



Hallway Health Care: A System Under Strain

1st Interim Report from the Premier's Council on Improving
Healthcare and Ending Hallway Medicine

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Letter to the Premier of Ontario and the Minister of Health and Long-Term Care

Dear Premier Ford and Minister Elliott,

As Chair of the Premier's Council on Improving Healthcare and Ending Hallway Medicine, I hear from patients regarding what it's like to receive care in our system. I am impressed by the dedication of health care professionals who deliver high-quality health care throughout our communities; however, I am also concerned.

The concern is that on any given day in the province, there are at least 1000 patients receiving health care in the hallways of our hospitals. At the same time, the wait time to access a bed in a long-term care home is 146 days, and this can vary significantly depending on where you happen to reside in Ontario.

There is much to be proud of within our health care system. There are examples of innovation, and there are teams that are working seamlessly together to provide wrap-around services for patients with complex needs. However, we've also come to understand that there are many barriers within the system that just don't make sense.

This report is the first of a number of public reports the Council will provide to you in order to help inform the future of health care in the province. The next report will contain a series of recommendations, and will be solutions-focused. While each of the reports will contain our best advice for you, these reports are also for the people of Ontario.

Our primary goal is to be transparent and accountable to the public while we consider the current challenges and future needs of the health care system. Over the next three years, the public will be able to track our progress and participate in our work. They will keep us accountable and help us reach our goal. By doing our work well, the public will be able to see the improvement at their local hospital and across the health care system.

Our objective is to help ensure Ontarians have a health care system that has the right mix of health care professionals, the right number of hospital and long-term care beds, and that care is available when and where it's needed.

Tough decisions will be required to address the challenges facing our health care system, while we continue to champion the health care professionals already leading great work in our communities.

A word of thanks to the Council Members – each of whom has brought a wealth of experience and knowledge, enthusiasm and optimism to our discussions. I look forward to our continued partnership in the years to come, and to turning the vision into reality for the people of Ontario.

Dr. Rueben Devlin, *Chair*

Premier's Council on Improving Healthcare and Ending Hallway Medicine

Executive Summary

Hallway health care is a significant problem in Ontario. The entire health care system is too complicated to navigate, people are waiting too long to receive care and too often are receiving care in the wrong place; as a result, our hospitals are crowded.

The Premier's Council on Improving Healthcare and Ending Hallway Medicine has been tasked with providing advice to government on how to solve this problem and improve health outcomes across the province.

This first report provides an overview of some of the key challenges contributing to hallway health care, and identifies opportunities and emerging themes from the Council's initial work – including the potential to integrate health care and introduce technology solutions to build strong and efficient community and hospital services, support better outcomes for patients, and to fix the problem of hallway health care.

Key Findings

1. Patients and families are having difficulty navigating the health care system and are waiting too long for care. This has a negative impact on their own health and on provider and caregiver well-being.
2. The system is facing capacity pressures today, and it does not have the appropriate mix of services, beds, or digital tools to be ready for the projected increase in complex care needs and capacity pressures in the short and long-term.
3. There needs to be more effective coordination at both the system level, and at the point-of-care. This could achieve better value (i.e. improved health outcomes) for taxpayer money spent throughout the system. As currently designed, the health care system does not always work efficiently.

Chapter 1: The Patient Experience

Patients and families are having a difficult time navigating the health care system. Ontarians cannot always see their primary care provider when they need to, wait times for some procedures and access to specialists and community care are too long, and emergency department use is increasing. A lack of early intervention and prevention is contributing to more patients becoming ill. All of these challenges are connected to the problem of hallway health care.

Chapter 2: Stress on Caregivers and Providers

Health care providers, family members, and friends are feeling the strain of a system that isn't making caregiving easy. This leads to high levels of stress and places a heavy burden on caregivers to act as advocates for timely and high-quality health care services.

Chapter 3: Different Health Care Needs

There are more patients with complex needs and an increase in chronic issues that require careful and coordinated management, like an aging population living longer with high rates of dementia. Fair access to health care across the province continues to be a concern.

Chapter 4: Immediate and Long-Term Capacity Pressures

Ontario does not have an adequate or appropriate mix of services and beds throughout its health care system. This leads to capacity pressures on hospitals and long-term care homes. Demographic projections indicate there will be additional strain on existing capacity in the near future.

Chapter 5: Responsibility and Accountability in the System

Ontario's health care system is large. Responsibility for coordinating high-quality health care is spread across many government agencies, organizations, and the Ministry with no clear point of accountability to keep the focus on improving health outcomes for Ontarians. There is a fundamental lack of clarity about which service provider should be providing what services to patients and how to work together effectively. Ontario could be getting better value for the money it currently spends on the health care system.

Opportunities for Improvement

The health care system can make better use of available technology, and should aim to deliver integrated and efficient services in all parts of the province. People have more access to digital tools and information than ever before, and expectations for high-quality, efficient, and integrated health care have changed.

Next Steps

The Council is working on a second report, which will include recommendations and advice for government on how to remedy the problem of hallway health care in Ontario. Four key themes have emerged through the Council's initial work that will help guide the development of detailed recommendations in its next report:

1. A pressing need to integrate care around the patient and across providers in a way that makes sense in each of our communities in the province, and improves health outcomes for Ontarians.
2. Growing demand and opportunity to innovate in care delivery, particularly in the use of virtual care, apps, and ensuring patients can access their own health data.
3. The potential for greater efficiency in how we streamline and align system goals to support high quality care.
4. The critical role for a long-term plan so that we have right mix of health care professionals, services, and beds to meet our changing health care needs.

Introduction

In Ontario, there are many signs of a health care system under pressure. Patients are: waiting longer than they should in overcrowded emergency departments, receiving health care in hospital hallways, not able to access specialized post-acute hospital care, and unable to transition out of hospital beds due to services not being available in the community.

Hospitals are an important point of intake into the health care system; however, too many patients are going to hospitals for conditions that could be treated in primary or community care settings or prevented altogether. Overcrowding of the emergency department means Ontarians whose care can only be provided in an emergency department are waiting longer to access the health care they need, and are sometimes waiting in unconventional locations – like hallways. On an average day in 2018, there were approximately 1000 patients waiting for a hospital bed in an unconventional space or emergency department stretcher.¹ This should not happen.

The health care system is complex and hospitals receive patients from many different care settings: from primary care (like family doctors or nurse practitioners), long-term care homes, home and community care, mental health and addictions agencies, and from the emergency department.

In fact, the pathway through the health care system is often not a straight or simple line: patients will move between care settings depending on the severity of needs or the kind of care required at each stage of their journey. At the same time, there are other patients who, with just a little more help from a health care provider, could stay in their homes longer, avoid a visit to the emergency department, avoid hospital admission, and maintain their health and independence.

We are seeing the results of a system under pressure in our hospital hallways; however, hallway health care is a symptom of broader challenges facing Ontario's health care system.

We've heard from many Ontarians that the health care system can do better, and that accessing the high-quality health care that's available in Ontario should be a straight-forward process.

Oftentimes, that's just not the case.

Ida and Sara's Story: Scared, Cold, and Exposed

Ida, the caregiver for her elderly aunt Sara, shares her experience spending two days in a hallway of the emergency department at a hospital.



Aunt Sara

When Ida called the ambulance to take her 94-year-old aunt Sara to the hospital, she knew they would probably end up in a hallway. As the main caregiver for Sara for more than 10 years, Ida had accompanied her to the hospital emergency department a few other times and waited for care in a busy hallway, usually for eight or 10 hours.

This time, after being triaged by a nurse, Sara was wheeled in a stretcher into a nearby hallway, where she joined three other patients tucked against the walls of the brightly lit, high-traffic zone. Police were bringing in some people who were causing disturbances. "There was a lot of yelling and cursing," Ida says. "Sara became frightened because there was a police officer there. It made her really uncomfortable and scared. Even if she wanted to sleep, she couldn't."

Ida stayed up all night with Sara. She had a chair but it couldn't fit in front of the stretcher, so she had to sit behind her, out of view of her frightened aunt. Nurses came by to ask questions and do tests. The hallway was in a constant state of frenzied activity and noise.

"Sara was upset the whole time. It was awful to watch. She couldn't figure out what was going on, where she was, and whether she was in trouble because the police officer was there. She kept telling me she was scared and why couldn't she be in a room on her own. She asked can I turn the light out, can I have a sleeping pill."

Sara got very cold in the hallway, but the nurses were so busy that Ida went in search of a blanket herself. Sometimes Sara's IV pole would fall over and Ida would have to fix it. A few times, Ida left to get some tea or go to the washroom and returned to find Sara lying completely exposed to everyone passing by after her hospital gown and bedsheets slipped off.

The next morning, Ida had to leave for a few hours to do some work and when she came back she was shocked to see that Sara was still in the hallway. She stayed by her side through the rest of the day, always afraid that if she left to get tea, that would be when the doctor arrived.

Sara tossed and turned in the uncomfortable stretcher that she had occupied for the last 30 hours. Neither Sara nor Ida had slept in two days. Later that day, doctors determined that Sara would have to be admitted to the hospital. That evening, a hospital bed became available and Sara was finally whisked out of the hallway where she had spent the last 48 hours.

Sara recovered in hospital, and recently moved into a seniors' residence.

Chapter 1: The Patient Experience

In its first four months, the Council heard from over 340 patients, and a recurring theme from their stories is what it feels like to wait for health care services in environments that don't support rest or healing. Many patients described uncomfortably low levels of privacy in emergency departments, and feeling a complete lack of dignity when telling their personal stories and sharing their medical history with a health care provider in a hallway, where everyone could hear. For some people, even something that should be simple – like helping patients get to the washroom on time – was challenging under the current conditions.

What is Hallway Health Care?

Hallway health care is a term used when patients are waiting for a hospital bed in an unconventional or unexpected location. This could be a hallway, or another space within a health facility that was not designed for using the space in this particular way.

Hallway health care is measured by counting the number of people waiting for a hospital bed overnight in an unconventional space or emergency department stretcher. That captures the volume – or size – of the problem, but there are more things going on throughout the system that are connected to hallway health care, like wait times for long-term care homes, that also contribute to how well the system works.

A high-performing health care system should have very few people waiting for a hospital bed if they need one.

Navigation & Access to Health Care

The Council heard that patients and their families find it difficult to navigate the health care system. For some, it's a matter of not being able to find timely health care, due to long wait-times or inconvenient service hours. For others, it can be difficult to know where to go for the right kind of care. For example, Ontarians often go to the emergency department with mental health or addictions issues that could have been dealt with more quickly, and oftentimes more appropriately, in primary care or community mental health and addictions agencies. By not knowing how to access community services or waiting too long for a community service because there are not enough of those services, many people reach a crisis point that leads them to the emergency department.

Either way, it means people are ending up in emergency departments, waiting hours for care that sometimes could have been more appropriately provided in a different care setting, or avoided entirely by proactive and preventative measures. These challenges with navigation and timely access contribute to the problem of hallway health care because the way patients move in and out of hospitals has a significant impact on the efficiency of the entire health care system.

Going to the emergency department for health care that could be provided somewhere else happens frequently in Ontario, sometimes because it's the only health care setting that is open 24/7. According to the 2018 Health Care Experience Survey, 41% of Ontarians who went to the emergency department, and 93% who went to a walk-in clinic received care for a condition that could have been treated by their primary care provider.² Even though 94% of Ontarians have a family doctor or nurse practitioner,³ the data suggests that Ontarians are not always choosing to use, or have timely access to their primary care provider as the first access point to health care.

While the health care system has evolved over the last 15-20 years, the emergency department still remains one of the only health care settings open and available whenever people get sick and need care. Additional focus on preventative measures, and effective engagement with primary care providers could help reduce the inflow of patients to emergency departments and hospitals, and contribute to reducing the problem of hallway health care.

Wait Times & Quality Care

In general, visits to emergency departments across the province increased by about 11% over the last six years, to 5.9 million in 2017/18.⁴ This increase in volume of visits to the emergency department is just one contributing factor to the back-log across the system, since not all visits to the emergency department lead to hospitals admitting patients.

The current recommended target in Ontario – what the province expects from its hospitals – is if a patient is to be admitted, to get the patient to an inpatient room and bed within 8 hours of being seen in the emergency department.⁵ However, in November 2018, only 34% of patients admitted to hospital are admitted to an inpatient bed from the emergency department within that 8 hour target.^{6,7}

Furthermore, patients in Ontario who require admission to an inpatient bed are spending an average of 16 hours in the emergency department before a bed becomes available, which is the longest that wait has been in six years.⁸

Waiting too long for health care isn't just a problem in hospitals; wait times are also longer than they should be in other parts of the health care system. For example, the median wait time for long-term care home placement in Ontario in fiscal year 2017/18 was 146 days, and the median wait time for home care was around six days for patients waiting at home.^{9,10}

When Ontarians can access services and supports, the data generally tells a positive story. For example, survey results for home and community care show high levels of client satisfaction: 92% of respondents

“Half of parents who sought help for mental health services for their child said they faced challenges in getting the services they needed, primarily due to wait times.”
– Children’s Mental Health Ontario (November 2017)

rated their overall experience as excellent, very good or good;¹¹ however, long wait-times in some parts of the system are a clear signal that the system isn't running as smoothly as it could. Furthermore, the location of health care services also matters. For example, families describe how complicated it can be to navigate pediatric health care services, and improving access to high quality services closer to home would help families and patients.

In addition to expecting health services to be available to Ontarians within a reasonable time-frame, the province also expects high-quality care to be provided in every care setting. One way to improve access to care is to ensure people don't experience avoidable complications while receiving treatment. For example, evidence shows that patients who get certain infections while in hospital have a length of stay that is two weeks longer than it otherwise would have been.¹² These infections, which can be very costly to treat, may be avoided by following best practices in care.

We intuitively know that a delay in accessing health care – whether it's waiting for a bed to open up in the right care setting, for a diagnostic test, or for a referral to a specialist, means the road to recovery is longer and possibly rougher than it needs to be.

Spotlight: Mental Health and Addictions and Hallway Health Care

The Council is concerned that patients are unable to access mental health and addiction services when they are needed most. For example:

- Approximately 1 in 3 adults who went to the emergency department for mental health and addictions care had not previously accessed physician-based care for their mental illness.¹³
- There was a 72% increase in emergency department visits and a 79% increase in in-patient admissions for children and youth with mental health issues over the last 11 years.¹⁴

Access to health care at the appropriate place and time is crucial for patients with mental health and addictions issues.

Most mental health and addictions issues are more appropriately treated in the community; however, long wait times for community treatment means sometimes patients' conditions worsen as they sit in the queue, giving them no other option but to seek care through the emergency department, and return home to continue to wait for services.

The re-admission rates for mental health and addictions issues is significantly higher than many other health issues.¹⁵

Chelsea's Story: Setbacks and Recovery



Chelsea

Chelsea, a 29-year-old mother of two in Sudbury, struggled for years to access care for her anxiety, panic disorder and depression.

The onset of Chelsea's significant mental health issues began with a panic attack at age 22. "I didn't want to leave the house," Chelsea says. "I didn't want to shower. It just hurt to be alive. The pain is such emotional agony that you just don't know what to do with yourself. You feel alone and scared."

Desperate for help, Chelsea went to the emergency department at her local hospital multiple times within a week, waiting for hours to see a doctor, and each time quickly sent home with no resources or information about where to find help in the community.

Eventually, Chelsea received a prescription for anti-anxiety medication and anti-depressants. She had never taken medication for her mental illness previously despite being diagnosed with generalized anxiety disorder at age 12. The doctor at the hospital also referred her to outpatient cognitive behavioural therapy, but there was a nine-month wait.

Chelsea tried to get her life back on track and was able to see a psychiatrist every three months or so, but she never felt he really got to know her, and he wasn't able to provide the care she needed to recover.

A few years later, Chelsea's dad found the name of a psychotherapist and Chelsea began seeing her every week, and at times three times a week when her symptoms worsened. The psychotherapist really got to know Chelsea as a person and, for the first time, Chelsea felt like she had compassionate care for her illness. "Whatever I needed, she was there," she says.

Chelsea says most people she talks to have very similar experiences to her with the mental health system, if not worse. "People don't know where to go, or what resources are available to them," she says. "The system needs to be much more holistic, patient-centred, and recovery-oriented." And she'd like to see more funding for mental health supports and other services like structured psychotherapy. "It can be difficult financially to pay for psychotherapy services and it can cost people thousands of dollars a year."

Now 29, Chelsea knows she will have to actively work on recovery but is feeling more confident and stronger than ever in her ability to cope with and manage her illness.

Chapter 2: Stress on Caregivers and Providers

Perhaps one of the most troubling indicators that there is something wrong with our health care system is the strain that is being felt by family and friends who are caregivers of patients, as well as some health care providers. There are clear indications throughout the system of provider burnout, including staffing shortages in certain positions and parts of the province, and high levels of stress.

Among patients who received home care for six months or longer, in the first half of 2017/18, approximately 26% had a primary family or friend caregiver who experienced continued distress, anger or depression in relation to their caregiving role – this is up from about 21% in the first half of 2012/13.¹⁶ This strain is also felt among some personal support workers (PSWs). It's difficult and rewarding work, but scheduling can often be unpredictable and can lead to a break-down in care continuity for workers and home care clients.

“It was difficult for my mother who was suffering with Alzheimer’s to be in such a confusing space for so long. We had to stay with her all night to make sure she was warm and knew that someone was there to care for her.”
– Patient Survey Response

This stress on providers is also finding its way into hospitals and other health care settings. For example, a study of four Ontario hospitals found that health care providers often experience role overload (too many responsibilities and too little time), and that 59% of providers reported high levels of stress.¹⁷

Solving hallway health care will not just be a matter of adding more beds to the system. Increasing capacity in the community, staffing levels, training, and support will play an important role in building a high-functioning system that works for all Ontarians – including the ones who work in health care.

Chapter 3: Different Health Care Needs

The health care needs of Ontarians are different than they were even a generation before, and this is contributing to the problem of hallway health care. One example of how patient profiles and health care needs are shifting is among residents in long-term care homes. These patients have changed in recent years, in ways that make caring for them more complex. The typical long-term care home resident in the province is over the age of 85, has chronic health care conditions – like diabetes, high blood pressure, heart or circulatory diseases, and dementia – and generally needs extensive help with personal care.¹⁸ Taken together, these conditions are expected to put significant strain on health care resources.

Hospitals are also experiencing a shift in the health care needs among patients, including an increase in patients admitted to general internal medicine. In a study of seven hospital sites in the Greater Toronto Area, it was found that general internal medicine patients accounted for about 39% of emergency department admissions and roughly 24% of all hospital bed-days. Additionally, those admitted into general internal medicine had a median number of 6 co-existing conditions, which means they require a lot of medical support and resources.¹⁹

In general, there are more patients of all ages and abilities, with complex rehabilitation and mental health and addictions needs who could benefit from additional support in the community. Given the specific health care needs of an aging population, home care services are now supporting an increasingly complex client base that requires more assistance than before. Although the province has invested significant resources in the past to helping Ontarians stay in their home as they age, these patients are living longer and getting to the point now where they are experiencing a decline in their ability to perform activities of daily living.

The Council is committed to ensuring that Ontarians are supported and empowered to live their fullest life. It is important that our health care system contributes in a meaningful way to help individuals – patients, and caregivers alike – to live well and to the best of their abilities. As the population ages, and the profile of patients receiving home and community services changes, the system must respond and provide the right level of support in the right location to achieve these goals.

Spotlight: Fair Access to Health Care

With technological advances, medical breakthroughs, and an increased awareness among the general population about how to live a healthy lifestyle – there’s some good news – the average life expectancy in Ontario has increased across most of the province.²⁰

Unfortunately, health outcomes do not look the same everywhere in Ontario. For example, there are geographic, socio-economic, and sex differences in mortality rates across the province, which is just one way to measure the health of a population.²¹

Another example of where there is still more work to be done to improve health outcomes is in Ontario’s north. In northern communities, the average life expectancy is lower than the rest of the province and people living there are more likely to die prematurely due to circulatory disease, respiratory disease, and suicide.²²

As the Council continues its work and develops recommendations to help improve health outcomes and solve the problem of hallway health care in Ontario, it will consider the unique health care needs and cultural considerations of distinct populations in the province, including, Indigenous people and French-speaking individuals.

Chapter 4: Immediate and Long-Term Capacity Pressures

Capacity pressures are also contributing to the problem of hallway health care in Ontario. There are several causes to the capacity challenge:

1. Ontario may not have the appropriate number of hospital, or long-term care beds to meet the health needs of the population;
2. There is insufficient capacity in community care systems – like home care and mental health and addictions care – to prevent people from needing to go to hospital and to enable them to return home from hospital quickly; and,
3. The province is not using the beds across the system as effectively as possible.

In practice, this means that there are people across the province who are spending time in hospital beds because they can’t access other options for health care.

Waiting for Care in the Wrong Spot: Understanding Alternate Level of Care (ALC)

A common approach for measuring the appropriate use of space for patients is by tracking the number of patients who require an 'Alternate Level of Care.' When a patient is occupying a bed in a hospital and does not require the intensity of resources or services provided, the patient is designated as requiring an alternate level of care.

ALC rates and volumes are just one way to measure how effectively the health care system is flowing patients through to different care settings. It is a designation that refers to patients who remain in hospital although they no longer require hospital-level care.

A high-performing health care system would have a low ALC rate, which would mean that patients are receiving appropriate care for their needs in the right setting.

There are many patients in Ontario who are waiting in the wrong place in the system, and who require an alternate level of care (ALC). For example, in October 2018, almost 16% of days in hospital were spent by patients that were waiting for care in another setting.²³ This rate is high, and it is also increasing despite investments in more beds across the system. As of November 2018, there were approximately 4,665 patients designated as requiring an ALC.²⁴ This represents a 4% increase in absolute volumes compared to the year before.²⁵

In addition to being high, the ALC rate is different depending on where you are in the province, and can change depending on the time of year. As of October 2018, the range of ALC rates across Ontario was between 5% and 34% - with some challenges more pronounced in the northern part of the province and in the Greater Toronto Area.²⁶

There are many examples of people waiting for health care in the wrong spot across the system that could benefit from a different kind of support. For example, over 9% of people designated as requiring an ALC who have been waiting more than 30 days are people who have specialized mental health needs²⁷ who could be served – with appropriate supports – in supportive housing rather than hospital beds.

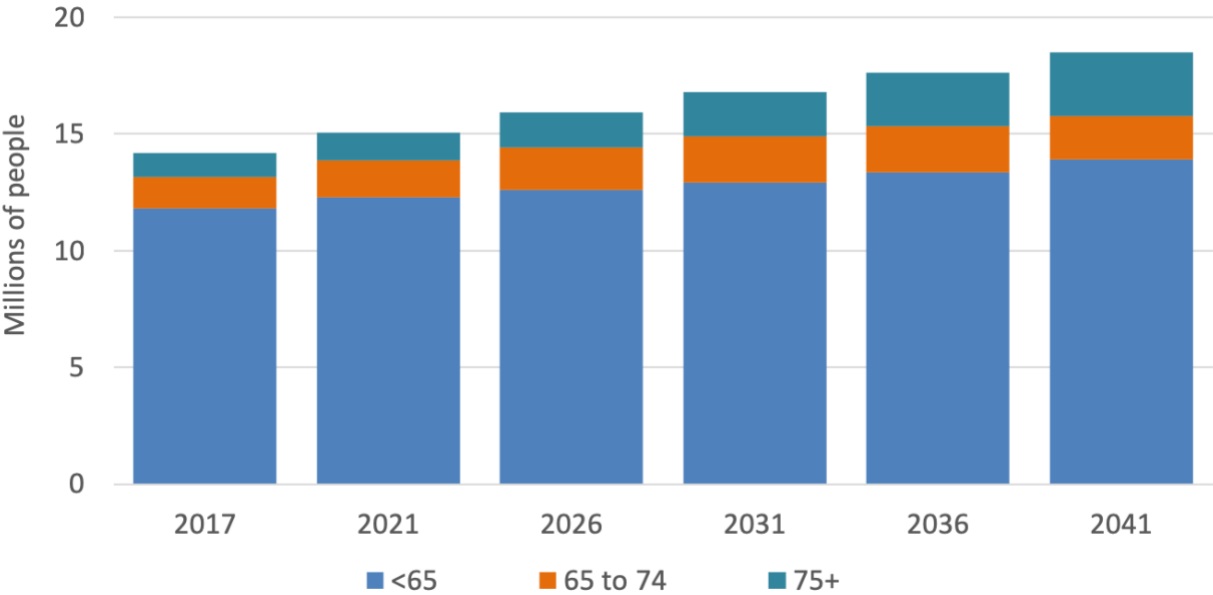
Another area where we can see the direct impact of capacity pressures is in how difficult it can be to find space in long-term care homes. The largest proportion of cumulative ALC days (province-wide), are currently attributed to patients waiting to be discharged to long-term care (59%).²⁸ This means that people are waiting too long in hospitals before moving to an open bed in a long-term care home. This is in part due to the fact that long-term care homes are currently at 98% capacity, with roughly 78,910 residents in 627 long-term care homes across the

province, and also because community supports are not expanding fast enough.²⁹ For example, a 2017 Canadian Institute for Health Information report found that in Canada more than 20% of seniors admitted to residential care could remain at home with appropriate supports; furthermore, seniors assessed in hospital are substantially more likely to be admitted to residential care than those assessed in the community.³⁰ The mis-match of capacity, demand, and use of services is one of the main pressure points facing the health care system, contributing to hallway health care.

Population Aging & Health Care Services

According to population projections, Ontario’s senior population (individuals 65+) is expected to almost double from 2.4 million, or almost 17% of the population in 2017 to 4.6 million, or almost 25% by 2041.³¹ As an example of what it means for health care services, consider that 76% of seniors (aged 75+) who require care are currently receiving care at home. To maintain that ratio, the system would need to provide home care services to 97,194 more clients.³²

Population growth by age group, 2017 to 2041



(Source: Ministry of Health and Long-Term Care, 2019)

One of the challenges associated with an aging population is an associated rise in the number of patients with dementia. Close to 228,000 Ontarians are currently living with dementia, and this number will grow to over 430,000 by 2038.³³ Dementia is one of the leading causes of dependency and disability among seniors, and caregiving responsibilities for an individual with dementia can have a significant impact on family and friends.

Between 2008 and 2038, dementia will cost Ontario close to \$325 billion.³⁴ This includes health care and other costs, including lost wages, or out-of-pocket expenses by people with dementia or their care partners. Approximately 64% of residents in long-term care homes have dementia.³⁵ Some long-term care homes cannot care for additional residents with dementia since the numbers are already so high – which can delay admission and cause additional strain on families looking for support.

And while we focus on the rising number of seniors requiring different health care services, it is also important to note that in the next twenty years there will be more than 560,000 more children (0-18 years of age) in Ontario.³⁶ Proactive and early health care interventions will help these children have better lives, and will help reduce health care costs over their lifetime.

Social Determinants of Health

The social determinants of health are the economic and social factors that impact our health. They play a critical long-term role in health care, particularly for those suffering from chronic conditions. Having a job, eating healthy food and having a safe place to sleep are foundations to good health.

Population Growth & Health Care Services

In addition to the anticipated growth among the aging population, Ontario's general population is also growing larger. Demographic projections suggest that the province will see an increase in its population by roughly 30% by 2041.³⁷

This population growth will not occur evenly across the province, which will have an impact on how the health care system plans to handle this future growth, and where it allocates its limited resources to address the anticipated increase in demand for services.

In particular, projections suggest that the Greater Toronto Area (GTA) will be the fastest growing region of the province. By the year 2041, the GTA's population is expected to grow by 41% or by approximately 2.8 million people compared to the year 2017. Similarly, population growth will be slower in certain parts of the province, which will impact the system in different ways.³⁸

If no action is taken, these demographic changes will significantly impact the availability of health care in the province. With no additional capacity created – or no other efficiencies in the system found – the hospital bed rate in Ontario will decline from approximately 222 beds per 100,000 people in 2018 to approximately 173 beds per 100,000 people in 2041.³⁹

The projections are more concerning for the long-term care bed rate, which is projected to decline from 72 beds per 1,000 people aged 75 or older to 29 beds per 1,000 people aged 75 or older by 2041. This is a total decline in the long-term care bed rate of about 60%, or the equivalent of 48,000 bed closures by 2041 if nothing is done.⁴⁰

Simply adding more beds to the system will not solve the problem of hallway health care. For example, community mental health and addictions services, as well as community rehabilitation services are two areas where additional access to services could help relieve some of the pressures causing hallway health care.

Given the current pressures on capacity and the implications of future demographic shifts, the Council will be looking for innovative solutions to remove unnecessary barriers preventing Ontarians from receiving culturally appropriate, timely, and fair access to health care.

Chapter 5: Responsibility and Accountability in Health Care

The final factor contributing to hallway health care is the lack of integration throughout the provision of health care services in Ontario. There are barriers to true integration across different care settings in the province. For example, Ontario's current health care system can be characterized as decentralized, large, and siloed, and it can be difficult at times to know who is responsible and accountable for ensuring Ontarians have access to high-value health care.

This is in part due to the size of the system. There are currently 21 health-related government agencies supporting the design and delivery of health care in Ontario. Many of these agencies were created to tackle specific problems, support research, or to establish quality standards and metrics to help the system as it matured. However, these agencies are not always well-aligned and there is limited strategic oversight to ensure the efficient and coordinated use of resources.

In addition to being over-sized, the system is also decentralized. Of the \$54.6B in provincial health care expenditures, the majority of this funding is allocated by the Ministry of Health and Long-Term Care to transfer payment recipients.⁴¹ Similar to other systems across the country, Ontario's Ministry does not directly provide health care – it pays other people to deliver services to clients. However, the financial incentives and funding models used to pay health care

“There is such a gap in the transitions of care...the interest is not on the patient, but on each individual health service provider's own unique budget and strategic objectives. Why does each agency have their own administration as opposed to a truly regional or provincial coordinated system?”
– Patient Survey Response

providers to coordinate and deliver services need to be appropriately aligned, otherwise the system won't work the way it needs to.

Decentralization can also contribute to duplication in processes and procedures, which can slow down access to health care services. One example of duplication in the health care system is in the assessment process. Approximately 11% of time spent on care coordination is used to conduct assessments and re-assessments for community and home care services.⁴²

Assessments are also done by service providers and hospitals, while primary care providers often have detailed and up-to-date patient records that could be used to inform care planning and delivery, and prevent patients from having to repeat their stories.

“The staff have all been kind and professional...the negative issue would be the constant need to provide basic information like address, date of birth, medications, family doctor, allergies, and more. It is very frustrating for a senior to be asked the same questions.”
– Patient Survey Response

In addition to barriers to information sharing, some of the unnecessary duplication in the assessment process is driven by the separation between the coordinator role and front-line care. These kinds of system-design issues have a real impact on patients, since it is not always clear which service provider is responsible for delivering care.

It is also important to remember that the delivery of children's health care is different from adults. The current system does not recognize this very well, and children receive health care in even more settings, like schools, primary care, home and community care , and

of course with their families. Patients and health care professionals alike are frustrated by the lack of communication between professionals, health care organizations, and patients. This lack of coordination and duplication in some roles and functions is costing the system in both time and money, and may not always translate into getting patients access to the care they need.

Stronger lines of accountability would help make the health care system more efficient, and also help ensure Ontario gets a greater value for what it currently spends on health care. Currently, the government spends about 42 cents of every tax dollar on health care.⁴³ Although this is the lowest per capita spend on health care compared to other provinces and territories, the system could work smarter and use this same amount of money to achieve better health outcomes.⁴⁴ When compared to similar countries in the world, Canada generally spends more on health care, but scores lower on some key performance indicators.⁴⁵ With performance based incentives that link investments to outcomes, Ontario could shift the focus of health care spending to high-value, instead of high-cost. With clearer lines of responsibility and accountability in the health care system, Ontario could move towards strengthening the entire system and solve the problem of hallway health care.

Randy's Story: The Big Picture



Randy, a retiree from Pickering, says patients like himself could benefit from a comprehensive electronic health record that covers the entire health journey.

Whenever Randy sees a new doctor, he carries a chart he designed himself. Across the page, a line that looks like a heartbeat tells the story of his health over time. When the line spikes up, it pinpoints a serious illness or health emergency at a specific age. There's a concussion and broken nose in his younger years, and more recently, two cases of deep vein thrombosis and an atrial flutter.

Randy

Randy has recovered well from his most recent emergency, though he's on blood thinners and is watchful for signs of other illness. While thinking about past health events that he should follow up on, he realized that while all his doctors might have different records that, together, would create a complete history of his care, he didn't have one himself.

So, he made the chart based on memory. Without the complete picture, patients are left with fragments, he says. "There are just too many sectors, too many contact points. The onus comes back to the patient or caregiver to put pen to paper or make some history of this."

Overall, Randy is quite happy with the care he's had – he gave the hospital that fixed his atrial flutter a five-star review on Trip Advisor. But he would like hospitals and physicians to give patients more access to digital records so that they can take the next steps on their health care journey. Health care is a shared responsibility, he points out, and patients can't adjust their behaviour if they don't have the information readily available.

Randy already knows how he would use broader records – he would check on the most pressing things, like his heart health, and review conditions that might need attention, and share some of the genetically important information with his grown children, so they can ask their doctors the right questions. "If we want to look in and see our data, we can. If we don't feel comfortable, wait. To me, it should be a choice, but available."

"The system has different metrics on me but none of them have the full story."

Opportunities for Improvement

Digital & Modern Health Care

Ontario's health care system has room for improvement when it comes to using technology as a tool to help coordinate and deliver services, and improve outcomes for patients. As the Council continues its work, it will make a focused effort to consider technology solutions to help improve health outcomes for patients across the province. This could look like new partnerships to deliver specific services or to help support the integration of care at the local level. This could also look like identifying options for integrated health information systems that would help facilitate smooth transfers between care settings.

According to the 2018 Health Care Experience Survey, only 16% of Ontarians could make an appointment with their health care provider by email or on a website. Perhaps even more surprising, is that less than 1% of appointments that year were conducted virtually in Ontario.⁴⁶ This is just one example of how Ontario could be doing a better job connecting patients with care. As Ontario's health care costs are projected to rise more closely with aging demographics than inflation it will be more important than ever to explore how adopting technology might help bend the cost curve and unlock potential savings.

Accessing health care doesn't have to be complicated, and the Council will be looking for ways for patients and families to be able to connect easily with a truly integrated health care system.

Integrated Health Care Delivery

The Council is also interested in providing advice that could help inform how health care is delivered in Ontario. Integrated health care has the potential to involve the full continuum of health care services, and connect all health care providers and care settings into one seamless partnership motivated by a common goal: providing wrap-around services to patients and improving health outcomes. This includes considering the impact of the social determinants of health, and providing more proactive health care interventions.

What is Integrated Health Care?

Integrated health care means different things to different people – and may look like a new way of accessing care within your community. Integrated health care is motivated by one main goal: providing coordinated, wrap-around health care services to patients.

Integrated health care means the system doesn't act as a barrier to providing timely health care services to patients. It means that your home care services are working in complete partnership with your local hospital and primary care providers to make sure that everything is ready to go at home once you or your loved one has been discharged.

There are already examples of integrated health care working across the province. The Council will be looking for innovative solutions to support leaders and pioneers in integrated health care, and will consider how to scale up these initiatives so that everyone can benefit from coordinated care. This could include thinking about the roles and functions of health professionals, and reconsidering how to streamline certain functions, like care-coordination. The Council may also provide advice on how Ontario could introduce innovative payment and accountability mechanisms to ensure alignment with service provision and government objectives – including patient self-determination.

Efficiency in the System

Simply adding more hospital or long-term care beds to the system will not solve the problem of hallway health care in Ontario. The Council will consider strategies that include prevention, early intervention, and evidence-based programs that improve health outcomes, and will look at best-practices in Ontario and in other jurisdictions across the world as it develops advice for government.

The Council will ensure recommendations included in its next report will address a balance of both short and long-term needs across the health care system, make the system more efficient for patients, providers, and caregivers, and ultimately help set Ontario up for success in the years to come.

Next Steps

In its second report, the Council will focus on providing recommendations that will help the system deliver better health care in the province.

Four key themes have emerged through the Council's initial work that will help guide the development of detailed recommendations in its next report:

1. A pressing need to integrate care around the patient and across providers in a way that makes sense in each of our communities in the province, and improves health outcomes for Ontarians.
 2. Growing demand and opportunity to innovate in care delivery, particularly in the use of virtual care, apps, and ensuring patients can access their own health data.
 3. The potential for greater efficiency in how we streamline and align system goals to support high quality care.
 4. The critical role for a long-term plan so that we have right mix of health care professionals, services, and beds to meet our changing health care needs.
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We want to hear from you!

The Council will be shifting its attention to developing advice for the government on how to fix the problem of hallway health care. The second report will be released in Spring 2019.

Our focus over the next few months will be on identifying innovative, affordable, and evidence-based solutions that will work in Ontario. As we work with you, and health care professionals across the system to develop these recommendations, we will also be giving careful consideration to how to measure our progress on this work. Our intention is for you to track our progress and help keep us accountable as we continue to think about how to improve health care in Ontario.

We will also be on the road holding engagement sessions across the province to make sure the recommendations we develop will work in your community. If we don't get to meet you in person, you can also find us online.

How to reach us: hallwayhealthcare@ontario.ca

Biographies



Dr. Rueben Devlin

Special Advisor and Chair of the Premier’s Council on Improving Healthcare and Ending Hallway Medicine

An orthopaedic surgeon, Dr. Devlin completed his medical school and residency training at the University of Toronto. During Dr. Devlin’s 17 years practicing in Newmarket, he held senior hospital positions, including Chief of Surgery and Chair of the Medical Advisory Committee.

Subsequently Dr. Devlin served as the President and Chief Executive Officer of Humber River Hospital in Toronto from 1999 to 2016. Humber River Hospital is one of Canada’s largest regional acute care hospitals, serving a catchment area of more than 850,000 people in the northwest GTA. As the CEO of Humber River Hospital he not only led the operational transformation of the hospital, Dr. Devlin was also responsible for the vision and implementation of North America’s first fully digital hospital

Dr. Devlin has a record of successfully developing and implementing corporate strategic plans at the highest levels of health care and taking bold steps to use innovation and technology to directly impact patient access care, and satisfaction.

Dr. Devlin was appointed as Special Advisor and Chair of the Premier’s Council on Improving Health Care and Ending Hallway Medicine in June 2018.



Adalsteinn Brown

Adalsteinn (Steini) Brown is the Dean of the Dalla Lana School of Public Health at the University of Toronto. Previous experience includes senior leadership in policy and strategy in the Ontario government, founding roles in start-up companies, and global work on how to measure performance in health care. He studied government at Harvard University and Public Health at the University of Oxford.



Connie Clerici

Connie Clerici is a seasoned executive with a long history of leading large teams through Canada's complex and highly regulated health care environment. She is the founder and the Executive Chair of Closing the Gap Healthcare, an organization that focuses resources on the advancement of innovations and on building and supporting a high-quality, publicly-funded health care system that is sustainable for Canadians.

Ms. Clerici's passion is to help those most in need in society, and to accept full accountability for doing so. Her requirement that ethics and compassion accompany sound business practices was founded on her early career experiences, including being responsible for moving severely disabled children out of institutional care at the Christopher Robin Home for Children in Ajax and into the community in the 1980s, and her work with Rose Cherry's Home for Kids (now the Darling Home for Kids).

Ms. Clerici is a life-long learner, participating in extensive training in leadership and business at a variety of business schools and universities. She is currently a board member or advisor for numerous public and private organizations, an Adjunct Lecturer at the University of Toronto's Institute of Health Policy, Management and Evaluation, a leader in the Ivey Business School supporting entrepreneurship and the co-chair of Health Quality Ontario's Quality Standards Committee.



Barb Collins

Barb Collins was appointed the President and Chief Executive Officer of Humber River Hospital on July 1, 2016. Ms. Collins is a Registered Nurse, with an MBA from Queens University in Kingston, Ontario. She has more than 40 years' experience in acute care hospitals, including nursing in Intensive Care, Operating Room and the Emergency Department, and has managed Support and Facilities Services.

Prior to assuming her current responsibilities as President and CEO, Ms. Collins served as the Humber River Hospital's Chief Operating Officer. As COO, she was the senior Executive Lead for Humber River Hospital's redevelopment project, overseeing the design, construction and activation of the new Humber River Hospital. This 656 bed, 1.8M square-foot acute care facility provided Humber with a unique opportunity to optimize design, incorporate technology and reinvent processes to deliver more effective and efficient patient-centered care, supported by some of the world's finest medical technology.

Humber River Hospital has been recognized as North America's first fully digital hospital. That journey continues with the opening of the first Hospital Command Centre in the world focused on both patient flow and high reliability patient care. Most recently Humber River introduced a Humanoid Robot, yet another step in transformational care.



Michael Decter

Michael B. Decter is the President and Chief Executive Officer of LDIC Inc. Currently he is also Chair of Medavie Blue Cross, Board Member of Blue Cross Life and Auto Sector Retiree Health Care Trust and Chancellor of Brandon University.

Previously, Mr. Decter served as Deputy Minister of Health for Ontario, Cabinet Secretary in the Government of Manitoba and Chair of the Health Council of Canada.

Mr. Decter is a graduate of Harvard University with a major in economics. He is also the author of three health books, *Healing Medicare*, *Four Strong Winds* and *Navigating Canada's Health Care*, co-authored with Francesca Grosso.



Dr. Suzanne Filion

Dr. Filion is an experienced clinical psychologist and change leader with an ardent commitment to public and community service. She obtained her PhD in Psychology from the Université de Montréal and her master's degree in Education from the University of Ottawa. She also holds a Mental Health Law certificate from the Osgoode Hall Law School at York University.

As past director of the Mental Health and Addictions (MHA) program at the Hawkesbury and District General Hospital (HGH), Dr. Filion deployed over 15 innovative community programs in MHA to improve access to services and increase efficiency. She is currently Vice-President of Development and Integration at HGH and President and CEO of her own private practice in Eastern Ontario. Dr. Filion has taught at the University of Ottawa and Saint Paul University.

Nationally, she is known for her work in psychological trauma and with minority groups. In recognition of her outstanding achievements in the fields of mental health and addictions during more than 25 years, Dr. Filion recently received the Canadian Psychological Association Award for Distinguished Contributions to Public or Community Service.



Dr. Lisa Habermehl

Dr. Habermehl is a rural family physician living in Northwestern Ontario. She is currently practicing in Red Lake where, over the better part of two decades, she has provided care in a variety of settings, including long-term care, clinic, hospital and the emergency room.

Dr. Habermehl has been a faculty member of the Northern Ontario School of Medicine since early in its inception and is currently an Assistant Professor, mentoring medical students and residents as they expand their knowledge of medicine while immersed in rural communities.

She was previously Chair of the Rural Expert Panel at the Ontario Medical Association, whose mandate is to advocate for an equitable health system for rural physicians and patients.

Dr. Habermehl completed her residency in family medicine at Family Medicine North in Thunder Bay, upon graduation from the University of Western Ontario. She has since received her Fellowship in Family Medicine from the College of Family Physicians of Canada.



Peter Harris

Peter Harris Q.C. has a varied legal background in tax matters and general corporate advice. His tax practice places some emphasis on tax litigation, cross border and international transactions and he has provided tax and business counsel to some of Canada's major industrial and financial institutions.

Mr. Harris has been a special advisor to the Canada Revenue and the federal Department of Finance and has acted as an advisor to the Ontario Government with respect to various financial matters. Mr. Harris is currently on the board of the Central West LHIN.

Apart from his income tax practice Mr. Harris has served on the boards of directors of Atomic Energy of Canada Limited, the Ontario Sports Centre (Chair), Director of Toronto General & Headwaters Hospital (Chair). Mr. Harris is currently the Chair of the Chamber of Commerce Taxation and Economics Committee.



Dr. Gillian Kernaghan

Dr. Kernaghan was appointed the President and Chief Executive Officer of St. Joseph's Health Care London (St. Joseph's) in 2010. St. Joseph's is a multi-sited, academic health care organization serving London and region.

Prior to assuming this role, Dr. Kernaghan served for 17 years as the Vice President, Medical for various hospitals in London and led the medical staff during complex restructuring in which four hospitals merged to form St. Joseph's. Through this restructuring and various program transfers between organizations, the roles of the London hospitals dramatically changed. In 1984, Dr. Kernaghan joined the medical staff of St. Joseph's, Parkwood Hospital and London Health Sciences Centre as a family physician. She completed her residency at St. Joseph's Hospital in 1984 upon graduation from Western University and was awarded her Fellowship in 2000.

Gillian currently serves on the Ontario Hospital Association Board, the Council of Academic Hospitals of Ontario Executive and Council and is the Chair of the Board of the Catholic Health Association of Ontario. She served as the Co-Chair of CHLNet from 2014-2018 and as President of the Canadian Society of Physician Executives for 2010-2012.



Dr. Jack Kitts

Dr. Jack Kitts is President and Chief Executive Officer of The Ottawa Hospital. Dr. Kitts received his medical degree from the University of Ottawa in 1980 and completed specialty training in anesthesia in 1987. He spent one year as a research fellow at the University of California in San Francisco.

Dr. Kitts then joined the medical staff at the Ottawa Civic Hospital as an anesthesiologist and Research Director for the Department of Anesthesia. In 1995 he was appointed Chief of Anesthesia at the Ottawa Civic Hospital and Associate Professor at the University of Ottawa. In 1998, Dr. Kitts was appointed Vice-President of Medical Affairs and led the medical staff during a complex restructuring in which three hospitals and five large programs were merged into The Ottawa Hospital.



Kimberly Moran

Kimberly Moran is dedicated to improving the lives of children and youth with a focus on strengthening health care policy, systems and patient outcomes in Canada and internationally. Her passion for improving the delivery of child and youth mental health treatment runs deep and is rooted in her family's lived experience with mental health as a mother of a daughter who became seriously ill.

Ms. Moran is currently Chief Executive Officer of Children's Mental Health Ontario, representing the province's largest provider of child and youth mental health services, supporting 120,000 children, youth and their families. She serves on the board of the Canadian Mental Health Association Toronto, and previously contributed to the North York General Hospital and SIM-one Simulation Healthcare Network boards.

Ms. Moran brings more than thirty years of senior leadership experience in the private and not-for-profit sectors. She is also a Chartered Professional Accountant which underlies her passion for developing effective and affordable health care systems.

Prior to CMHO, she held positions as Special Advisor to the Dean of the Faculty of Medicine, University of Toronto, Acting CEO and Chief Operating Officer at UNICEF Canada, and senior finance positions with TD Bank and Ernst & Young.



David Murray

David Murray is Executive Director of Northwest Health Alliance (NWA). Mr. Murray has had a long and distinguished career in health care administration spanning many years and multiple organizations and sectors.

Before joining the NWA, Mr. Murray was the Chief Executive Officer of Sioux Lookout Meno-Ya-Win Health Centre for seven years. Mr. Murray has also served as the CEO of the Waterloo Wellington Community Care Access Centre (CCAC), the CEO of the North East LHIN, President and CEO of the nationally recognized Group Health Centre in Sault Ste. Marie, and CEO of the Kenora Rainy River CCAC.

Mr. Murray has an Honours Bachelor of Commerce, MBA and designations in CBNA, CHE.



Dr. Richard Reznick

Dr. Reznick is the Dean of the Faculty of Health Sciences at Queen's University and a professor in the Department of Surgery. He is also Chief Executive Officer of the Southeastern Ontario Academic Medical Organization.



Shirlee Sharkey

Shirlee Sharkey is the President and Chief Executive Officer of SE Health. Under Ms. Sharkey's leadership, the social enterprise has enjoyed exponential growth and expansion, and facilitated transformative solutions in areas such as Indigenous health, end of life care, and caregiver wellness and support. Today, SE Health delivers 20,000 care exchanges daily through its team of 9,000 leaders and professionals.

Active in public service, Ms. Sharkey is the current Chair of Excellence Canada, and a board member of the C.D. Howe Institute and the Canadian Frailty Network.

Academically, she is cross-appointed to the University of Toronto's Lawrence S. Bloomberg Faculty of Nursing and the Institute of Health Policy, Management and Evaluation as an adjunct professor.

In 2017, Ms. Sharkey was presented with an honorary Doctor of Laws degree from the University of Ontario Institute of Technology for her breakthrough leadership in community-based health care.

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- Health Quality Ontario for their work conducting patient interviews, and the patients for sharing their stories;
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- Members of the six sub-committees of the Premier's Council, on: primary care, home and community care, hospital care, long-term care, mental health and addictions and digital innovation, for sharing key insights from across the health care system.

References

- ¹ Ministry of Health and Long-Term Care. (2019). [Daily Bed Census Summary](#)
- ² Ministry of Health and Long-Term Care. (2018). [Health Care Experience Survey \(HCES\)](#), April 2017 – March 2018
- ³ Ministry of Health and Long-Term Care. (2018). [Health Care Experience Survey \(HCES\)](#), April 2017 – March 2018
- ⁴ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ⁵ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ⁶ Health Quality Ontario. (2018). [Time Spent in Emergency Departments: Length of Stay in Emergency for All Patients Admitted to Hospital.](#)
- ⁷ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ⁸ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ⁹ Ontario Local Health Integration Networks. (2018). [Pan-LHIN Environmental Scan: 2019-2022 Integrated Health Service Plans.](#)
- ¹⁰ Health Quality Ontario. (2018). [Home Care Performance in Ontario: Wait Times for Home Care Services.](#)
- ¹¹ Health Quality Ontario. (2016). [System Performance: Patient Experience with Home Care.](#)
- ¹² Lloyd-Smith, P., Younger, J., Lloyd-Smith, E., Green, H., Leung, V., & Romney, M.G. (2013). [Economic Analysis of Vancomycin-Resistant Enterococci at a Canadian Hospital: Assessing Attributable Cost and Length of Stay.](#) *Journal of Hospital Infection*, 85(1), 54-59.
- ¹³ Health Quality Ontario. (2015). [Taking Stock: A Report on the Quality of Mental Health and Addictions Services in Ontario.](#)
- ¹⁴ Children's Mental Health Ontario. (2019). [Ontario's Kids and Families Can't Wait: CMHO's 2019 Pre-Budget Submission.](#)
- ¹⁵ Madi, N., Zhao, H., & Li, J.F. (2007). [Hospital Readmissions for Patients with Mental Illness in Canada.](#) *Healthcare Quarterly*, 10(2), 30-32.
- ¹⁶ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ¹⁷ Duxbury, L., Higgins, C., & Lyons, S. [The Etiology and Reduction of Role Overload in Canada's Health Sector.](#)
- ¹⁸ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario's Health System is Performing.](#)
- ¹⁹ Verma, A.A., Gui, Y., Kwan, J.L., Lapointe-Shaw, L., Rawal, S., & et al. (2017). Patient characteristics, resource use and outcomes associated with general internal medicine hospital care: the General Medicine Inpatient Initiative (GEMINI) retrospective cohort study. *Canadian Medical Association Journal Open*, 5(4), E842-E849.
- ²⁰ Ministry of Finance. (2018). [Ontario Population Projections Update, 2017-2041.](#)
- ²¹ Buajitti, E., Chiodo, S., Watson, T., Kornas, K., Bornbaum, C., Henry, D., & Rosella, L.C. (2018). [Ontario atlas of adult mortality, 1992-2015, Version 2.0: Trends in Public Health Units.](#) Toronto, ON: Population Health Analytics Lab.
- ²² Health Quality Ontario. (2017). [Health in the North: A Report on Geography and the Health of People in Ontario's Two Northern Regions.](#)
- ²³ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.
- ²⁴ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.
- ²⁵ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.
- ²⁶ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.

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- ²⁷ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.
- ²⁸ Cancer Care Ontario – Access to Care. (2018). Provincial Monthly Alternate Level of Care Performance Summary, November 2018.
- ²⁹ Ministry of Health and Long-Term Care. (2019). MOHLTC Data.
- ³⁰ Canadian Institute for Health Information. (2017). [Seniors in Transition: Exploring Pathways Across the Continuum.](#)
- ³¹ Ministry of Finance. (2018). [Ontario Population Projections Update, 2017-2041.](#)
- ³² Ministry of Health and Long-Term Care. (2019). MOHLTC Data.
- ³³ Ministry of Health and Long-Term Care. (2016). [Developing Ontario’s Dementia Strategy: A Discussion Paper.](#)
- ³⁴ Ministry of Health and Long-Term Care. (2016). [Developing Ontario’s Dementia Strategy: A Discussion Paper](#)
- ³⁵ Health Quality Ontario. (2018). [Measuring Up 2018: A Yearly Report on How Ontario’s Health System is Performing.](#)
- ³⁶ Ministry of Finance. (2018). [Ontario Population Projections Update, 2017-2041.](#)
- ³⁷ Ministry of Finance. (2018). [Ontario Population Projections Update, 2017-2041.](#)
- ³⁸ Ministry of Finance. (2018). [Ontario Population Projections Update, 2017-2041.](#)
- ³⁹ Ministry of Health and Long-Term Care. (2019). MOHLTC Data.
- ⁴⁰ Ministry of Health and Long-Term Care. (2019). MOHLTC Data.
- ⁴¹ Ernst & Young. (2018). [Managing Transformation: A Modernization Action Plan for Ontario. Line-by-Line Review of Ontario Government Expenditures 2002/-3 – 2017/18.](#)
- ⁴² Ministry of Health and Long-Term Care. (2019). MOHLTC Data.
- ⁴³ Ernst & Young. (2018). [Managing Transformation: A Modernization Action Plan for Ontario. Line-by-Line Review of Ontario Government Expenditures 2002/-3 – 2017/18](#)
- ⁴⁴ Canadian Institute for Health Information. (2018). [National Health Expenditure Database Trends, 1975 to 2018.](#)
- ⁴⁵ Conference Board of Canada. (2012). [International Ranking: Health.](#)
- ⁴⁶ OTN. (2017). [OTN’s Annual Report 2016/17](#), and OMA. (2018). [Not a Second Longer.](#)

