Cancer Care Ontario

# Acute Leukemia Provincial Plan

2017

Ontario
Cancer Care Ontario

# Contents



**"When I was first diagnosed with Acute leukemia, I was 27 years old, about to celebrate my third wedding anniversary, a part time university student and a first time Maman to my baby boy who was only 1 year and 2 months. It was a time of so much chaos, so much anxiety and so much upheaval. My hope is that this Acute Leukemia Provincial Plan will lessen that burden and encourage improved access to care for patients, in a timely fashion, as close to home as possible."**

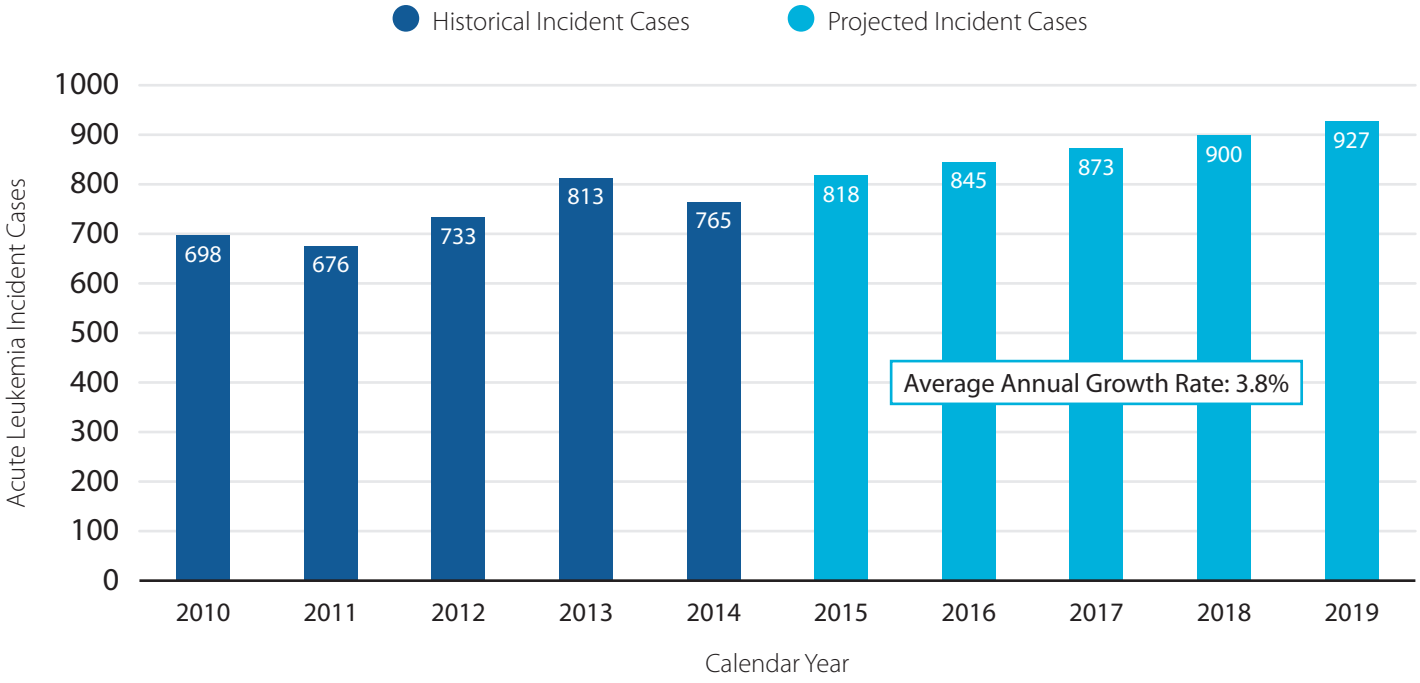
– Lianne D, Cancer Care Ontario, Patient and Family Advisor

# Introduction:

Acute leukemia is a rapidly progressive cancer of the white blood cells. There are two main types of acute leukemia, each named after the type of cell that is affected: acute myeloid leukemia (AML) and acute lymphoblastic leukemia (ALL).

The need for acute leukemia care is expected to grow in the years to come (see Figure 1). In order to better meet the healthcare needs of this patient population in Ontario, provincial-level planning is required. Planning will include the growth of existing acute leukemia service programs, alongside the development of new service provider sites in a coordinated and sustainable manner.

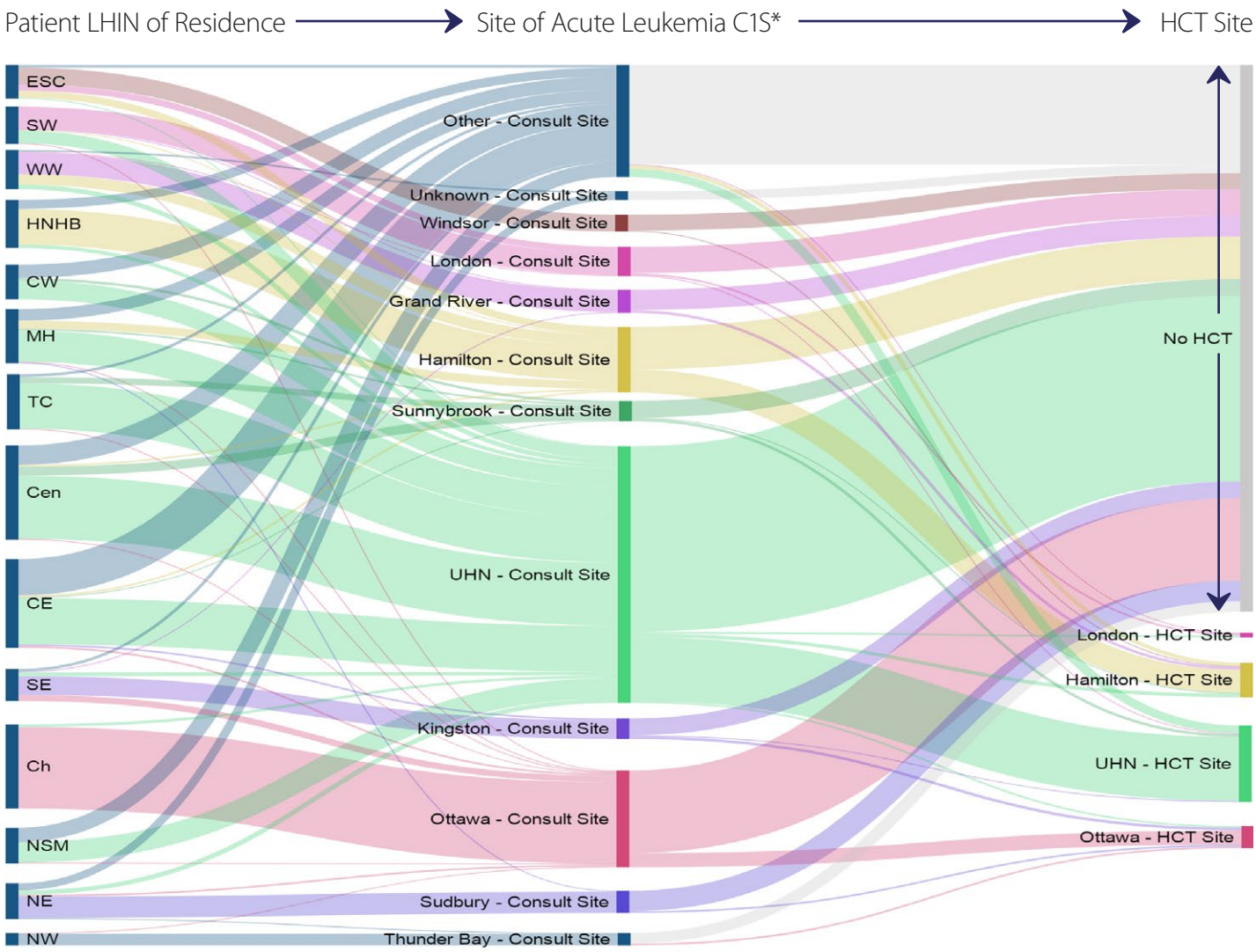
**Figure 1: Historical incident cases and volume projections for adult acute leukemia in Ontario.**




Data source: incident cases data - CCO SEER*Stat Package Release 10 - OCR (Aug. 2015); Population data - Statistics Canada, Ontario Ministry of Finance, Fall 2014 release, based on the 2011 Census.

Care for adult patients with acute leukemia is complex (see Appendix A), resource intensive, requires a high degree of specialization and therefore is typically centralized to designated centres. The first step in quality acute leukemia care is to confirm the diagnosis, followed by induction chemotherapy, then post-induction or consolidation chemotherapy, with the ultimate goal of disease remission and appropriate ongoing follow-up care. Hematopoietic cell therapy (HCT), also known as stem cell transplant (SCT), may also be an appropriate treatment choice for patients with acute leukemia (see Box 1 for further information on HCT). Clinical services, diagnostics, health human resources and system capacity must be in place in order to deliver the best person-centred and clinical care for acute leukemia patients. The current model for referrals for consultation and treatment is not provincially organized for patients with acute leukemia in Ontario (see Figure 2). Provincial oversight in this area would provide a more streamlined process for providers, while providing care closer to home for patients.

**Figure 2: Current flow of patients with acute leukemia from Local Health Integration Network (LHIN) of residence to location of consultation with a hematologist/medical oncologist (C1S*) to site of HCT. Width of lines represents patient volumes, with thicker lines representing greater patient volumes.**




Data Source: Acute Leukemia data - Activity Level Reporting (ALR) (Jan. 2017); Hematopoietic Cell Transplant data – Specialized Services Oversight Information System (SSO IS) (Jan. 2017); Patient LHIN of Residence – ALR supplemented by Registered Person Database (RPDB), Postal Code Conversion File (PCCF+) (Jan. 2017)
*Note: C1S is defined as the first consultation with a medical oncologist/hematologist in the ALR data holding.
**Note: LHIN name abbreviations - Erie St. Clair (ESC), South West (SW), Waterloo Wellington (WW), Hamilton Niagara Haldimand Brant (HNHB), Central West (CW), Mississauga Halton (MH), Toronto Central (TC), Central (Cen), Central East (CE), South East (SE) Champlain (Ch), North Simcoe Muskoka (NSM), North East (NE), and North West (NW).

Appropriate planning for this patient population must consider a number of critical components, including a service delivery model that is multidisciplinary, shared across care settings, and person-centred. Strong local and regional referrals and collaboration between specialized healthcare providers and supporting service providers, for both in-patient and out-patient care, ensure high-quality care. There is an increasing need for timely molecular diagnostics for diagnosis and disease typing to guide treatment for patients, and therefore the essential role of pathology and laboratory medicine should also be addressed. All of this must be supported by a transparent funding model, as well as a measurement and performance management strategy to drive system improvements.

**Box 1. Hematopoietic cell therapy (HCT)**

Acute leukemia patients who are being considered for transplant require timely consultation with the transplant team, appropriate clinical decision-making and adequate treatment facilities.

There are two types of HCT: autologous (auto-HCT), where hematopoietic stem cells are first harvested from the patient and then transfused (transplanted) back into the patient after a course of high-dose chemotherapy; and allogeneic (allo-HCT), where hematopoietic stem cells come from a related (allo-R) or unrelated (allo-U) donor.

Acute leukemia patients requiring transplant usually receive an allo-HCT, but management of auto-HCT patients impacts the capacity in many HCT centres and therefore is also considered in the Acute Leukemia Provincial Plan.

# A Provincial Plan for Adult Acute Leukemia Services

The Acute Leukemia Provincial Plan (the Plan) is designed to:

- Provide timely access to high-quality, coordinated acute leukemia services for adults, as close to home as possible;
- Focus on optimal outcomes and improved patient experience; and
- Encourage hospitals and providers to work together to form networks of services that are person-centred, evidence based and support evolving clinical practice.

This Plan builds on earlier work completed by Cancer Care Ontario. In 2012, the *Adult Acute Leukemia Services Plan for the Greater Toronto Area* was developed to address an urgent need in one part of the province and was expected to serve as a platform to address needs in other parts of the province. The Acute Leukemia Provincial Plan also builds upon the Systemic Treatment Provincial Plan, *Quality Person-Centred Systemic Treatment in Ontario 2014-2019*, which lays out Ontario's approach to extend the quality and safety agenda and strengthen and enable care models for systemic treatment.

Specifically, the Systemic Treatment Provincial Plan states:

*By 2019, patients that are receiving complex hematology care will experience improvements in access and quality of care through the exploration and implementation of care models related to: provider roles, opportunities for transitioning patients from in-patient to out-patient to out of hospital settings, communication strategies and technologies.*

The Acute Leukemia Provincial Plan was developed collaboratively by regional, clinical and patient representatives through a multi-pronged provincial approach facilitated by Cancer Care Ontario. This Plan sets the stage to achieve a vision of care in Ontario where there will be strong networks of service providers across the province that deliver care in a coordinated way.

# Service Providers and their Roles

## Goal

Acute leukemia service providers will provide services within defined service designations. The appropriate number of service provider sites will exist to support the healthcare demands of the acute leukemia patient population.

## Current State

Not all hospitals provide the same level of services for patients with complex hematologic malignancies, including acute leukemia. Four designations of leukemia provider sites have been defined according to the scope of services provided (see Figure 3).

These four levels of designations are in alignment with the levels of care described in the Systemic Treatment Provincial Plan. The transplant and acute leukemia service sites, acute leukemia services sites, and acute leukemia shared-care partner centres are situated in Level 1 or 2 systemic treatment centres and provide complex care and academic leadership. Other systemic treatment hospitals provide less complex systemic treatment in collaboration with more expert centres as appropriate.

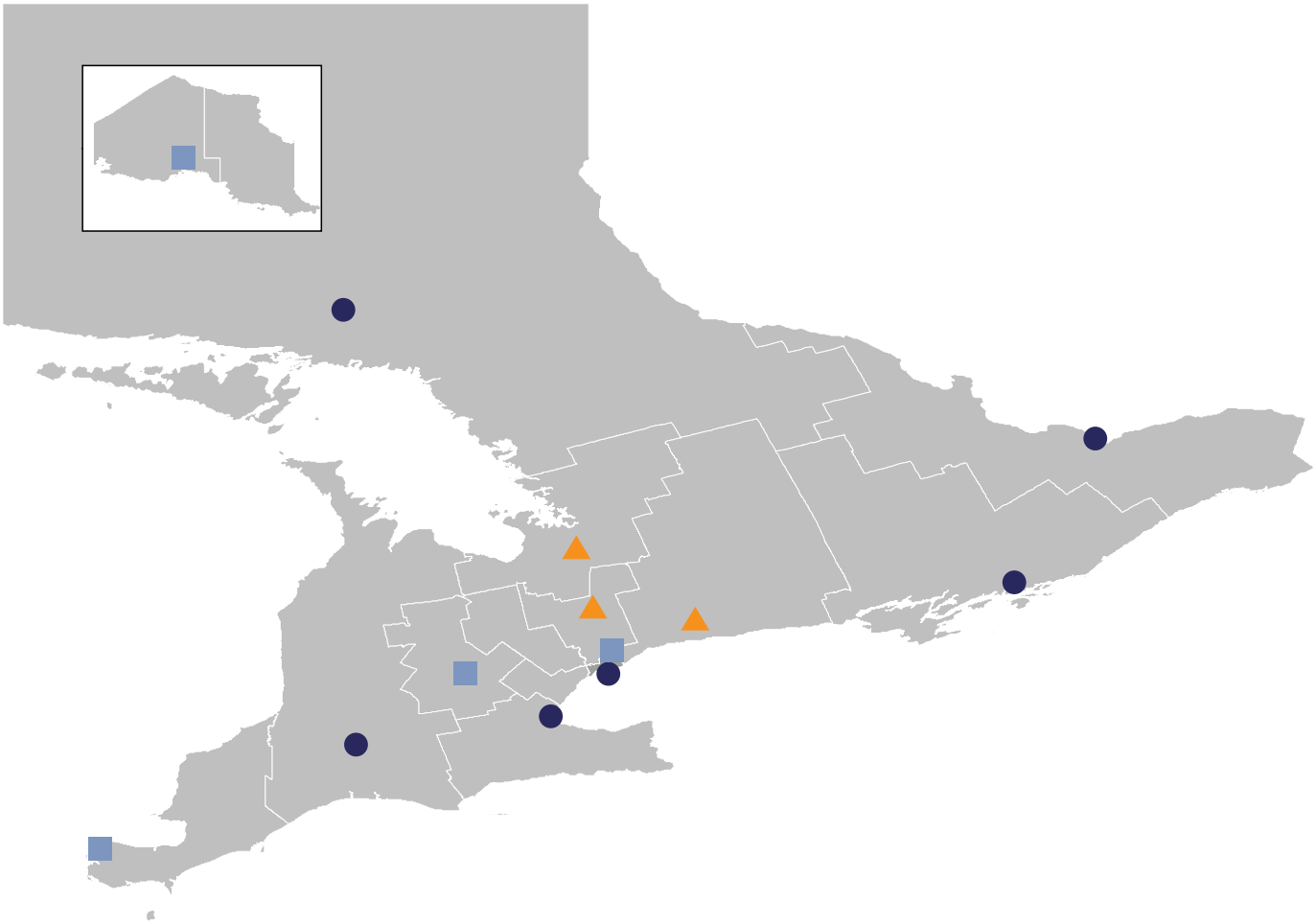
**Transplant and Acute Leukemia Service Site**
Provides a full scope of acute leukemia services and HCT. The transplant centre acts as the hub of activity for patients with complex hematologic malignancies. Across the province these centres work together to ensure a standardized approach across the acute leukemia care continuum.

**Acute Leukemia Service Site**
Provides a full scope of acute leukemia services, including induction chemotherapy and post-induction treatment and care. These acute leukemia centres do not perform HCT, but instead work with a transplant centre, partner centre and/or other systemic treatment hospitals to support care closer to home. They may accept autologous transplant patients for post-transplant recovery.

**Acute Leukemia Shared-Care Partner Centre**
Provides a subset of services for patients through a shared-care model. Partner centres work in partnership with an acute leukemia service site to share portions of care on an ongoing basis and/or accept autologous transplant patients for post-transplant recovery closer to home.

**Systemic Treatment Hospital**
Provides supportive care (e.g., transfusion, hydration) for acute leukemia patients not on active treatment.

**Figure 3: Current service provider sites in Ontario and types of services they provide.**



| Provider Site | Locations |
|---|---|
| **Transplant & Acute Leukemia Service Site** | 1. London Health Sciences Centre*<br>2. Hamilton Health Sciences Centre<br>3. University Health Network – Princess Margaret Cancer Centre<br>4. Kingston General Hospital**<br>5. The Ottawa Hospital<br>6. Health Sciences North** |
| **Acute Leukemia Service Site** | 1. Windsor Regional Hospital<br>2. Grand River Hospital<br>3. Thunder Bay Regional Health Sciences Centre<br>4. Sunnybrook Health Sciences Centre |
| **Acute Leukemia Shared-Care Partner Centre (with UHN)** | 1. Southlake Regional Health Centre<br>2. Royal Victoria Regional Health Centre<br>3. Lakeridge Health |

*Auto and Allo-R HCT only
**Auto HCT only

**Legend**

- ● Transplant and Acute Leukemia Service Site
- ■ Acute Leukemia Service Site
- ▲ Acute Leukemia Shared-Care Partner Centre (with UHN)

Types of acute leukemia and complex malignant hematology (CMH) services available at the different service levels should be supported by appropriate health human resources and infrastructure as detailed below in Tables 1, 2 and 3. It is important to note the increasing complexity of care seen among the types of service designations. This framework will allow for centres to further develop infrastructure and health human resources in order to become a higher level of service designation over time. This will support the province in meeting the growing demand for CMH services.

**Table 1: Scope of services required to be available at provider sites based on level of designation.**

| Services Provided | Service Provider Site |
|---|---|
| All episodes of active and supportive care for stem cell transplant patients | ● |
| All episodes of active and supportive leukemia care | ● ■ |
| Conduct or provide access to clinical trials | ● ■ |
| Responsible for partnering with Leukemia Partner Sites regarding patients that are being transferred, updated protocols, mentorship, etc. | ● ■ |
| Monitor patient outcomes such as ICU admission, and other quality indicators | ● ■ |
| Work with Acute Leukemia Service Site to provide certain episodes of active care for adult acute leukemia | ● ■ ▲ |
| Provide outpatient monitoring for patients receiving consolidation chemotherapy | ● ■ ▲ |
| Participate in the monitoring and delivery of some chemotherapy of ALL patients during intensification and maintenance | ● ■ ▲ |
| Provide mid-cycle monitoring of patients receiving ALL maintenance therapy | ● ■ ▲ |
| Treat febrile neutropenia events in active-care and palliative care settings | ● ■ ▲ |
| Provide supportive care for patients in the palliative or non-complex treatment settings | ● ■ ▲ ✚ |
| Both palliative and post-chemotherapy supportive care would include transfusion support | ● ■ ▲ ✚ |
| Have ongoing discussions with Transplant and Acute Leukemia Service Site regarding patients that are being transferred, updated protocols, etc. | ▲ |

**Legend**

- ● Transplant and Acute Leukemia Service Site
- ■ Acute Leukemia Service Site
- ▲ Acute Leukemia Shared-Care Partner Centre
- ✚ Other Systemic Treatment Hospitals

**Table 2: Health human resources recommendations at provider sites based on level of designation.**

| Health Human Resources Recommendations | Service Provider Site |
|---|---|
| Mentorship to lower levels of service provider | ● ■ |
| **Physicians:** | |
| • Leukemia specialists, 24-hour coverage (including by phone) | ● ■ |
| • Hematologist/oncologist with leukemia commitment, 24-hour coverage (including by phone) | ▲ |
| • Hematologist/oncologist or committed internist, 24-hour coverage (including by phone) | ✚ |
| **Nursing:** | |
| • Master's prepared nurse practitioner specialized in oncology, ideally with additional hematology education | ● ■ |
| • Specialized oncology nurses with national certification in oncology through the Canadian Nurses Association and additional knowledge, clinical skills and clinical decision making in leukemia | ● ■ ▲ |
| • May have Master's prepared nurse practitioner specialized in oncology, with additional hematology education and/or clinical fellowship supported from leukemia centre | ▲ |
| • Registered nurse working towards national certification as a Certified Nurse, Critical Care, Oncology (Canada) (CON(C)) within 3 years of employment | ✚ |
| **Pharmacy:** | |
| • Dedicated oncology pharmacists | ● ■ ▲ ✚ |
| • Monitor and intervene for side effects and reactions, provide supportive care, manage symptoms | ● ■ ▲ ✚ |

**Legend**

- ● Transplant and Acute Leukemia Service Site
- ■ Acute Leukemia Service Site
- ▲ Acute Leukemia Shared-Care Partner Centre
- ✚ Other Systemic Treatment Hospitals

**Table 3: Organizational support recommendations at provider sites based on level of designation.**

| Organizational Support Recommendations | Service Provider Site |
|---|---|
| Intensive Care Unit | ● ■ ▲ |
| Infectious disease specialist | ● ■ ▲ |
| On-site, fully capable blood bank (with ability to deliver packed red blood cells and platelet transfusions, as well as plasma and factor concentrates, without delay) | ● ■ ▲ |
| Networkable electronic medical records that can be shared among centres, and Imaging | ● ■ ▲ |
| Infrastructure (ambulatory infusion pumps, Hickman and PICC catheters, etc.) | ● ■ ▲ |
| Cancer Care Ontario Data Book compliant | ● ■ ▲ |
| Pharmacy capacity and expertise | ● ■ ▲ ✚ |
| Multidisciplinary psychosocial oncology team, members with advanced training to address complex needs | ● ■ ▲ ✚ |
| Decision-support resources to collate and analyze quality indicators | ● ■ ▲ ✚ |
| Onsite 24-hour blood bank (packed red blood cells and platelet transfusions) | ✚ |
| Networkable electronic medical records that can be shared among centres | ✚ |

**Legend**

- ● Transplant and Acute Leukemia Service Site
- ■ Acute Leukemia Service Site
- ▲ Acute Leukemia Shared-Care Partner Centre
- ✚ Other Systemic Treatment Hospitals

## Moving from Current State to Ideal State

Additional service provider sites will need to be brought on board to meet the need for timely access to person-centred care with the best possible outcomes for all acute leukemia patients in Ontario. These new service provider sites should operate within the defined service provider requirements and the recommendations for health human resources and organizational support detailed in this plan. Select existing centres will be developed to provide more complex services. Additional service provider sites are most needed in the Greater Toronto Area and efforts will be targeted to meet the demands of this region.

Service provider sites will be monitored to ensure that they are meeting minimum case volume requirements (see Box 2).

### Box 2. Minimum Case Volume Requirements

In addition to the service requirements detailed in Tables 1, 2 and 3, excellence in patient care requires clinical expertise achieved through ongoing practice. While evidence to support a minimum service volume for acute leukemia is not available, the National Institute for Health and Care Excellence 2016 guideline for *Hematologic cancers: improving outcomes* (NICE guideline [NG 47]) recommends:

*Haematology units that care for adults and young people who are receiving high-intensity chemotherapy should provide high-intensity (non-transplant) chemotherapy for induction or re-induction of remission to a minimum of 10 patients per year who have new or relapsed haematological malignancies and who are at risk of more than 7 days of neutropenia [with neutrophil counts] of 0.5×10$^9$/litre or lower.*

Sites providing the full scope of acute leukemia services in Ontario will be expected to follow a similar approach and ensure that sufficient case volumes are completed in order to maintain ongoing expertise and support good clinical outcomes. These volume requirements will undergo periodic review and may be adjusted as new relevant evidence becomes available.

# Accessing Acute Leukemia Services

## Goal

The diagnosis and treatment of acute leukemia is usually an emergency situation requiring accurate and timely care be available to patients. Strong referral and collaborative practices between hospitals and providers will facilitate the provision of these services.

## Current State

Traditionally when a patient presents with acute leukemia at a centre that does not have the capability to provide diagnostics and treatments, the treating clinician calls neighbouring service provider sites to identify a site which has the capacity to provide these services. Due to capacity constraints, clinicians may need to call multiple service provider sites.

To assist with the consultation and referral of acute leukemia cases in Ontario, Cancer Care Ontario has partnered with CritiCall Ontario[1] to enable immediate physician-to-physician consultation regarding the patient's care requirements. If necessary, referral to a hospital with the resources necessary to care for the patient can be facilitated using defined referral patterns. This process was developed to assist with capacity challenges and to ensure that patients receive timely access to specialized care at centres that have the required resources and expertise, regardless of geographic borders.

## Moving from Current State to Ideal State

As capacity is built to better meet regional and local demands, referral patterns will be simplified and standardized, with each acute leukemia services site having a defined catchment area for case referral.

CritiCall Ontario services will continue to be utilized in emergent situations.

[1]CritiCall Ontario is a 24-hour-a-day emergency consultation and referral service for hospital-based physicians in Ontario who are caring for urgent or emergently ill or injured patients. More information is available at CritiCall.org. CritiCall Ontario is funded by the Ministry of Health and Long-Term Care.

# The Importance of Networks

## Goal

The foundation of this Plan is the collaboration among different levels of service providers across regional and inter-regional groups in a "Network". Although portions of care along the acute leukemia care path will be received at multiple centres, all the centres will be connected and working together to ensure integrated care through Regional Networks and the larger Provincial Network.

There are many advantages to this structure. Capacity planning can be done at a broader level to meet the needs of the population served. Hospitals with highly specialized resources are clearly identified and the role of supporting service providers can be well understood. Patients with acute leukemia may require many of the same specialized resources that are required for HCT patients, and therefore service providers performing HCTs are also considered in Network implementation. Patient referral patterns can be established to ensure smooth and timely transitions between care settings and phases of treatment.

Hospitals and front-line providers, representing all of the service designations, previously described, must work together with internal and external colleagues to support patients with acute leukemia and their caregivers. Under this Plan, resources will be organized to ensure all patients, irrespective of where they live, have coordinated access to the expert care that meets their needs.

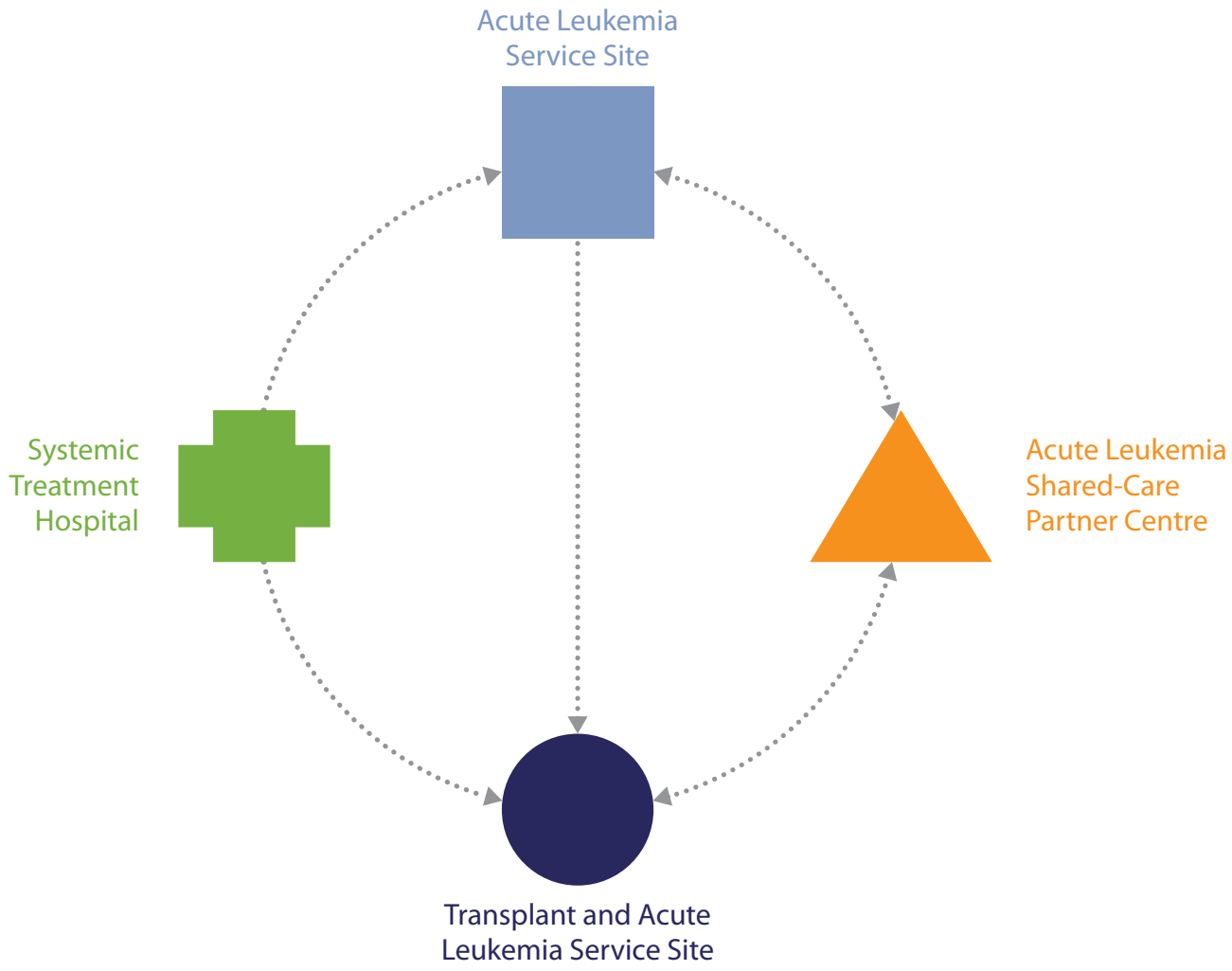
## Current State

Existing referral patterns and shared-care models vary across the province and have been built on historical relationships that have evolved over time. Although functioning well, there is room for improvement to ensure that all system components are well integrated so that patients will have access to standardized, effective and safe care, as close to home as possible.

## Moving from Current State to Ideal State

The variety of provider sites, models of care and supporting services currently available across the province to care for the acute leukemia patient population emphasizes the importance of strong, person-centred Networks for this group of patients. Integrated care will be accomplished through the formation of Regional Networks that collaborate to support the larger Provincial Network. Networks, with the support of Cancer Care Ontario, will work to ensure the implementation of this Plan. Regional Networks will allow patients to receive care closer to home where possible (see Figure 4).

**Figure 4: How service providers across the province are networked and support access to acute leukemia care.**




## How patients can move through the network

**Mary**
Receives acute leukemia care at an acute leukemia service site, then is referred to a transplant and acute leukemia service site

**George**
Receives acute leukemia care and a stem cell transplant at one site

**Daniel**
Referred from a systemic treatment hospital to an acute leukemia service site

**Sue**
Receives acute leukemia care through a shared-care model with a partner centre

# Supporting Care Closer to Home

## Goal

Following the initial phases of care, acute leukemia patients have ongoing needs which continue to be addressed by their expert clinical team. Frequent clinic visits for routine assessments and blood work can place a toll on patients and caregivers if they live far from the acute leukemia services site. While the most complex care will be centralized to certain hubs, care closer to home for less complex treatments and monitoring will be organized through the development of Regional Networks. The Regional Networks will ensure that the expert clinical team extends beyond the acute leukemia services site and is inclusive of experts at centres closer to the patient's home who can help to provide care, as appropriate.

## Current State

There are two models currently in place to help transfer less complex care closer to a patient's home: the Acute Leukemia Shared-Care Program; and Day 1 Transfer model for patients who have received an auto-HCT.

The *Acute Leukemia Shared-Care Program* was initially developed by the Princess Margaret Cancer Centre and Royal Victoria Regional Health Centre and has since expanded to include two additional centres (Southlake Regional Health Sciences Centre and Lakeridge Health). This Program allows patients, as appropriate, to receive part of their care at the Princess Margaret Cancer Centre and other parts of their care at a shared-care partner cancer centre closer to home. The Program's goal is to maintain the provision of high-quality care, while reducing the burden on the Princess Margaret's resources and reducing the travel pressures experienced by patients and their caregivers. Record-sharing and coordinated care between hospitals are key success factors for this model.

While allo-HCT is often required as part of treatment for acute leukemia patients, all post-HCT patients also have long-term follow-up care needs. For patients who have received an auto-HCT, there are opportunities to transfer their care from the transplant and acute leukemia services sites to a centre closer to home. Partner centres with the appropriate level of expertise can meet the recovery needs of these patients, relieve pressures on the more specialized transplant and acute leukemia service sites, and provide a better patient experience closer to home, where family and personal supports are stronger and reducing the need for ongoing travel. A number of centres across the province currently share the care of post-HCT patients through the Day 1 Transfer model. Through this model, a patient is transferred to a partner site closer to home immediately following auto-HCT, before they are too immunocompromised to travel. Work is currently being done to expand this model in Ontario as part of a comprehensive approach to CMH service delivery.

## Moving from Current State to Ideal State

Moving forward, the Shared-Care Program should be considered by other acute leukemia service sites, along with potential shared-care partner cancer centres and hospitals, as a method to meet the needs of patients within their Regional Network.

Further expansion of the Day 1 Transfer model should be considered to help meet growing capacity demands of this patient population.

# Models of Care

## Goal

A high-quality acute leukemia program ensures that patients have the right care from the right provider at the right time.

## Current State

The demand for CMH services has increased over time, resulting in a shortage of skilled health human resources and in-patient beds. Currently, models of care for CMH vary across the province in terms of staffing composition and service delivery setting.

The *Complex Malignant Hematology Models of Care: Recommendations for the Changes in the Roles and Composition of the Multidisciplinary Team and the Setting of Care to Improve Access for Patients in Ontario – March 2017* was developed to support implementation of the Acute Leukemia Provincial Plan (see Appendix B). The recommended models of care focus on optimizing two areas:

1 The roles within the multidisciplinary team (i.e., ensuring that care providers are working at the full scope of their practice across the care continuum); and

2 The use of care settings (i.e., shifting care for eligible patients from the resource-intensive in-patient setting to the lower resource-intensive out-patient setting).

These recommendations are based on literature review findings, as well as the lessons learned from sites in Ontario that have successfully introduced new roles and/or expanded the scope of practice for providers on their care teams and transitioned components of care to less resource-intensive settings.

Education is needed for patients and caregivers on urgent care management, and highly skilled specialized providers must be available to meet urgent needs. Capacity and services must be expanded (e.g., protecting "flexible beds" and extending hours of operations) to accommodate patient surges and after-hours care. Record-sharing and access to electronic medical records across sites are needed for multidisciplinary teams and Networks to work well together.

## Moving from Current State to Ideal State

A multi-pronged approach will be undertaken to provide the resources and infrastructure to support new models of care. This will include:

- The development and use of a Models of Care tool by service sites to assist with implementing the Models of Care Recommendations for the optimization of care delivery;
- Capacity and service expansion to accommodate the needs of this patient population; and
- The development and implementation of medical record sharing strategies.

The Plan will drive local, Regional Network and provincial activities needed to make these changes.

# Pathology and Laboratory Medicine

## Goal

As a driver of patient care, pathology and laboratory medicine services for leukemia patients, including diagnosis, treatment monitoring and follow-up, will be standardized.

## Current State

Challenges exist as the demand for laboratory services continue to increase with the growing number of biomarkers, evolving test methodologies and the increasing need for complex studies. Diagnostic workup of patients utilizes varied platforms and technologies, and appropriate turn-around-times for key diagnostic and prognostic markers are critical to ensure timely decision-making in clinical care. Planning for service delivery must address all of these issues.

Best practice recommendations developed in 2016 (see Appendix C) will support this plan. The *Consensus Pathology Recommendations for Complex Malignant Hematology* provide the direction needed for standardization of laboratory services for diagnosis, treatment and follow-up of patients with AML, ALL, myelodysplastic syndromes (MDS), high-grade lymphoma (HGL) and aplastic anemia (AA). These recommendations provide guidance for the classification, diagnostic work-up, turn-around-time and minimal residual disease testing for leukemia patients.

## Moving from Current State to Ideal State

To support the implementation of these recommendations, testing networks will be developed to ensure patients receive the requisite testing within the stated timelines and that results are accessible for clinical decision-making and patient management. More work is needed to identify the system impact and barriers or system gaps (e.g., funding) that may influence adoption of these recommendations.

# Evidence-Informed Best Practices to Support Best Outcomes

## Goal

CMH is an evolving area of clinical care. Health human resources planning and diagnostic and treatment protocols must be innovative and evidence-informed. Standardized clinical care practices across Ontario should exist.

## Current State

Several mechanisms currently exist to support sharing of best practices among frontline providers involved in acute leukemia care. Tools currently in place include:

- Collaborative online space with resources for healthcare providers;
- LISTSERV (an application that distributes messages to subscribers on an electronic mailing list) for providers to ask questions of each other; and
- The Sharing Best Practices for Acute Leukemia webinar series. This webinar series was launched in May 2016; to date, six webinars have been held which have been attended by over 90 regional participants and have been well received. This webinar series has helped to educate attendees about a variety of clinical topics in which attendees previously expressed an interest. The webinars have also been a forum for the building of relationships between clinicians and centres.

## Moving from Current State to Ideal State

Moving forward, these tools will continue to be made available to providers and will be adapted to accommodate changing needs. Work will be done to ensure acute leukemia service providers from across the province have access to these tools.

Other initiatives to support the implementation of best practices will include the development of communities of practice, funding models that support quality care, and a measurement strategy. These initiatives are further detailed below.

# Communities of Practice

## Goal

Provide a forum to bring service providers (clinicians, allied health professionals and administrators) together to discuss both current practice and emerging evidence in order to standardize care, and implement best practices.

## Current State

Communities of practice specific to acute leukemia related topics are not in place.

## Moving from Current State to Ideal State

To advance the development and implementation of best practices, communities of practice for acute leukemia will be formed. Focus areas may include guideline development, best practice implementation and other topics. This work will evolve over time and will be driven by the needs of service providers.

**"This is a Plan whose time has come. By collaborating together and maximizing all resources and skills available through this Plan, it would be my sincerest desire that clinicians know even greater successes in patient outcomes with manageable workloads leading to increased professional satisfaction and quality of life."**

– Lianne D, Cancer Care Ontario, Patient and Family Advisor

# Funding Models that Support Quality Care

## Goal

Supporting the delivery of care that reflects best practices requires adequate resources, including funding.

## Current State

Systemic treatment in Ontario is supported through several funding mechanisms:

- The *Systemic Treatment Quality Based Procedure (ST-QBP)* supports out-patient care and is based on evidence-informed practice and has been developed in consultation with stakeholders, including clinical experts and administrative leaders from across the province.
- The *New Drug Funding Program* and *Evidence Building Program* are publicly funded drug programs under the Ontario Public Drug Programs, administered by Cancer Care Ontario. These programs reimburse hospitals and cancer centres for newer, and often very expensive, injectable cancer drugs used in accordance with established funding criteria. While the New Drug Funding Program funds drugs with strong evidence of clinical benefit and cost-effectiveness, the Evidence Building Program is designed to resolve uncertainty where there is emerging or evolving data related to the expansion of cancer drug coverage in Ontario.
- The *Case-by-Case Review Program* considers funding requests for oral and injectable cancer drugs for cancer patients who have rare clinical circumstances that are immediately life threatening, and who require treatment with an unfunded drug because there is no other satisfactory funded treatment.

HCT had been funded incrementally since 2008/09. In 2016/17, Cancer Care Ontario implemented a new HCT funding model that is better aligned with activity and costs across the continuum of care.

## Moving from Current State to Ideal State

Work is in progress to implement a new funding model for the delivery of acute leukemia services. This model was developed using a similar approach to the development of the HCT funding model. The new acute leukemia funding model will be aligned with other funding models, and will support and facilitate the provision of care as close to home as possible.

Funding models will be reviewed and updated as appropriate, based on the mandate of the Ministry of Health and Long-Term Care.

## Measurement and Accountability

### Goal

A strong measurement approach is instrumental to the success of the Plan and ensuring the best possible patient outcomes. Success should be measured against baseline status and other jurisdictions.

### Current State

Cancer Care Ontario, in collaboration with the Ministry of Health and Long-Term Care and regional partners, has assessed the current incidence of this patient population and volumes of service delivery to inform future volume projections and the development of capacity models.

The HCT-CMH Consultation Group, led by the Ministry of Health and Long-Term Care, has developed a list of pivotal key indicators for measuring the status of CMH service delivery.

### Moving from Current State to Ideal State

Pivotal key performance and quality of care indicators will be implemented to assess performance at the system and hospital levels, and to measure patient outcomes. This will ensure that patients have timely access to person-centred care with the best possible outcomes. Measures such as survival, during and after acute leukemia treatment, and wait times for treatment will be clearly articulated and monitored. This measurement strategy will report Patient Reported Experience Measures tailored for this population. Appropriate benchmarking will demonstrate how Ontario compares to other jurisdictions. Where challenges are found, improvement strategies will be undertaken. Where success is demonstrated, learnings will be shared with others.

# Moving Forward

The Acute Leukemia Provincial Plan lays out a comprehensive strategy for the organization and delivery of care for adult acute leukemia patients in Ontario. This Plan will support high-quality care, as close to home as possible, through a networked, evidence-informed and person-centred approach. Strong Networks will ensure standardized, high-quality care and provide the infrastructure needed to advance clinical practice as new evidence emerges. Implementation of the Plan will be monitored and it will evolve over time to ensure patients in Ontario have the best care, resulting in the best possible outcomes.

More information is available on our website at **www.cancercare.on.ca/ocs/clinicalprogs/acute_leukemia/.**

# Appendix

**Appendix A** – Patient Education Pathway for Acute Myeloid Leukemia

**Appendix B** - Complex Malignant Hematology Models of Care: Recommendations for Changes in the Roles and Composition of the Multidisciplinary Team and the Setting of Care to Improve Access for Patients in Ontario – March 2017

**Appendix C** - Consensus Pathology Recommendations for Complex Malignant Hematology – December 2016

Appendices are available on our website at **www.cancercare.on.ca/ocs/clinicalprogs/acute_leukemia/.**

**Need this information in an accessible format?**
1-855-460-2647, TTY (416)217-1815,
publicaffairs@cancercare.on.ca