

White paper

Implementing efficient public sector home care to reduce costs and improve care

Co-authored by AlayaCare and Davis Pier

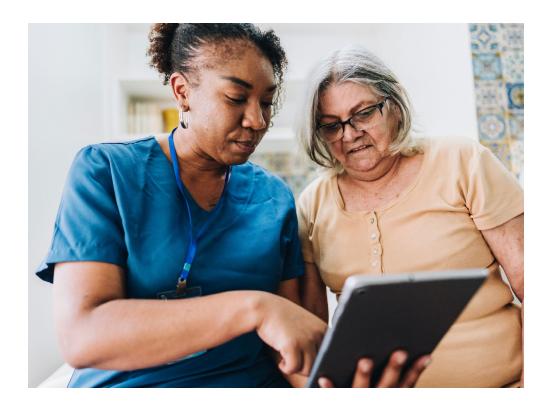
Introduction

Canada's population is aging, and that demographic shift is coupled with escalating healthcare costs. To meet the care needs of Canadians within budget constraints, there is a pressing need to find high-quality, cost-effective, and sustainable healthcare solutions.

Home-based care, with its ability to provide personalized and compassionate care in the comfort of one's own home, is well placed to help the public sector reduce burgeoning healthcare costs and enhance the quality of care. It can be scaled to meet the growing needs of Canada's aging population and has the opportunity to positively change Canada's health system through mechanisms such as focusing on health equity, tackling caregiver shortages, improving health outcomes, and lowering the financial burden on the economy.

This white paper will cover:

- A snapshot of the current situation facing healthcare providers—the challenges faced by Canadian health systems, and illustrating how an effective home care system can address those challenges.
- The principles of an effective home care system—outlining key components for realizing the benefits of home care and how AlayaCare can enable the public sector to implement and integrate these services successfully.
- A framework for the implementation of home care services—including recommendations and a guide for getting started.



Trends in Canadian healthcare: Where things stand

The current care landscape in Canada is complex, influenced by myriad factors, including demographic shifts, technological advancements, and evolving patient needs and expectations. There are challenges, but we can embrace them as opportunities for improvement through innovation, technology, and strategic implementation.

Challenges facing Canadian healthcare providers

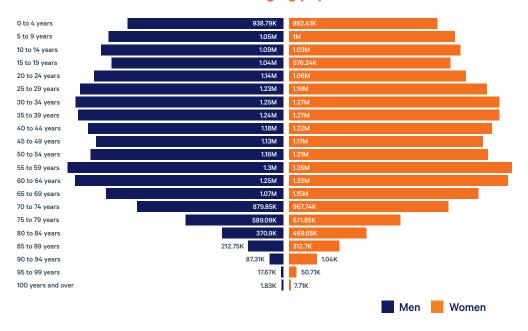
Canada faces significant challenges in delivering healthcare services—especially to aging adults and people with complex care needs.

Canada's aging population

Canada's older population is rapidly growing. More than one in five working adults are close to retirement and Statistics Canada estimates that almost a quarter of Canadians—more than 12 million people—will be 65 and older by 2051. The number of Canadians aged 65 and older rose 18.3 percent to 7 million from 2016 to 2021—the second-largest increase in 75 years. The number of people over 85 has more than doubled since 2001, and is expected to triple by 2046.

At the same time, we will have a lower ratio of people in the workforce compared to elders in need of care — and technology is the only way we can address this imbalance.

Canada's aging population



Overburdened healthcare systems

Canada's aging population creates a major challenge for our healthcare systems. Seniors need significantly more care than other demographic groups—more seniors mean far greater demand on health systems.

Many of Canada's health systems are already stretched thin—surgery backlogs, staff shortages, and a lack of family doctors are major signs of what the Canadian Medical Association has characterized as the health system "collapsing."

Long-term care homes don't fare much better. The Ontario Long Term Care Association reports that up to 40,000 people are waiting for long-term care in the province. And the waitlist for long-term care placements is growing by 1,000 people yearly.

Increased cost of healthcare for aging populations

Providing health care services to older populations is costly. Consequently, seniors consume much more than their share of healthcare dollars: While Canadians over 65 currently make up only a fifth of the population, they consume nearly half of all healthcare spending.

An aging population is one driver of increased healthcare costs, but there are others. Population growth, improvements in medical care, and inflation in the costs of medications, physician services, and other services also make health care more expensive. The Conference Board of Canada estimates that provincial and territorial governments will need an extra \$93 billion over the next 10 years to adequately care for aging Canadians.

Much of this cost is driven by care delivered in acute settings. In some cases, acute care is the best option based on medical conditions, but more and more patients are being treated in the home. When patients can be treated at home, costs are greatly reduced. More recent data from a study published by the Journal of General Internal Medicine shows even more substantial savings with the average daily cost of an inpatient hospital stay at roughly \$6,200.00 and the average cost of a home health visit at just \$135.00, approximately 46X the cost. Further, patients have reported being happier and feel they recover more quickly at home.

"On average, per-person healthcare for people over 65 is seven times greater than for people under 65 years of age."

Shortage of qualified healthcare providers

Staffing challenges present another pressure on the system and there is a critical shortage of healthcare workers in every sector:

- Doctors: One in five Canadians do not have a regular family physician, and Canada ranks in the bottom seven of 36 high-income countries for number of physicians per person. A study by RBC projects that Canada will be short about 44,000 physicians by 2028.
- Nurses: Needs-based forecasting models have estimated a shortage of 117,000 nurses by 2030.
- Care workers: The Wall Street Journal has reported that the caregiver turnover rate was about 64.9% in 2021, meaning that over half of all caregivers left or were terminated from their jobs. That number soared to 77.1% in 2022.

As a result, hospitals, long-term care homes, and health agencies often need more staff. This puts additional strain on staff, negatively impacts morale, and limits the ability to take on more clients.

Home care helps provinces meet the needs of Canada's seniors

The challenges that Canada faces in providing adequate health care to seniors are significant, but there are reasons to be optimistic. Technological innovations have the potential to make healthcare more efficient and provide personalized care at scale. One potentially powerful strategy is to develop an efficient home care program grounded in modern technology and data.

Home care refers to a range of services provided to individuals in their own residences that assist with daily activities and health needs. It can include personal care tasks such as bathing and dressing, as well as medical care like administering medications or wound care. It can be tailored to the specific needs of the individual, whether they require short-term recovery assistance or longterm support.

Key benefits of an effective home care program for provincial health authorities include:

Reduce the burden on the healthcare system

The goal of home care is to support individuals in maintaining their independence and quality of life, often helping them avoid unnecessary hospitalization or institutionalization. For seniors, it aims to reduce time in hospitals and help them live comfortably at home as long as possible.

That means reduced pressure on hospitals and other health care services. One systematic review found that home-based, continuous, long-term primary care led to significant reductions in visits to emergency, hospitalizations and rehospitalization, and long-term care admissions.

Effective home care can also reduce demand for long-term care facilities. The Canadian Medical Association estimates that one in ten aging adults who enter long-term care could have received care at home.

Avoid more costly solutions

By reducing the number of hospital stays or delaying admissions to long-term care facilities, home care can lead to significant savings for the healthcare system. The Canadian Medical Association estimates that \$2.3 billion a year could be saved and used elsewhere in the health system if we could more effectively reduce seniors' need for hospital care with care at home.

Complement community caregiving

One reason home care is more cost-effective is that it better leverages the care provided by unpaid caregivers.

Family and community caregivers play integral roles in supporting individuals particularly seniors—in their day-to-day lives. In Canada, 25% of people over 15 are caregivers. Of those, a quarter—1.5 million people—are over the age of 65.

Caregivers are an important source of care in Canada, serving as a complement to home care while making it more effective:

- Education: Home care providers can educate family members on best practices for care, helping to enhance the quality of care the individual receives from their family.
- Expertise: Home care brings professional healthcare expertise into the home, complementing the emotional support and familiarity provided by family members. This is particularly crucial for managing medications, wound care, and other specialized health needs
- Support: One in three Canadian unpaid caregivers is in distress. Home care services offer vital respite for family caregivers, allowing them to take breaks and reduce the risk of caregiver burnout.

By working in conjunction with community resources and families, home care helps to create a comprehensive, supportive network for individuals. It ensures they receive the care and support they need to live fulfilling lives in their own homes.

Home care is more cost-effective than institutional care, such as hospitals and longterm care facilities. Home care costs \$127 per patient per day, compared to over \$200 for long-term care or \$949 for hospital care.

Address health care worker shortages

Home care can play a significant role in addressing the shortage of health care workers.

- Shifting workloads: Home care helps some patients who would otherwise require hospitalization or long-term care stay healthy at home. This frees up health care workers in more acute settings.
- Preventative care: Home care offers preventative services and early intervention, which helps reduce the need for more intensive health care interventions and hospitalizations. This also eases the demand on health care workers.
- Telehealth and remote monitoring: Home care is well positioned to leverage technology, ensuring timely interventions without the constant physical presence of a health care worker. This makes more efficient use of health care workers' time.

Collaborative efforts across various healthcare settings are essential to create a sustainable and resilient workforce. Home care helps limited staff resources go further.

Better outcomes and lower hospital admissions

Home care services can be tailored to the specific needs and preferences of individuals, allowing for more personalized and patient-centered care. This may lead to better care outcomes.

- Personalized care: Home care provides one-on-one attention, ensuring that the care plan is tailored to the individual's specific needs, preferences, and routines.
- Comfort: Being in a familiar and comfortable environment can enhance mental well-being, reduce stress, and contribute to faster recovery.
- Safety: Home care minimizes the risk of exposure to infections that are commonly acquired in hospital settings.

Research has found that home care often leads to better outcomes. For example, one systematic review found that home care significantly improves patients' quality of life. Another found that effective home care reduced hospital readmission rates and lowered health care costs while simultaneously increasing patient satisfaction. As an added benefit, the study found that home care was not associated with additional caregiver burden.

Canadians prefer home care

One significant benefit of home care is that most people prefer receiving care in their own homes to receiving care in hospitals or long-term care facilities.

Virtually all Canadians—96% according to one study—report that they would like to age at home and live independently. Being in a familiar environment provides comfort and security. Home care also allows individuals to maintain their daily routines and sense of normalcy.

By aligning with people's preferences for care in their own homes, home care enhances their overall experience of receiving care and contributes to improved well-being.

The case for change: AlayaCare enables seamless home care delivery

The clear benefits of home care help explain why home care is expanding in Canada. Last year, Ontario announced that it would invest an additional \$1 billion over three years to expand home care.

How can governments and provincial health agencies ensure their investments lead to better care? Here are some foundational principles and components that need to be in place for a home care delivery system to work well—and how AlayaCare helps you implement them.

1. Person-centered and personalized care

Home care plans should be tailored to meet the unique needs, preferences, and goals of individuals. They should be holistic, addressing not just physical health, but also the individual's emotional, social, and environmental needs.

AlayaCare enables care providers to create and adjust individualized care plans, ensuring that services meet each client's unique needs and preferences. The platform provides a comprehensive view of a client's medical history, preferences, and care needs, facilitating a holistic approach to personalized care at scale.

2. Coordination and communication

Home care is a set of integrated services. It's critical to coordinate between various healthcare providers, specialists, and other support services. To do that, you need clear, open, and regular communication between all parties involved—the individual receiving care, their family, and health care teams.

AlayaCare offers integrated messaging and communication tools that enable seamless coordination among caregivers, clients, and their families. Caregivers and health care providers can access and update client information in real time, ensuring everyone is on the same page and enhancing care coordination. The Family Portal also allows families and caregivers to stay informed and have some agency over a client's care.

3. Quality and safety

Effective home care is based on high standards of professionalism, competence, and ethical practice. Robust safety protocols are required to prevent accidents and injuries and manage risks effectively.

AlayaCare allows for the implementation of standardized care protocols, ensuring consistency and quality in care delivery. The platform makes it easy for health professionals to conduct risk assessments, helping to maintain a safe care environment.

The platform also leverages AI and machine learning to score clients on risk of possible adverse events like falls, episodes, and emergency room visits. Better prediction of these negative events helps caregivers intervene and manage the risk to improve safety.

4. Trained and supported staff

Home care only works with well-trained, qualified, and competent care professionals. Retaining qualified staff is one of the biggest challenges in the home care industry, so an effective system helps meet the needs of caregiving staff. Staff also need continuous education and training opportunities to stay updated with best practices.

AlayaCare offers a number of features that help you retain qualified caregiver employees, including an employee retention dashboard that tracks employee satisfaction and identifies warning signs of employee turnover. It also offers scheduling tools for more consistent scheduling to help ensure hours are distributed fairly.

To ensure staff are adequately trained, AlayaCare hosts training materials and resources through AlayaCare University. This service facilitates ongoing education and professional development for caregivers.

5. Family and community involvement

Family involvement is critical to successful home care. The most effective care programs encourage community and family members to be engaged in care, and they facilitate that involvement. When possible, connect individuals with community resources and support services to enhance their well-being.

AlayaCare's Family Portal allows family members to stay informed and involved in the care of their loved ones. The platform can also integrate with community resources, helping to connect clients with additional support and services.

6. Use of technology

Technology solutions allow caregivers to monitor health status, manage chronic conditions, and provide virtual consultations. They also provide the tools required to manage electronic health records and data management systems to keep accurate and up-to-date information, which improves care coordination.

AlayaCare gives caregivers the ability to access and update client information from anywhere, making sure it's always up to date. The platform also features video conferencing capabilities custom-built for home-based telehealth. It allows for virtual care visits and remote monitoring of clients' health from anywhere on any device.

Our video-conferencing tools and our data management are secure, HIPAAcompliant, and fully integrated with the rest of our platform.

Enacting change and digital transformation: Implementing a centralized platform for home care

Implementing a cloud-based home care platform such as AlayaCare within provincial health environments requires careful planning, coordination, and training. Beyond procuring the right technology solution, it's important to plan for implementation supports such as project management, change management, privacy and security, and evaluation.

Davis Pier has worked with AlayaCare on several government implementations putting its expertise in government services and experience in the healthcare sector to work to ensure a seamless, holistic, and successful path to project delivery.

Here is a guide to help navigate the process and enable transformation and improved care:

Integrated project management approach

Public sector health transformation initiatives are complex and require strong project management. The diverse stakeholder environment includes program staff, technology, external service providers/agencies and clients/caregivers. A welldesigned and managed project governance supports effective communication and decision-making processes that can lead to faster implementations with higher rates of achieving successful outcomes. An integrated project management approach combining program and technology teams is critical for successfully executing transformative initiatives. Mitigating potential risks requires proactive planning, regular assessments, and adaptability to unforeseen challenges. Davis Pier's partnership throughout the project implementation proved instrumental in reducing the risk of failure and navigating potential obstacles.

Effective workflow optimization is at the core of successful community/home care transformations. This practice involves streamlining processes, identifying bottlenecks, and leveraging technology to enhance efficiency. By identifying and removing unnecessary steps in the care process, healthcare providers can focus more on delivering quality care to patients. AlayaCare's user-friendly interface and features proved invaluable in this regard.

Integration and inter-operationality

Successful community/home care transformations necessitate seamless integration with the broader continuum of care—from continuing care to hospital systems. Collaboration among healthcare partners enhances patient outcomes and reduces risks associated with fragmented care. Healthcare providers can

deliver more comprehensive and effective services by sharing patient information and coordinating care planning.

To enable this, your home care system must be able to integrate with other applications that support other health service areas, such as primary care, longterm care, and acute care.

One provincial health authority that recently implemented AlayaCare was experiencing high rates of missed visits for clients who were away were admitted to an inpatient unit or emergency department during the scheduled visit time. Through integration between AlayaCare and the hospital system, home care clients admitted to the hospital automatically had their home visits placed on hold. Missed visits were reduced, resulting in higher home support and nursing staff efficiency. Care coordinators were also alerted when the client was admitted to an acute environment, allowing them to begin developing plans for services to support discharge back to the community.

Change management and solution co-design

Effective implementation of a digital transformation effort requires more than simply deploying new digital tools. An active and ongoing change management strategy to ensure longer-term adoption and utilization is vital—and the effort will not only support the rollout but also the realization of outcomes and benefits. Engaging a change management professional such as Davis Pier early is critical as early identification and communication of client, staff and system benefits builds project buy-in. A change impact assessment identifying how user groups and partners will be impacted provides a practical, actionable roadmap for creating communication, adoption, and training plans. Depending on your vendor, you can rely on the training they provide. AlayaCare University offers a full suite of expertled training to help your team fully use our platform. Beyond training, establishing a system for supporting users to troubleshoot issues or answer any questions that may arise, ensuring they have the help they need when they need it.

Involving stakeholders in the design process is key to unlocking the full potential of any transformation. From frontline staff, caregivers, patients, and IT and administrative personnel, these groups possess invaluable insights into day-today operations and patient needs. By actively involving them in the co-design of solutions, healthcare providers can create more user-friendly systems that genuinely cater to the needs of both patients and caregivers.

Aligning with policy and regulatory requirements

Embracing a community-based care model often requires reevaluating existing policies and developing new ones that align with the new approach. Engaging relevant stakeholders in this process ensures that policies are comprehensive and promote consistency and high standards of patient-centric care.

Data privacy and security

While privacy legislation varies by province, all ministries and health authorities must adhere to legislation governing personal health information collection, use, and dissemination. Strong measures to protect sensitive health data are essential, and it's critical that technology solutions adhere to stringent privacy and security standards.

In many jurisdictions, this requires completing a privacy impact assessment (PIA) and a threat risk assessment. A health technology privacy expert within a Ministry or from an external partner can provide an understanding of applicable provincial and federal legislation and will assess the technology solutions to ensure appropriate safeguards exist and privacy risks are identified and mitigated. Privacy assessments can be especially complex in public sector environments where external agencies are responsible for care delivery and require personal health information to be shared with them.

Transforming from hospital-centered care to community-based care demands strategic planning, collaboration, and a commitment to continuous improvement. By implementing the best practices discussed above, healthcare organizations can successfully navigate change challenges and pave the way for more impactful and sustained transformations.

Getting clear on how you'll manage implementation, stakeholder engagement, and evaluation is a critical first step. Working with a trusted partner like Davis Pier to develop a comprehensive implementation plan further enhances the likelihood of success in the community and home care transformations.

Evaluation framework: Measuring impact and outcomes for patients, health care professionals. and systems

A cornerstone of effective home care is that it is built alongside systems to measure care outcomes, patient satisfaction, and service quality. The best services use data and feedback to continuously improve care practices, policies, and service delivery.

AlayaCare includes advanced reporting and analytics, enabling agencies to measure outcomes, track performance, and identify areas for improvement. All your staff can access the performance metrics and statistics, so it's easy to focus on what matters to them. Schedulers, administrators, and clinical users can all configure customized dashboards and produce the reports they need to make informed business decisions.

With the right tools to measure performance and conduct comprehensive program evaluations—and by defining key outcomes and an evaluation framework to measure them during implementation planning—you will be set up to not only measure the reduction in systems-level costs that are achieved, but how these efficiencies translate to positive outcomes for patients and health care professionals.

Reducing total cost of care. The promise of home care is that it is cost-effective. You can stretch budgets further with more efficient care. AlayaCare contributes to the reduction of total care costs through the following features:

- Scheduling: The scheduling tools allow for optimal allocation of staff, ensuring that resources are used efficiently, reducing overstaffing, and minimizing idle time.
- Automation: The platform automates billing and payroll processes, reducing administrative overhead, minimizing errors, and ensuring accurate and timely payments.
- Enhanced coordination: Care teams can communicate in real time, ensuring that everyone is on the same page and reducing the likelihood of misunderstandings or duplicated efforts.
- Reporting and analytics: The robust reporting and analytics capabilities of AlayaCare provide insights into operational efficiency, patient outcomes, and areas for cost savings.

By enhancing efficiency, improving care coordination, supporting preventive care, and empowering patients, AlayaCare plays a pivotal role in reducing the total cost of care.

Continuous improvement

It's best practice to continuously monitor the system's performance to ensure that it meets your objectives and delivers the intended benefits. Consider assessing user adoption and satisfaction to identify areas for improvement and ensure the system is meeting the needs of all stakeholders.

One way to do this is to actively seek feedback from users and stakeholders to understand how the system can be improved. We encourage you to work with your platform provider to implement updates and enhancements, ensuring the system stays current and continues to meet the evolving needs of the agency.





Take the first step towards more effective home care

A home care management system is the key to transforming home care delivery and realizing all the benefits an effective home care system could have. Contact our team to get a demonstration of AlayaCare and learn more about how it can help you meet the challenge of continuing to provide high-quality healthcare.

About AlayaCare

AlayaCare is an end-to-end software platform for public, private, non-profit, and community home-based care organizations that manages the entire client lifecycle, including needs assessments, care plans, scheduling, visit and route optimization, and visit verification. Founded in 2014 and now with over 500 employees, AlayaCare combines traditional in-home and virtual care solutions that enable care providers to lower the cost of care and achieve better outcomes for their clients. For more information, visit: AlayaCare.com

About Davis Pier

Davis Pier is an organization dedicated to solving complex social challenges and generating solutions that improve people's lives. Our team works exclusively in government services and social impact spaces. We're known for our strength in developing solutions but, more importantly, for rolling up our sleeves on implementation and working in true collaboration with our clients and partners. We integrate our experience navigating the public sector with our expertise in service design, change management, and project management to drive better solutions and project outcomes for our clients and the communities they serve.