks*** that can be interpreted at the local setting
	Payment models that do not support changes in scopes of practice	• ***Alternative funding*** (e.g., bundled or mixed payment schemes) to include all health care professionals and to be aligned with desired outcomes
MESO	***Communication across multiple care settings***	• Implementation and upkeep of ***electronic medical records*** essential for all respective health care professionals (and for patients themselves) to have timely access to the most up-to-date information on treatment and status
	Professional protectionism	• Representation of the interests of professions in the context of collaborative care arrangements and ***inter-professional standards/overlapping scopes of practice***
	Accountability	• Broader application of collaborative performance measures and an overall quality assurance framework through involvement of ***accrediting bodies***
	Availability of evidence	• Systematic monitoring and evaluation (with specific focus on inputs and outputs) to estimate cost incurred for introducing change and the ***long-term return on investments***
MICRO	***Professional hierarchies***	• ***Change management team:*** a designated role for managing changes in scopes of practice and models of care
	Professional cultures (lack of trust and role clarity; job protectionism, turf wars, task escalation)	• ***Continuing professional development*** to cultivate team thinking and develop levels of trust around relative competencies • ***Team vision:*** to reinforce that the ultimate goal is the improved well-being of the patient; who provides the care is secondary to the quality and accessibility of services provided
	Communication among health care professionals	• ***Instilling group mentality:*** internalization of shared responsibility across health care professions • Scheduling of ***regular meetings*** for health care team members to consult on appropriate care strategies and problem-solving strategies; integrating ***information communication technologies*** • ***Co-location*** to have different types of health care professionals and services functioning in a shared space

Health human resource planning is supported by the availability of health care professionals with skills that align with working in new service delivery models, like the Patient's Medical Home. Enhanced training will include a broader set of clinical skills – transdisciplinary skills – which will allow professionals to provide a greater scope of services and to step in to support other team members when needed. As well, team members working in the new service design will require competencies that go beyond their traditional training, and ongoing supplemental training and team learning will be built into practice. Required are enhanced skills related to: professionalism; communication; patient-centredness and preferences; collaboration and teamwork; leadership; project management; population health; health equity; advocacy; continuous quality improvement; research; patient safety; cultural competency; and information technology.[87 88]

As an example of the breadth of competencies required, the family medicine resident training profile outlines the skills for family physicians of the future, including: i) embracing the principles of family medicine (a community-based, skilled clinician, with a defined practice population and effective patient relationships); ii) having a comprehensive set of skills to perform core professional activities related to managing a practice and patients, and providing comprehensive, inclusive care; iii) having generalist capabilities related to patient-centred care, clinical reasoning, professionalism, selectivity in making choices, communication and procedural skills ; and iv) being able to work effectively in the Patient's Medical Home model. The residency profile is also used to better articulate to the public and other specialities family physicians' scope of practice and generalist approach.[89]

A New Integrated Service Design: Information and Management Continuity

Patient care will be coordinated and connected through exchange of information and care plans among providers, services and organizations.

A top concern of patients in Alberta is the disjointed, uncoordinated care that they receive, and many primary care providers express frustration with referral services in this regard. For example, one in five Albertans reported that their regular doctor did not seem informed and up-to-date about the recent care they received from the specialist.[90] That experience concurs with only 17% of family physicians reporting that they receive a report on a specialist visit within a week of service, and only two-thirds receiving information about changes made to patients' medication or care plans. As well, too few physicians receive notification of patient admissions to the hospital or emergency department; communicate with home care about their patients' needs, services received or changes to their conditions; or often coordinate care with social services or other community providers.[91]

Patients expect their health care information to be accessible to them and their providers when it's needed and for all their providers to be in accord. In future, patients will no longer have to repeat their health history or take the same test multiple times for different providers. They will be less likely to fall through the cracks during transitions in care and experience delayed or inappropriate care due to inadequate communication. Patients will receive care from a fully informed team of professionals within the Patient's Medical Home and throughout the integrated health neighbourhood. Seamless patient transitions will be supported by well-connected primary, speciality and community-based health and social care networks, and facilitated by standardized patient referral, pathway and flow processes, and by patients being reconnected to their core team post discharge from acute care and other health and social services. For example, referral processes could be improved with a single platform housing a directory of specialists, with wait times, response times and up-to-date clinical information.

Importantly, information and management continuity will be supported by the requisite technical infrastructure. Alberta has already invested in the integration of patient health information with the deployment of Netcare and Connect Care, and has continued to add functionality and enhancements to these systems. However, "*to date, uptake of digital health technologies has been somewhat messy — with pockets of activity directed either toward a specific condition or an operational or administrative problem.*" [92] Related to primary and community-based care, CII/CPAR is the platform for integrating community EMRs. The Community Information Integration (CII) system transfers select patient information between EMRs and other providers via Netcare. The Central Patient Attachment Registry (CPAR) records and reports the attachment of panelled patients to family physicians. Although the CII initiative has made headway, much of EMR data remain outside Netcare and Connect Care, and there is some overlap in the information housed in these systems.

Primary and community-based clinicians want to interact with rest of the health system digitally through their EMR and to have data pushed into the EMR rather than having to log into different portals to look for it. To achieve greater system integration, EMRs will need to meet provincial standards for interoperability. Direct integration will improve clinical workflows, patient safety and quality of care, health outcomes and the overall patient experience.[93] As well, optimized use of EMR functionality (including registries, clinical decision support, prompts and reminders) will help improve patient management. Currently, only about half of Albertan's family physicians report receiving a reminder for guideline-based interventions and screening tests or receiving a prompt to provide patients with their test results; only four in ten send patients reminder notices when it is time for regular preventative or follow-up care.[94]

Future EMRs with seamless system-to-system interoperability, along with a provincial electronic health record (EHR), will improve information management and provide comprehensive real-time information. Such information sharing will be facilitated by patient health summaries and problem lists generated within the EHR that can be augmented and updated by the providers and patients (in order to ensure accuracy and their preferences are reflected). Not all patient information needs to be or should be shared widely; some will remain with the provider and with the patient.

Important changes need to occur to improve information sharing. Concerns about confidentially and privacy, data custodianship and ethical use of data must be addressed. An overarching provincial data governance strategy, outlining how the data should be housed, managed and used, and who is allowed to use it and for what purposes, is needed. Legislation needs to be updated and address the requirements for enabling integrated data and information continuity across the system, including outlining who is responsible for its management and accuracy, and how cybersecurity will be maintained.

Technological advancement will require a culture shift and change management support for health care providers. It should be implemented with "*intention and vision*" and clarity on what is to be accomplished and improved. Technology should be intuitive and easy to use, with clinical priorities and processes driving the technology introduced, rather than the other way round. Currently, "*it is designing us and we are changing to adapt to the technology.*" [95] Systems must also enhance care continuity, but some – such as standalone systems not integrated with the Patient's Medical Home team – can undermine it.

Patients have high expectations of technology. They want ready access to their health information in the same way as online banking and shopping. MyHealth Records – personal health records – were introduced by Alberta Health in 2019. It allows Albertans to view their laboratory, drug and immunization information held within Netcare. Users have found it an effective tool.[96] But overall, very few Albertans report having viewed online or downloaded health information, such as tests or laboratory results.[97] In future, all patients will have ready access to an integrated, interactive portal that holds a complete set of their medical records. This patient portal will also support appointment making, secure messaging, uploading clinical information, patient monitoring, and interactive apps and health queries. Such access can increase patient engagement in their care, reduce errors, and improve their experience and outcomes.[98] [99] [100]Patients' access to their health records could be enhanced by changes in the type of language used by health care providers and by annotations and links to further information about its content. For example, including annotations indicating that test results are normal and links to further vetted information about tests that are out of range.

What Having Access to a Patient Portal Means for Gary

In future, many patients will have experiences similar to Gary. He accessed the portal using his tablet, reviewed his INR results, uploaded his home monitoring data, and entered his medication dosage. An out-of-normal range entry triggered a clinical alert and Gary was seen by his core team soon thereafter. After his appointment, Gary used the portal to message his clinician, check his lab results and upload his BP and weight. He also uses an app available on the portal to help him manage his various conditions.

A New Integrated Service Design: Continuous Redesign and Embedded Change Management and Quality Improvement

A continuous quality improvement ethos will be promoted, supported and required throughout the health system, with a focus on value and outcomes of importance to patients.

Alberta has made significant strides in quality improvement and primary care practice redesign towards a Patient's Medical Home, and is a model for concerted province-wide innovation. Nonetheless, many Albertans are not receiving the highest quality of care possible, and often quality improvement is not part of day-to-day clinical work. Health and social services in the future will be characterized by having a focus on excellence and being catalysts for Innovation, supported by the right kind of tools, support and actionable information.

A Focus on Excellence and Catalyst for Innovation

Health services in the future will be innovative and resilient in their efforts to create the best possible service processes and patient outcomes. Building on existing models, initiatives and programs in Alberta, continuous quality improvement will be an integral part of the Patient's Medical Home and integrated health neighbourhood and be embedded in all clinical work. With entire team involvement, services will be able to respond to new evidence and areas identified for improvement with accelerated and rapid cycle change. With a focus on excellence, there will be a renewed focus on clinical pathways, guidelines and evidence-based care. For example, there will be new guidelines for virtual care, minimized unnecessary visits and care, and state-of-the-art chronic disease management, with comprehensive and integrated approaches to multi-morbidity and shared care. Proactive approaches to care will have greater prominence, including preventative education and interventions, risk stratification and identification of patients at risk for and living with chronic conditions. Change and improvement efforts with be focused on meeting patient needs and preferences, with attention to health equity. There will be greater transparency of health service performance and patients will be partners in change.

The Requisites for Supporting Change and Improvement

There are seven critical features that will support change and improvement going forward:

1. Accountability

Currently, there are few streamlined, documented and monitored service and outcomes expectations for physicians, Primary Care Networks and Alberta Health Services. There is insufficient use of performance measurements and accountability mechanisms, and services are inadequately evaluated.[101] [102] There is not enough emphasis on engaging primary care and community-based teams in measurement for quality improvement and often measures used in acute care settings are inappropriately applied to care in the community. As discussed above, in future, there will be both common and tailored accountability frameworks that reflect system principles and goals, as well as clinical priorities. The province – led by the Joint Commission with input from Alberta Health, Alberta Health Services and the new Alberta Community Health Care Services (ACHCS) – will develop provincial and sectoral accountability frameworks, with measurable targets and criteria for performance monitoring. As such, many quality improvement efforts will be tied to system and sector priorities through the accountability frameworks. Frontline teams, including patient representatives, will be engaged in identifying measures that are meaningful to them and link to the accountability frameworks. Patient Care Networks will be responsible for monitoring the accountability agreements in the integrated health neighbourhood.

2. Transformation Champions

Having strong transformation champions and leaders helps to change the culture of the health care system and services, improve engagement and buy-in, strengthen the capacity for change, and increase the likelihood that providers will implement an innovation. Transformation requires a network of clinician leaders, quality improvement champions, practice facilitators, patient representatives and decision makers to align to a common vision and lead change.[103] [104] [105] [106]

In Alberta, having strong leaders with a vision, passion and stamina has made the difference in change efforts to date. For example, physician champions have been critical to engaging their peers and guiding primary care transformation, with both continuity in leadership roles *and* new voices joining in. Alberta has invested in leadership development, with groups like the Physician Champion Network and PCN Physician Leads. The creation of the Primary Care Alliance (PCA) brought together thought leaders to advance the transformation agenda, and the Specialty Care Alliance (SCA) draws a concerted voice from specialists.

Alberta will build on past leadership development initiatives and have more and new types of leaders, from across the sector and across professions, with an expanded set of skills to promote and implement change. There will be a focus on building transformation champions to create a network of leaders throughout the system – at the Patient's Medical Home, integrated health neighbourhood, Patient Care Network and provincial levels. Each Patient Care Network will have dedicated transformation champions who will recruit, train and support current and emerging leaders and the teams in medical homes and health neighbourhood. Practice level leaders could have a multitude of roles, from engaging and training their peers in efforts to accelerate practice improvement to leading change management and specific quality improvement initiatives. Training and support will include quality improvement methods and tools, approaches to optimizing team-based care, and advancing coordination of care with specialists and community-based services. Transformation champions in the Patient's Medical Home and other services in the health neighbourhood will be supported by practice facilitators described below.

3. New Roles on the Ground

There will be new quality improvement roles for patients and health care team members, and new ways in which they support improvement. All team members will play a role as quality efforts become part of daily practice. Team roles will be flexible and evolving, and include clinical leads, process leads, subject matter experts and information management. Figure 12 is an example of a transformed experience for new team members as they join teams dedicated to quality improvement. From the beginning, team members will be engaged in a continuous quality improvement culture and it will become a vital part of their role in the team.

Figure 12. How new team members will be on-boarded in the future

4. Centralized Guidance and Support

Alberta has made the strides it has towards Patient's Medical Homes and improving quality because of the centralized, province-wide efforts. Supporting practices from the provincial level has been critical for skills development and province-wide change efforts. Thought leaders and agencies – such as the Accelerating Change Transformation Team (ACTT), Health Quality Council of Alberta (HQCA) and Primary Health Care Integration Network within Alberta Health Service – have played an important organizational role in developing key resources and supports and assisting with dissemination and uptake. Concerted programs have the capacity to keep abreast of international innovations, develop strong evidence-based approaches and build on learnings from others, while adapting them to the Alberta context and creating local delivery solutions.

Experience has shown that the manner in which quality improvement initiatives are implemented matters in terms of their effectiveness, sustainability and spread. Having the right infrastructure, resources and support – as well as capacity on the ground – is critical to success. Past initiatives have included providing strategic advice, developing and updating clinical practice guidelines, supporting clinicians make change, piloting innovation, and supporting improvement initiatives focused on achieving particular process or clinical practice changes. ACTT has led successful province-wide improvement initiatives, panel management, screening and prevention, and smoking cessation. These programs have achieved a high degree of spread and normalized the use of quality improvement and facilitation. They helped change practice behaviours and improve patient care, as well as spur other province-wide initiatives, such as the adoption of system-level indicators and scaling the Central Patient Attachment Registry (CPAR). ACTT has also created evidence-based tools and clinical practice guidelines to support teams advance the Patient's Medical Home. This effort has gained traction; in 2019, the Canadian College of Family Physicians ranked Alberta as the top province in the implementation of the Patient's Medical Home. To take improvement ideas through to implementation at a provincial scale, this type of provincial leadership and infrastructure is required. With strong capacity building support throughout the system, such efforts will continue to flourish.

5. Practice Facilitation

Fostering change requires building and sustaining capacity at the practice level, as well as support in scaling up successful efforts. Improvement training and skills development, academic detailing, and audit and feedback are all important. But, the evidence shows that they are less effective in the absence of practice facilitation. With facilitation, practices are more likely to:

- adopt evidence-based guidelines[1]
- have significant and sustained improvement in delivery and quality of care[1–12, 36]
- improve the delivery of, and patient outcomes from, chronic disease management [4,9,36]
- increase preventative service delivery rates and processes[2,3,6,8,10, 36]
- have better team relationships and communication[3]
- have greater capacity for change and increased adaptive reserve[7]

Practice facilitators can help team members conceptualize their work in a different way. They bring a unique outsider perspective, and because they work with multiple practices, they provide "cross-pollination" of best practices and widely communicate lessons learned.[107 108 109] Alberta has a cadre of skilled practice facilitators. The various initiatives led by ACTT, AHS and HQCA have shown success and sustainability with their support, including the Patients Collaborating with Teams (PaCT) and Peer-to-Peer EMR Network initiatives. In future, Patient Care Networks will have dedicated practice facilitators who will provide training, assessment, coaching, technical assistance and feedback to health care services on the ground. They will be part of a provincial program that provides standardized training and improvement guidelines and tools, including quality measures and approaches for optimizing the use of practice data to support improvement.

6. Patients as Partners in Change

Patient preferences are driving the design of more quality improvement initiatives. For example, Patients Collaborating with Teams (PaCT) supports teams in providing care to the most complex patients by improving patient preferred interactions and discussions on what matters most to them. In addition, patients and caregivers are increasingly contributing to quality improvement initiatives. For example, patient and family engagement learning collaboratives have supported health care organizations across Canada in creating environments where they can contribute meaningfully as partners. In the new system and service design, patients' roles as partners in design, development and implementation will continue to evolve. (Also see the section *Community-Driven: Patients and Community as Partners in Health Service Design* above).

7. Measuring, Learning and Acting

Health service redesign and quality improvement efforts require comprehensive actionable data to guide them. As discussed above, Alberta has deployed Netcare and Connect Care to centralize patient data. CII/CPAR integrates some community EMRs, and some practices participate in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), which collects de-identified health information from EMRs for the purposes of research, surveillance and quality improvement. As well, Health Quality Alberta gathers and publishes data.

However, further strides are needed to attain integrated patient and system data to support measurement, learning and action, and create a *learning health system.* A system of using data for change will characterize the Patient's Medical Home and integrated health neighbourhood of the future. A closer connection between service delivery and data gathering will allow for the continuous generation of knowledge and improve health care delivery and outcomes. Learning and improvement will be supported by more and better data that will be readily accessible, relevant and usable.

Artificial intelligence (AI) holds great promise for the use of data to improve health care and will be used increasingly across the system. In primary and community-based care, it can help improve accuracy, reduce errors and augment care processes. For example, AI mining of EMRs could help in determining secondary options if first line treatments do not work, proposing alternative diagnosis for uncommon scenarios, and using vital signs to predict certain outcomes. However, AI is not without shortcomings. For example, outstanding questions regarding its appropriateness in certain circumstances and racial and gender biases remain. According to Eric Topol, "*the greatest opportunity offered by AI is not reducing errors or workloads.... it is the opportunity to restore the precious and time-honored connection and trust—the human touch—between patients and doctors.*" [110]

Figure 13. Steps to measuring, learning and acting

In the future, EMRs will be optimized to allow providers ready access to data on their individual patients and patient populations, to identify trends and outliers, and to respond quickly with the changes required. Provincial integration of EMRs will allow for a central repository of de-identified patient data that will support decision making on system and practice improvement, and research and analyses on a local and provincial level. When a Learning Health System is in place there will be a rapid cycle of assembling, analyzing and interpreting data in real time, followed by feeding it back to practices to stimulate innovation, facilitate change and guide improvement. Provincial-wide data improvement initiatives, with common definitions and alignment of measures, will support these efforts, as will artificial intelligence (AI) as it evolves. Becoming a Learning Health System is not a one-off effort; it will require ongoing commitment and leadership. Involving patients and providers alike, the focus will be on turning data into information to support continuous practice redesign.

What Improved Data and Information Management means for Kim

Kim was diagnosed with colon cancer because of improved data management and proactive panel management. She is relatively young and healthy, and like many other patients, does not make appointments for regular health screening and preventative tests. The "POET" (Proactive Office Encounter Technician): i) helps manage the patient panel; ii) uses the EMR to identify patients due for routine screening and prevention; iii) sends a reminder to patients to make an appointment through the portal; and iv) generates requisitions for laboratory or diagnostic imaging for the patient's next appointment. Kim was identified as overdue for a fecal immunochemical test (FIT) and a test kit was sent to her, which she completed. It came back positive. She then was referred to a specialist, had a colonoscopy and was diagnosed. Kim entered the cancer care system, while maintaining strong links to the core team at her Patient's Medical Home. She was assigned a navigator from her medical home to help her through the various transitions in her care, while keeping the core team aware of her progress. When Kim has a question, a member of her medical home team is available to respond, or quickly connect her to someone who can. Information from each episode of care flows seamlessly back to her medical home. Kim feels supported by an expanded team and experiences a collaborative approach. She rarely needs to repeat her story or explain her health history. She sees they are all contributing to her health record and care management plan, as well as her psycho-social needs.

5. Factors Facilitating Transformation

There has been much change and learning in Alberta over the past two decades. (See Appendix A). Change takes time and is incremental – from the early primary care pilots and creation of the Access, Improvement, Measures (AIM) project to the numerous recent Patient's Medical Home initiatives. Importantly, the incremental change has been dotted with major change events that have helped accelerate transformation, such as the creation of Primary Care Networks and the Covid-19 pandemic, which required the immediate implementation of virtual care. We are proposing a combination of transformative change, supported by incremental evolution in service design and delivery.

Real transformation cannot occur in siloes. A collaborative effort, with strong alliances and governance structures, and clarity of purpose and roles are critical ingredients. Over the past 20 years, developing the right governance structures has taken time and experimentation to find the appropriate balance. For example, the creation of the Joint Venture Council (JVC), the primary care opioid initiative, and formalized relationships between Alberta Health Services and Primary Care Networks within zones have led the way to more creativity and effective use of scarce resources.

There will be many factors to consider when launching and implementing this transformation. Much has been written about managing change, but too often the advice is not followed and efforts stall when the hard work starts and there are not quick wins. The following are some of the critical first steps for laying the groundwork:

1. Find leaders who excel in complexity and uncertainty
2. Have the difficult conversations
3. Gain buy-in and engage those who are averse to change and feel they have something to lose
4. Have all voices at the table
5. Create new organizational structures and infrastructure
6. Plan to ensure reorganization truly results in improved quality and integration of care

5.1 Considerations when Initiating Change

The following are additional considerations for initiating transformation:

- Make a compelling case for change
- Define a clear and common vision among stakeholders
- Show commitment to the patient's medical home and neighbourhood models from top leadership
- Ensure consistency of purpose and focus, as well as support, along all implementation phases
- Address context, pre-existing norms, values and relationships among stakeholders, including power and trust dynamics
- Ensure representative planning and governance structures
- Outline clearly the various requirements and processes for system restructuring
- Clarify roles and responsibilities
- Define how the funds flow
- Develop realistic estimates of the costs of transformation and provide resources for change
- Allow adequate time for change to take place

5.2 Levers for Change

Evidence and experience show a number of levers support health system transformation. Some of the key levers for change are:

- Acknowledge and address barriers to change
- Address the intrinsic and extrinsic motivators of change
- Get the financial and other incentives right
- Change culture with a transformational shift in thinking
- Create a change ethos and culture of quality
- Develop a foundation for integrated, shared decision making and collaboration
- Skilled and engaged leadership, including clinical champions and opinion leaders
- Meaningful stakeholder (administrator, provider, organizational, patient and community) engagement and participation
- Professional standards and well-defined norms
- Performance frameworks that outline goals and assess performance using milestones, trends, benchmarks, clinical audit, report cards and accreditation
- The right balance between prescription and experimentation
- Training and skills development for transformation

5.3 Transformed Organizational Development and Management

The transformation proposed in this write paper will require significant efforts in organizational redesign and management. Critical areas for focus and development include:

Managing health organizations for transformation, including navigating complexity and uncertainty

- Address structural and organizational barriers to change
- Develop an enabling environment
- Promote organizational learning
- Elevate thinking from individual performance to organizational and system performance
- Increase collaboration with system partners

Planning for and implementing change at the service delivery level, including reorganization and business process reengineering

- Consider physical requirements, such as architectural design of clinical space, information and communication technologies
- Consider size of practice groups and types of arrangements
- Develop and train a health transformation workforce
- Hire for cultural fit
- Empower team members to act, take risks and innovate

Ensuring continuous quality improvement

- Focus on patient and provider experience (as part of the Quadruple Aim)
- Standardize clinical and management systems to support change
- Renewed focus on evidence-based care and best practices
- Mentorship and facilitation
- Evaluation, using appropriate frameworks

6. Conclusion

Alberta's health care system is faced with multiple challenges that require a concerted bold response. To meet the health needs of Albertan in the future, a transformational change to the structure of the health system and the way in which services are designed and delivered is vitally needed. In this white paper, the Primary Care Alliance challenges the status quo. It proposes significant changes to ensure a system that is primary and community-based care oriented, population health driven, seamlessly integrated, team centred, technology and innovation supported, and focused on – and accountable to – value and outcomes of importance to patients. It is time to push through the political, institutional and professional barriers to change and create a system that benefits all Albertans.

Appendix A. Alberta's 20-Year Primary Care and Community Care Transformation Journey

This white paper is informed by and builds on the design, structures and lessons learned through Alberta's Primary Health Care transformational journey outlined below.

2013 - ongoing
Launch of PMH, panel management, Choosing Wisely, Change Agent Day & physician champion webinars

- Physician champions
- Improvement facilitators
- Train-the-trainer approach

2013-2015
Primary Care Evolution document released

- Roadmap for primary care evolution in collaboration with AHS and AH
- Detailed approach for change

2013-2014
ASaP

- Formalized practice facilitator training - significant practice level change aligned to the PMH. Grant ended Dec 2014 - program offering continues

2014 – 2017
Panel and Capacity Building Grant

- Significant investment and advancement in practice facilitation, panel identification/management

2015-2017
EMR P2P, Canada Health Info Way

- Focus on building capacity in health IMIT, create super users for EMRs to support primary care improvement

2015-2018
Panel infographics

- Supporting socialization of progress in panel identification and building capacity

2017-2019
PaCT

- Significant collaboration between AMA AHS and HQCA

2017
BCM

- First clinic live on BCM - pilot program aims for 10 clinics. 4 are live by Jun 2021 (with two committed in Aug/Oct of 2021)

2017-Today
PCNs proliferate

- 42 PCNs include 90% of primary care physicians
- Zonal bodies formed for physicians to collaborate

2017
New governance models for PCNs

- Three levels of representation
- Joint Venture partners role redefined

Primary Care Integration Network formed

- Primary care "voice" included within specialist care

Programs supporting uptake of PMH

2017 – today
AMA partners with AHS and ACFP for Primary Care Opioid Initiative

- AHS and PCNs working together to provide services within a zone under a new governance structure

2017
Specialty Care Alliance formed

- Organized, collective voice for specialists modelled after the PCA

2017-Today
PCNs proliferate

- 42 PCNs include 90% of primary care physicians
- Zonal bodies formed for physicians to collaborate

2017
New governance models for PCNs

- Three levels of representation
- Joint Venture partners role redefined

Primary Care Integration Network formed

- Primary care "voice" included within specialist care

Programs supporting uptake of PMH

2017 – today
AMA partners with AHS and ACFP for Primary Care Opioid Initiative

- AHS and PCNs working together to provide services within a zone under a new governance structure

2017
Specialty Care Alliance formed

- Organized, collective voice for specialists modelled after the PCA

2018
Accelerating Change Transformation Team (ACTT) formed

- Support programs PMP, TOP, PCN PMO combined to form ACTT
- Enable system transformation through content, capacity, support and influence

2018 - today
New Blended capitation sites

- New blended capitation sites supported

2019 - 2020
Focus on contintuiy and transitions within PMH (CPAR/CII - H2H2)

- Major integration initiative piloted to enhance continuity of care

2020
Virtual Care takes off

- Virtual care takes off during COVID-19
- New virtual delivery codes created

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