Chronic Disease Management

Health and Alberta Health Services

Report of the Auditor General March 2024

Assessment of Implementation Report



Outstanding Recommendations

Assessment of Implementation Report

Chronic Disease Management

Health Alberta Health Services

(September 2014)

Summary of Recommendations

We completed our assessment of implementation of the recommendations from our 2014 audit of the Department of Health (the department) and Alberta Health Services (AHS) efforts to manage chronic diseases among Albertans. The department and AHS have implemented eight of the nine recommendations. One recommendation is no longer relevant due to changed circumstances.

Nine years have passed since our original audit. Although we are assessing the recommendations as implemented, work to improve the management of chronic diseases in Alberta is part of a long journey to improve systems of care and is still ongoing. The work done to date by the department and AHS creates a foundation for improved chronic disease management, but the efforts must be sustained to see long-term improvements for Albertans living with chronic diseases. This is a significant undertaking, but one that has the potential of reducing the financial and capacity burdens on Alberta's health system while improving quality of life and health for the more than 1.5 million Albertans living with chronic diseases.

The management of chronic diseases in the community relies on a strong primary healthcare system. This report is focused on following up on the nine recommendations we made in 2014 about specific systems and processes to help practitioners and Albertans manage chronic diseases in the community, but not on the primary care system as a whole. The current challenges facing the primary care system and primary care providers are significant, and may be the subject of future audit work.

Chronic disease management also relies on other areas of the healthcare system—including acute and emergency care, mental health, and continuing care—which can provide wrap-around services and must share patient information with the primary care system and the patient. The implications of the reorganization of the provincial health system announced in late 2023 on chronic disease management are not yet known. As Alberta transitions towards a new model

¹ Chronic disease is a long-lasting condition that usually becomes worse and often cannot be cured. The most common chronic diseases in Alberta include hypertension, diabetes, chronic obstructive pulmonary disease, asthma, heart failure, coronary artery disease, obesity, and depression. Report of the Auditor General—September 2014, Chronic Disease Management, page 1.

of healthcare delivery, it will be critical for Albertans living with chronic diseases that the work to date to improve health system integration, patient-centred care, and efficient information sharing is maintained and furthered. It will also be even more important that objective evaluation of outcomes for Albertans living with chronic diseases is actively monitored and transparently reported to decision makers, and all Albertans.

Health

IMPLEMENTED Recommendation:

Improve delivery of chronic disease management services

IMPLEMENTED Recommendation:

Improve support of patient-physician relationships

CHANGED CIRCUMSTANCE Recommendation:

Improve physician care plan initiative

IMPLEMENTED Recommendation:

Improve delivery of pharmacist care plan initiative

IMPLEMENTED Recommendation:

Strengthen electronic medical record systems

IMPLEMENTED Recommendation:

Provide individuals with access to their personal health information

Alberta Health Services

IMPLEMENTED Recommendation:

Improve support of patient-physician relationships

IMPLEMENTED Recommendation:

Improve Alberta Health Services chronic disease management services

IMPLEMENTED Recommendation:

Improve physician care plan initiative

Introduction

Chronic disease

Chronic disease is any medical condition that requires ongoing and long-term management. It includes a host of conditions affecting a person's ability to maintain vitality and engage in daily living activities. Common examples of chronic diseases include hypertension,² diabetes, asthma, cardiovascular disease, COPD,³ obesity, as well as cognitive and mental health conditions.

According to a study completed in 2017 by AHS, approximately one-in-three Albertans live with one or more chronic diseases.

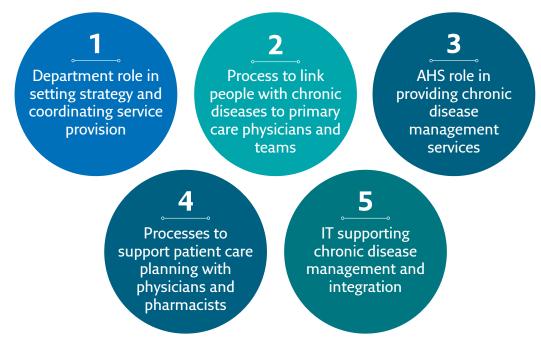
Chronic diseases are a burden to those who live with them and to the healthcare system particularly when a person is unable to manage their conditions effectively in the community. Ineffective management of chronic diseases causes pain, impaired mobility, reduced ability to work, isolation, and even early death to the people living with them. Avoidable hospital stays, emergency room visits, and urgent care walk-ins from unmanaged chronic diseases cost the Alberta health system billions of dollars and divert precious emergency and acute medical resources away from their intended focus.

The aim of chronic disease management is to provide care that helps people with these conditions improve their quality and length of life. Effective management of these conditions can also reduce costs and capacity burden on the healthcare system—particularly in emergency and acute services.

Our 2014 audit of chronic disease management

Our 2014 audit examined whether the Department of Health and AHS had adequate systems to effectively deliver chronic disease management services.

Our audit focused on five related areas of the chronic disease management system:



A condition characterized by chronically high blood pressure.

Chronic Obstructive Pulmonary Disease.

Our report detailed many good practices and examples of excellent care for Albertans with chronic diseases. But we also found a fragmented system of care and that no one had overall responsibility to ensure:

- the system was coordinated
- that all patients received the same level of care
- that providers were making effective use of available resources to understand the chronic diseases and manage patient care

We also noted the need for improvements to systems and tools to allow Albertans living with chronic diseases to be informed and involved in decision making for their own care.

We made nine recommendations—six to the department and three to AHS. Our recommendations focused on improving the delivery of chronic disease management services—including support of patient-physician relationships, and improvement of both pharmacist care plan and physician care plan initiatives. We also recommended improvements to the electronic medical record systems to ensure both healthcare providers and Albertans living with chronic diseases have convenient and complete access to the medical information they need to better manage their conditions. See Appendix A for a list of the nine recommendations.

Recommendation:

Improve delivery of chronic disease management services—understanding need and improving oversight

IMPLEMENTED

Context

In 2014, we found that the department's Primary Health Care Strategy described the actions and services needed to manage chronic diseases in the province. However, the department lacked a structured approach or business model to deliver chronic disease management services in the way Albertans expect of a high-performing healthcare system. At that time, the department:

- did not have systems to determine provincial demand for chronic disease management services
- had not set expectations or defined roles and responsibilities for healthcare providers in organizing and delivering chronic disease management services
- did not have processes to ensure that services were being delivered effectively at individual and province-wide levels

The department also needed to improve how key patient care information is shared among healthcare providers involved in caring for Albertans with chronic diseases.

Our current findings

The department implemented our recommendation by formalizing expectations, roles and responsibilities, and accountability processes. The department:

- developed the Chronic Condition and Disease Prevention and Management Framework which
 was adopted by the Provincial Primary Care Network Committee governance structure as
 guidelines for local Primary Care Network service planning
- revised the Primary Care Network Program objectives to clarify direction around chronic condition and disease prevention and management
- established formal monitoring and accountability reporting through requirements in local Primary Care Network grant agreements

We reviewed the Chronic Condition and Disease Prevention and Management Framework and found better clarity on strategic direction and eight goals that set expectations for chronic disease management services. Primary Care Networks are now required under their funding agreements to report back to the department on several measures, including screening, patient experience, and appointment wait-time indicators, focused on chronic disease management and care. We sampled annual reporting from Primary Care Networks and while not all networks reported on all indicators at the time of our sampling, they are compliant with reporting requirements overall.

Health and Alberta Health Services

Recommendation:

Improve support of patient-physician relationships

IMPLEMENTED

Context

Our 2014 audit examined the patient-physician relationship for three categories of patients—those whose family physician was a member of a Primary Care Network, those whose family physician was not a member of a Primary Care Network, and those who did not have a family physician. The department:

- did not have a process to determine whether Albertans with chronic disease had a family physician or who their physician was
- had not asked physicians to identify which of their patients had chronic disease or risk factors for chronic disease
- did not provide information to physicians to identify patients with chronic disease and define which physicians those patients regularly saw

We found that AHS did not determine if patients with a chronic disease had a family physician.

Our current findings

The department worked with family physicians, AHS, the Alberta Medical Association, and the Health Quality Council of Alberta to improve patient paneling⁴ through new guidance, processes, and reporting—allowing better identification of existing patients with chronic disease, as well as those at higher risk of developing chronic disease. The department also developed several IT systems to allow secure sharing of information among physicians and healthcare providers.⁵ Use of these new tools and processes was limited but continued to improve over time—the department has set a goal for 80 per cent uptake by community physicians by mid-2025.⁶

In Fall 2017, AHS completed a significant data analysis using three years of healthcare utilization data⁷ to understand the relationships between patients and community physicians. Their analysis included specific focus on patients with chronic disease and had several findings relevant to chronic disease management in Alberta.

⁴ A patient panel is a list of the unique patients who have a relationship with a primary care provider—typically a physician or a nurse practitioner. Understanding who holds the primary relationship with a patient is critical to both continuity and consistency of a patient-practitioner relationship, but also ensures clarity in who is responsible for leading the medical management of more complex conditions such as chronic diseases.

Key among these systems is the Community Information Integration Hub and Central Patient Attachment Registry (CII/CPAR). These systems are discussed in greater detail on page 12, in discussion of our recommendation to strengthen electronic medical records.

Originally, the goal was 80 per cent by mid-2023. However, due to several factors, including the impacts of the COVID-19 pandemic, progress has been slower than anticipated—as at December 2023 the adoption rate was 48 per cent. The department has extended that goal by two years.

⁷ The study examined the period of April 1, 2013 to March 31, 2016.

Select Findings of AHS "Informing the Attachment process for Primary Care" Study (2017)



1.5 million Albertans. or about 1 in 3, have one or more chronic diseases.



Albertans with less continuity with primary care physicians visited emergency departments more.



Less than 1% of Albertans with chronic diseases had no primary care visit within the 3 years of the study.

AHS developed new processes to identify patients with chronic disease presenting in hospital or AHS clinics who do not have primary care providers and link them to primary care providers. Primary Care Networks developed patient-directed tools such as Alberta Find A Doctor8 to aid patients in finding a primary care provider.

AHS also implemented new initiatives and programs to help Albertans with chronic diseases have greater continuity in their primary care, and between hospital-based care and primary care in the community. Examples we noted include their Continuity of Care campaign and Home-to-Hospital-to-Home initiative. AHS also took steps to ensure chronic disease services were available to people at higher risk of chronic disease by developing alternative models of care, providing some primary care directly in community-based clinics, and building health equity into Primary Care Network service planning.

See: https://albertafindadoctor.ca/.

Alberta Health Services

Recommendation:

Improve chronic disease management services understanding need and evaluating effectiveness of service delivery

IMPLEMENTED

Context

In 2014, we reported there was no ongoing process for AHS to assess chronic disease management demand. This made it difficult to match services with needs. AHS also did not have a province-wide strategy for chronic disease management services—goals and targets were not set, and there was no reporting on the overall basis of services provided, patient use, cost of services, or overall effectiveness. We also found varied effectiveness of coordination of services across AHS zones and Primary Care Networks.

Our current findings

AHS took several steps—developing a suite of frameworks and programs—to implement our recommendation, including steps to:

- better understand chronic disease service needs in the province to support joint service planning with Primary Care Networks
- collaborate with stakeholders and plan for integration of services across healthcare providers and in the community through the Primary Care Network Governance Framework
- set provincial standards and goals for chronic disease management through the Chronic Condition and Disease Prevention and Management Framework and embed these into systems, training, and care pathways used by healthcare providers⁹
- monitor the overall health system for chronic disease readmission rates, and notify patient care teams on patient admissions and discharges through the Home to Hospital to Home Transitions initiative
- evaluate and report on patient health outcomes through the Better Choices Better Health program

AHS has also set up multidisciplinary teams¹⁰ of subject matter experts and patients tasked with finding innovative solutions to challenging problems in healthcare—including a Primary Health Care Integration Network focused on improving the integration of primary healthcare in the province.

AHS told us that they view the actions to date as important, but still first steps in a multi-year process focused on learning and continuous improvement of their processes and tools—and in particular reaching the 80 per cent adoption goal of the Community Information Integration Hub and Central Patient Attachment Registry (CII/CPAR) application. We agree with their perspective. The work done so far is important, but it must be sustained and continuously reinforced to drive long-term improvements in coordination for Albertans with chronic diseases.

⁹ For example, in AHS' clinical information system Connect Care.

AHS calls these multidisciplinary teams Strategic Clinical Networks™. In addition to the primary care integration network, there are a number of other networks focusing on diseases and care pathways relevant to chronic disease management.

Recommendation:

Improve physician care plan initiative at the department

CHANGED CIRCUMSTANCE

Context

In 2014, we found several deficiencies in the department's management of its physician care plan initiative, including that the department did not:

- set expectations for management or content of physical care plans
- set targets for the use or adoption of care planning
- have processes to evaluate and improve the effectiveness of care plans or review reasonableness and compliance of care planning physician billing claims

We also found that, of the physicians who prepared care plans, many did not have information systems capable of effectively managing them.

Our current findings

The department decided to end the physician care planning initiative—delisting the Comprehensive Annual Care Plan billing code for physicians from the Schedule of Medical Benefits. 11 As a result, the recommendation is no longer applicable.

The department decided to end the physician care planning initiative based on research from the University of Alberta showing the impacts of physician care planning on patient health outcomes were uncertain. The department was concerned that it was investing considerable incremental funding without being able to show definitive positive outcomes for patients. We reviewed the research used by the department and performed our own review of other academic literature on the topic of effectiveness of physician care planning and its impact on patient health outcomes. We also confirmed the department followed proper processes to delist this activity from the Schedule of Medical Benefits.

In deciding to stop the initiative, the department was clear with us that it does not dispute the intuitive benefits of patients having a close working relationship with their primary care provider and the primary role in planning their own care. They also noted that care planning for chronic disease continues—but it is now billed as part of the annual visit. We encourage the department to continue to monitor the effectiveness of annual care planning and adjust processes based on new learnings and research, as it becomes available.

The Schedule of Medical Benefits is the fee schedule and list of medical benefits insured under the Alberta Health Care Insurance Plan.

Alberta Health Services

Recommendation:

Improve physician care plan initiative at AHS **IMPLEMENTED**

Context

Our 2014 report found that AHS did not have formal processes to obtain a patient's care plan from their family physician or pharmacist, or to inform a patient's family physician if changes to the care plan were necessary based on services provided by AHS.

At that time, AHS regularly gave information to the department that could help to better monitor and assess the effectiveness of patient care plans.

Our current findings

AHS used its strengthened coordinating processes through the Primary Care Network Governance Framework to work with Primary Care Networks, specialists, and other community professionals to identify problems and better coordinate its services with primary care. Working with these groups, AHS developed patient education resources, telephone and online patient advice services, and electronic referrals. AHS also developed training and offered programs for primary care providers focused on better integrating care and care planning between primary care and AHS services.

A major pillar in AHS' plan to improve information sharing and integration between primary care and other levels of care provided by AHS is the Connect Care clinical information system.¹² While Connect Care will not be used in most primary care settings, AHS continues to work with the department to develop and deploy tools to ensure information from AHS clinical settings can be conveniently accessed by primary care providers and patients—either via the provincial medical records system Netcare or directly into primary care providers' electronic medical records systems. AHS has designed a specific way for Connect Care to supply information—including care plans—from primary care to its clinicians in hospitals and clinics using the Connect Care Provider Portal. While this capability was built and is still being tested at several clinics at the time of our assessment, we noted it can provide direct information from primary care to AHS.

Connect Care is a clinical information system being put in place across all AHS service areas. The expected date of full implementation is currently Fall 2024.

Recommendation:

Improve delivery of pharmacist care plan initiative

IMPLEMENTED

Context

In 2014, we found that the department did not have a way to integrate patient care plans prepared by pharmacists with those provided by primary care physicians. At the time, the department specified the information pharmacist care plans should contain. However, they did not:

- set targets for care plan implementation
- evaluate the quality or effectiveness of pharmacist care plans
- verify pharmacist claims for care plan services

The department did not know which patients received care plans, what chronic conditions they had, or if pharmacist care planning billing was appropriate.

Our current findings

The department updated the provincial electronic medical record system Netcare to allow pharmacists to upload patient care plans—allowing pharmacists to share care plans with physicians and other healthcare providers.

The department updated its contract with Alberta Blue Cross¹³ to enhance the department's ability to oversee the pharmacist care plan program and claims. Some of the key changes we noted included enhancing claim verification and compliance work and increasing regular reporting on the results of claims monitoring to the department.

Finally, the department has regularly made updates to the Ministerial Order, 14 setting out the expectations and rules governing pharmacist compensation. This Ministerial Order includes clarity around expectations for the use and eligibility of patient care plans developed by pharmacists.

Alberta Blue Cross manages billings from pharmacists under contract with the Department of Health.

Ministerial Order M.O. 610/2021.

Recommendation:

Strengthen electronic medical records systems **IMPLEMENTED**

Context

Our 2014 audit noted clusters of excellence emerging in the use of electronic medical records among primary care physicians. However, there were also limitations and inconsistencies with, and particularly across, these systems, including:

- many different systems used by primary care physicians—these systems had limited or no ability to communicate with each other
- most physicians did not use their electronic medical records systems to manage care plans, maintain a chronic disease registry, or measure and report on chronic disease management performance and outcomes
- the department did not renew a program in place to support enhanced use of electronic medical records and increase adoption of electronic medical records
- the department, AHS, and other physicians did not have access to relevant patient information in primary care physicians' electronic medical records—and most primary care records could not be uploaded to Netcare

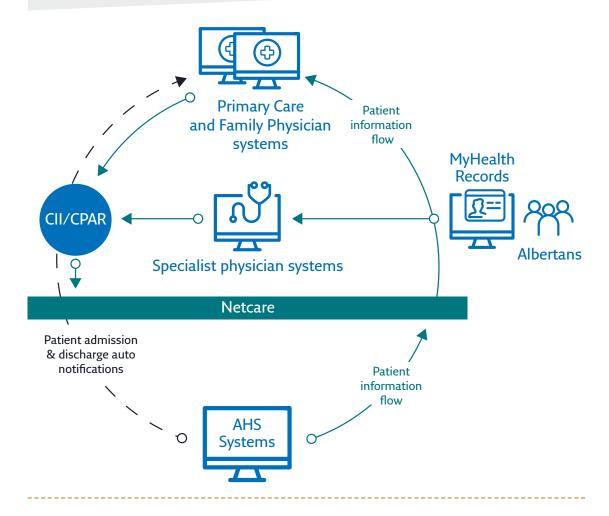
Our current findings

In the years following our audit, the department undertook a significant effort to develop two related information technology systems to improve information sharing among and between primary care and other parts of the health system:

- the Central Patient Attachment Registry (CPAR), to track confirmed patient relationships to primary care providers
- the Community Information Integration Hub (CII) to support sharing of patient health information and notifications between electronic medical records and clinical systems

Together, the CII/CPAR systems and initiative has the potential to significantly improve the understanding of patient-provider relationships and ease effective two-way sharing of key patient health information between primary care providers, and between primary care and secondary and tertiary care from specialists and in hospitals. When the department started the CII/CPAR initiative in 2016, it set a goal of 80 per cent adoption by primary care providers by May 31, 2023. That target was not reached, with the department reporting 43 per cent adoption at its latest reporting of December 2023. While the adoption has progressed slower than had been hoped, we noted that it still represents 1,700 primary care providers, 500 specialists, and 1.6 million Albertans on physician panels. The department, in partnership with the Alberta Medical Association, has maintained its 80 per cent adoption target—moving the target date out to May 31, 2025. To support this, it has also increased its efforts to promote adoption, including a \$12 million acceleration grant which is used to offset costs to primary care providers who adopt CII/CPAR.

The Community Information Integration Hub and the Central Patient Attachment Registry (CII/CPAR)



Initiatives like CII/CPAR are key enabling mechanisms to better integrate chronic disease care in Alberta. It is critically important that the department continue working with its partner organizations and primary care physicians to fully implement and achieve the full benefits of increasing health system integration.

Recommendation:

Provide individuals access to their personal health information

IMPLEMENTED

Context

In 2014, we found that neither the department nor AHS provided individuals with convenient access to their personal healthcare information. The department did not have systems or processes in place to support secure communication between physicians and patients.

The department launched MyHealth Alberta in 2011. In our 2014 audit, we found the launch had not met significant milestones, including critically making personal health records available. MyHealth Alberta is still in place today, but with some significant modifications, it now includes access to health records via MyHealth Records.

Our current findings

The department released MyHealth Records to Albertans in early 2019, enabling Albertans to access parts of their personal health records for the first time. The department then steadily improved the utility and accessibility of My Personal Records and supported AHS to launch MyAHS Connect to allow Albertans to access information from Connect Care. Decisions to supply COVID-19 health results—including vaccinations and test results—drove a sharp increase of active users of MyHealth Records to 1.1 million users by October 2021. The accessibility and growing list of health information available to Albertans is a significant and key step from where MyHealth was during our original audit.

However, and critically for the patient-centred management of chronic diseases in the community, patient care plans are not currently available in MyHealth Records.¹⁶ It is important that as the department continues to make iterations and as the adoption of CII/CPAR increases, the possibility of this key piece of health information is made available to Albertans living with chronic diseases.

MyHealth Records is an umbrella system made up of two applications Albertans can use to access parts of their health records—My Personal Records and MyAHS Connect. My Personal Records enables Albertans 14 years old and older to access personal health information including lab test results, immunizations, and medications dispensed at pharmacies; as well as to upload health data from devices like blood pressure monitors and fitness trackers. MyAHS Connect allows Albertans who have visited an AHS hospital or clinic using Connect Care to access to their medical records in Connect Care after registering with MyAHS Connect.

As of this writing, the department is working to make "patient summaries" available in My Personal Records. Care plans have been identified as a future requirement for the application but no firm date for this development is known.

Appendix A: September 2014 Chronic Disease Management Recommendations

Recommendation 1: Improve delivery of chronic disease management services (Department of Health)

We recommend that the Department of Health improve the delivery of chronic disease management service in the province by:

- defining care services it expects physicians, Primary Care Networks, and Alberta Health Services to provide to individuals with
- requesting family physicians to deliver comprehensive team-based care to their patients with chronic disease, through a Primary Care Network or appropriate alternative
- establishing processes to assess the volumes, costs and, most importantly, the results of chronic disease management services delivered by the healthcare providers it funds
- facilitating secure sharing of patients' healthcare information among authorized providers
- strengthening its support for advancing chronic disease management services, particularly among family physicians where the need for better systems and information is most critical

Recommendations 2 and 3: Improve support of patient-physician relationships (Department of Health, Alberta Health Services)

We recommend that the Department of Health improve its support of patient-physician relationships by:

- requesting all family physicians establish a process to identify their patient panels and which
 of those patients have chronic disease, and providing them with healthcare data to help them
 do so
- determining what it considers to be an effective care team size and composition, and working with family physicians, Primary Care Networks and other providers to help build teams to this level

We recommend that Alberta Health Services identify individuals with chronic disease who do not have a family physician and actively manage their care until they can be linked with a family physician.

Recommendation 4: Improve AHS chronic disease management services (Alberta Health Services)

We recommend that Alberta Health Services improve its chronic disease management services

- assessing the total demand for chronic disease management services across Alberta
- developing evidence to support decisions on how services provided by Alberta Health Services, family physicians, Primary Care Networks and Family Care Clinics should be integrated
- setting provincial objectives and standards for its chronic disease management services
- establishing systems to measure and report the effectiveness of its chronic disease management services

Recommendations 5 & 6: Improve physician care plan initiative (Department of Health, Alberta Health Services)

We recommend that the Department of Health improve its physician care plan initiative by:

- defining its expectations for what care plans should contain and how they should be managed by physicians and care teams
- setting targets for care plan coverage and evaluating the effectiveness of care plans on an ongoing basis
- strengthening care plan administration by ensuring that claims identify qualifying diagnoses, and that care plan billings by individual physicians are reasonable

We recommend that Alberta Health Services coordinate its services to patients with chronic disease with the care plans developed by family physicians and care teams.

Recommendation 7: Improve delivery of pharmacist care plan initiative (Department of Health)

We recommend that the Department of Health improve the delivery of its pharmacist care plan initiative by:

- establishing a formal process to ensure pharmacists integrate their care plan advice with the care being provided by a patient's family physician and care team
- strengthening claims administration and oversight, including requiring pharmacists to submit diagnostic information showing patients qualify for a care plan, and making care plans subject to audit verification by Alberta Blue Cross
- setting expectations and targets for pharmacists' involvement in care plans and evaluating the effectiveness of their involvement on an ongoing basis

Recommendation 8: Strengthen electronic medical record systems (Department of Health)

We recommend that the Department of Health strengthen support to family physicians and care teams in implementing electronic medical record systems capable of:

- identifying patient-physician relationships and each patient's main health conditions and risk factors
- tracking patient care plans and alerting physicians and care teams when medical services are due, and health goals or clinical targets are not met
- appropriately and securely sharing patient health information between authorized healthcare providers
- reporting key activity and outcome information for selected patient groups (e.g., diabetics) as the basis for continuous quality improvement

Recommendation 9: Provide individuals access to their personal health information (Department of Health)

We recommend that the Department of Health provide individuals with chronic disease access to the following personal health information:

- their medical history, such as physician visits, medications and test results
- their care plan, showing recommended tests, diagnostic procedures and medications, including milestone dates and targets set out in the plan

About our Assessment of Implementation Report

Management is responsible for implementing our recommendations. We examine implementation plans and perform procedures to determine whether management has implemented our recommendations when management has asserted they have been implemented. We repeat our recommendations if we do not find evidence they have been implemented. We may also issue new recommendations for matters that come to our attention during our assessment.

Our assessments of implementation are conducted under the authority of the Auditor General Act. The Office of the Auditor General applies Canadian Standard on Quality Management 1. Accordingly, we have maintained a comprehensive system of quality control, including documented policies and procedures regarding compliance with applicable professional standards and applicable ethical, legal, and regulatory requirements.

Our office complies with the independence and other ethical requirements of the Chartered Professional Accountants of Alberta Rules of Professional Conduct, which are founded on fundamental principles of integrity and due care, objectivity, professional competence, confidentiality, and professional behaviour.

