We are pleased to present the 2019 Princess Margaret Cancer Centre Strategy, *Future Care Now: Create Cancer Care-2030*, which outlines the foundational essentials and new strategic priorities that will guide our efforts to achieve impact as one of the top comprehensive cancer centres in the world. Our new priorities are grounded in co-creating exceptional care experiences for patients and providers, continuing our commitment to excellence in education, and accelerating progress in discovery.

Throughout the planning process, we sought to strike a balance between aspirational goals that will shape the future of care while remaining steadfast in advancing core essentials that enable and enhance our work. Our strategy is aligned with the University Health Network’s 2019-23 Strategic Plan, the Princess Margaret Cancer Foundation Strategy, the University of Toronto Faculty of Medicine 2018 - 2023 Academic Strategic Plan, and the Ontario Cancer Plan.

This strategy represents significant contributions from patients, families and staff across the Princess Margaret and University Health Network who together will enable our vision for *Future Care Now*.
The Princess Margaret Cancer Centre at the University Health Network is the largest comprehensive cancer centre in Canada and aims to be one of the top five cancer centres in the world. Our achievements and contributions are made possible by the dedication and talent of our people. Working collaboratively with the University of Toronto and The Princess Margaret Cancer Foundation, we drive cancer discovery, fuel advancements in cancer care, and share innovations globally.

*Source: Princess Margaret Cancer Centre Annual Report, 2018*
THE CANCER LANDSCAPE

THE CANCER CONTEXT

Nearly 1 in 2 Canadians are expected to be diagnosed with cancer in their lifetime and approximately 1 in 4 Canadians are expected to die from cancer. With population growth, aging, and improved life expectancy, the incidence and prevalence of cancer are expected to rise. Despite the transformational progress made in cancer care in the last 20 years, innovative solutions must be explored to reduce the burden of cancer on healthcare systems and individuals, improve patient care and experiences, and push the boundaries of science and innovation.

KEY DRIVERS FOR CHANGE

As we acknowledge the progress that has been made, we recognize a continued focus on advancing cancer care is critical to improving outcomes. Keys drivers for change include:

- **AGILITY**: Nimble and able to adapt to the changing context and environment.
- **TEAMWORK**: Capitalizing on diverse perspectives, collaborative mindsets, and collective intelligence.
- **INTEGRATION**: Convergence of clinical care, education, and research.
- **GLOBAL CONNECTIVITY**: Providing a gateway for knowledge transfer and advancement on a broad scale.
- **OPEN SCIENCE**: Creating new pathways to collaboration through the democratization of knowledge.
- **INGENUITY & INNOVATION**: Unlocking our future potential through the relentless pursuit of “why”.

Helen Amenta, Cancer Survivor and Volunteer

If you’ve walked the hallways of Princess Margaret Cancer Centre, chances are you have likely seen Helen Amenta in her burgundy volunteer vest chatting with patients.

Helen is a breast cancer and Hodgkin’s lymphoma survivor. After struggling with her diagnosis, she decided she was going to face it head-on. She volunteered with the “Healing Beyond the Body” program which connects specially trained volunteers with cancer patients and their supporters. Helen says she helps to comfort patients and understands all too well the anxiety and stress many people feel.

Her experience as a volunteer has been a catalyst for her own mental wellbeing and a way to give back. “The volunteer work I do is satisfying because I help patients who are experiencing anxiety. I let them know I’ve been there,” says Helen. “People need to know that you can live with cancer for a long time and you can have a pretty normal life.”
STRATEGY AT A GLANCE

VISION - Future Care Now

ESSENTIALS

The UHN Essentials represent our central responsibilities and core commitments to deliver excellence in care, discovery and learning.

- COMPASSIONATE CARE AND CARING
- PEOPLE AND CULTURE
- ENVIRONMENTS
- QUALITY AND SAFETY
- OPERATIONAL EXCELLENCE
- PARTNERSHIPS
- TECHNOLOGY

NEW STRATEGIC PRIORITIES

Our new strategic priorities will guide our focus and investments in the growing cancer program. Our goals and objectives will be achieved over a number of horizons - some setting the foundation for growth and potential, and others pushing the boundaries of what is possible.

- SHAPE THE FUTURE OF CANCER CARE
- ADVANCE CANCER CONTROL LOCALLY AND GLOBALLY
- HARNESS THE POTENTIAL OF DATA SCIENCE
- DRIVE CANCER DISCOVERY
- SUPPORT AND CHAMPION THE NEEDS OF PEOPLE AFFECTED BY CANCER
SHAPE THE FUTURE OF CANCER CARE

Cancer care delivery is highly complex and proactively assessing changes in the healthcare landscape is paramount to providing the care of tomorrow, today. Enabling future care now means challenging traditional models of care to create space for new possibilities. For patients, this means access to state-of-the-art care in the right way, time and place. For providers, this means access to a sophisticated tool box of options that allows them to deliver the best possible care.

BUILD THE CANCER TEAM OF TOMORROW

Effectively navigating the complexities of cancer care requires nimble, high-performing teams who embrace new approaches to care, maximize quality and value, and effectively partner with patients and families.

- **Redefine the cancer team.** Investigate novel models of team composition that leverage the strengths of inter-professional collaboration to optimize and evolve care.

- **Empower and activate patients and families.** Together with patients and families, implement new approaches to care that enhance engagement, quality, efficiency and outcomes.

FLIP THE CLINIC

The future of care requires innovative solutions to manage increasing volumes while optimizing outcomes and improving the patient experience. Our aim is to “flip the clinic” through collectively designing, evaluating, and operationalizing new approaches to care.

- **Reconstruct care around the patient.** Reimagine new approaches to care to improve integration, coordination and efficiency across departments, professions and external partners.

- **Leverage digital platforms and tools to extend care beyond our walls.** Adopt, adapt and develop novel technologies and methods to enable dynamic connectivity and customize care based on patient preferences and clinical requirements.

ENHANCE QUALITY AND VALUE IN CANCER CARE

Continually improving in all domains of quality - safe, timely, effective, efficient, equitable, and patient centered - and enhancing the value of care are critical to improve outcomes and create space for innovation.

- **Advance the practice and science of quality.** Build evidence to inform quality improvement strategies and engage patients and providers in local and system wide quality initiatives.

- **Maximize value through measuring outcomes.** Measure outcomes, assess efficiency, and develop interventions to improve value for patients, providers, communities and the broader system.

EVOLVE CARE THROUGH EXCELLENCE IN EDUCATION

Innovation in education can enable solutions for the challenges we face today and create new possibilities for the future.

- **Enhance our education and knowledge mobilization capabilities.** Leverage new platforms for teaching and learning, enable team-based learning, and accelerate the translation and adoption of knowledge.

- **Drive innovation in education.** Investigate and apply novel approaches for teaching and learning that support nimble teams, enhance capacity, maximize value, and integrate new advances into care.

ADVANCE CANCER CONTROL LOCALLY AND GLOBALLY

The Princess Margaret is well positioned to affect broad scale change that heightens cancer as a priority for action. We endeavor to leverage the breadth and depth of our expertise to establish strategic partnerships with healthcare organizations, governmental agencies and industry to revolutionize how cancer care is organized, delivered and funded.

PARTNER WITH COMMUNITY HOSPITALS AND PRIMARY CARE PROVIDERS TO BUILD CAPACITY AND ENHANCE QUALITY

Collaborating with regional and local partners to meet the needs of the patient populations we serve will allow us to enhance the quality of care beyond our walls while expanding our capacity to pursue innovation.

- **Collaborate with health system partners.** Enable bi-directional learning, enhance equity, facilitate continuity of care and better meet the needs of communities.

- **Enhance internal and external efficiency and coordination.** Optimize entry and exit points to and from the Centre, improve access to expertise for complex and rare cancers, and increase access to clinical trials.

ENGAGE WITH GOVERNMENT, INDUSTRY AND HEALTH SYSTEM PARTNERS

The organization, delivery and funding of cancer care can be enhanced through strategic partnerships with government, industry and health system partners all working together towards a shared objective.

- **Advocate for cancer research funding and co-develop health policy and funding models.** Enhance the adoption of new evidence to inform provincial and national cancer priorities.

- **Develop strategic alliances with industry partners.** Develop, test, and apply new technologies; leverage the Princess Margaret and UHN as prime testing ground for homegrown and external discoveries.
INNOVATE AND LEAD IN GLOBAL CANCER CONTROL EFFORTS

Joining efforts to meet the global challenges in cancer through international partnerships and collaborations can accelerate progress in clinical care, education and research.

■ Expand our global cancer strategy. Systematize and support global health activities, build academic expertise in global cancer control, and grow our reputation as an international centre of excellence in global health.

■ Extend our global network of partners, collaborators and alumni. Continue to enhance and expand our global partnerships to build capacity, collaborate academically, foster innovation, and support advocacy.
HARNESS THE POTENTIAL OF DATA SCIENCE

Cancer care is moving towards increasing adoption of artificial intelligence (AI) and deep machine learning resulting in a future where patients, providers and systems will harmoniously interact and data will continue to grow exponentially. Investing in data science will enable us to be at the forefront of inventing and applying novel analytical approaches and predictive models that hold the promise of transforming care, education and research.

ESTABLISH DATA SCIENCE INFRASTRUCTURE AND CAPABILITIES

We will develop a global data governance framework, recruit specialized expertise and build advanced technological infrastructure.

- Establish the Cancer Data Science Program. Bring together a core of experts to steward, steer and implement our data strategy.

- Inform the development of a UHN data governance framework. Maximize utilization and learning from our data assets while safeguarding privacy and ensuring accountability.

- Establish infrastructure and foundational capabilities. Enable real time knowledge transfer through processes and scalable platforms for curating, annotating and stewarding high quality and semantically rich data.

ACTUALIZE THE POTENTIAL OF DATA SCIENCE TO TRANSFORM CANCER CARE TODAY

We will derive meaningful insights from our rich data sources to optimize operations, inform care, fuel new research and enhance learning.

- Enhance care through automation and predictive analysis. Measure and predict outcomes, identify targeted therapies, monitor treatment response, and prevent toxicities.

- Optimize efficiency and business intelligence capabilities. Optimize operations, increase efficiency and improve the patient and provider experience.

- Increase the usability of clinical data for laboratory research. Enable new avenues for discovery through intertwining clinical and research databases; accelerate translational research.
ACHIEVE TRANSFORMATIONAL DISCOVERIES THAT WILL SHAPE THE FUTURE OF CARE

We will drive discovery through computational approaches that deepen our understanding of cancer and unveil novel cancer vulnerabilities.

- **Accelerate the application of new discoveries in the real world.** Establish a lab for applied data science to explore uncharted approaches to test safety, assess interoperability and explore regulatory requirements.

- **Exploit AI to uncover previously undetectable trends.** Uncover unforeseen linkages by integrating diverse data sources to enhance the prevention, detection, diagnosis and treatment of cancer.

- **Collaborate and partner with AI leaders.** Collaborate with leading AI research institutes to apply cutting-edge machine learning approaches to complex data.

MAXIMIZE THE POTENTIAL OF DATA SCIENCE THROUGH EDUCATION AND KNOWLEDGE TRANSLATION

New approaches to patient, provider and trainee education will be required to effectively apply new technologies to practice.

- **Enrich provider and trainee education.** Equip cancer professionals with the skills required to thrive in a rapidly changing healthcare environment.

- **Enhance patient education and engagement.** Leverage data-driven tools for patient education and engagement, and evaluate their impact on patient and provider experiences.

- **Facilitate collaboration and knowledge transfer between cancer and data science experts.** Explore education opportunities that enable bi-directional learning between cancer and data science experts.
The Princess Margaret is home to researchers who have pioneered breakthroughs and innovations driven by intellectual curiosity and the relentless pursuit of knowledge. We will continue to invest in our scientists to spark creativity and accelerate discovery.

ADVANCE CANCER CARE THROUGH BEST-IN-CLASS DISCOVERY RESEARCH

Enabling fundamental discoveries and advancements in our discovery research laboratories are critical to fueling tomorrow’s breakthroughs and ensuring that our translational and clinical research continues to be cutting-edge.

- **Achieve transformational discoveries.** Enhance our research structures to leverage the strengths of our established research programs and support the development of nascent programs.

- **Leverage our shared platforms to derive new insights.** Invent and adopt new technologies, tools and equipment to evolve our shared resources and platforms and accelerate the progression of ideas from conception to breakthroughs.

EXPAND OUR CAPABILITIES IN CLINICAL AND TRANSITIONAL RESEARCH

The Princess Margaret is uniquely positioned as the only Canadian site capable of supporting robust clinical research programs that include diverse trials and cutting-edge therapeutics.

- **Evolve our clinical research programs to develop the therapeutics of tomorrow.** Be at the forefront of developing novel interventions and technologies that push the boundaries of personalized medicine and accelerate the translation of discoveries to the clinic.

- **Advance the quality, safety and efficiency of clinical research.** Expand our capabilities in clinical research through novel quality initiatives that leverage digital technology to drive efficiency.
MAXIMIZE THE CONVERGENCE OF RESEARCH, EDUCATION AND CLINICAL CARE

Achieving significant progress in cancer care requires integration and collaboration amongst experts in the full spectrum of research, education and clinical care.

- **Partner with patients to drive cancer discovery.** Engage patients and families to inform the design, execution and interpretation of our research; explore opportunities to learn with and from every patient.

- **Integrate research with clinical care and education.** Breakdown silos through collaborations in research, clinical care and education that will ultimately inform and accelerate the adoption of research discoveries.

- **Educate the next generation of research leaders.** Enhance mentorship for junior researchers to develop the skills required to engage in research, knowledge translation and commercialization.
SUPPORT AND CHAMPION THE NEEDS OF PEOPLE AFFECTED BY CANCER

The Princess Margaret has a critical role in maintaining and improving the health of people affected by cancer during the course of their disease and treatment. To realize future care now, the full spectrum of patient and family needs must be seamlessly integrated into the cancer care continuum - from diagnosis to end-of-life and bereavement.

ENHANCE SUPPORTIVE CARE FOR PEOPLE AFFECTED BY CANCER

A cancer diagnosis can have significant physical, emotional, psychological, social and spiritual effects on patients and families. We aim to mobilize patients, families, health experts, and organizations to alleviate the far-reaching effects of cancer on individuals and communities.

- **Treat the whole person and family.** Enhance and expand programs and partnerships in psychosocial oncology, palliative care, survivorship and rehabilitation.

- **Generate new evidence to elevate the value of supportive care.** Develop and evaluate new models of care that establish standards of high quality supportive care, enhance integration across disciplines and professions, and inform health care policy.

- **Build capacity and expertise through inter-professional education.** Enhance inter-professional education that targets provider competencies and increases awareness of supportive care programs.

- **Champion the needs of underserved populations.** Develop programs that improve our ability to address the informational and supportive care needs of underserved populations and patients with high needs.
ENHANCE THE QUALITY OF PATIENT EXPERIENCES ACROSS THE CONTINUUM OF CARE

To realize future care now, we must elevate the importance of positive experiences in all care settings and interactions. This includes respect, compassion, partnership, and safe environments. We aim to uphold excellence in service for every interaction and respect each patient’s personal preferences and values.

- **Implement a cancer centre-wide plan to enhance the patient experience.** Together with patients and families, implement practices that foster a culture of service and compassion and are inclusive of diverse ideas and views.

- **Enhance patient experiences at the point-of-care.** Enhance provider competencies in communication to foster empathy and trust, and support the development of supportive and therapeutic patient-provider relationships.
FUTURE CARE NOW

Students and trainees identify the Princess Margaret as the training destination of choice where they can access enriching learning opportunities that prepare them to be the leaders of tomorrow.

Patients and families receive best-in-class, compassionate care that meets their full spectrum of needs from diagnosis to end-of-life and bereavement.

Health professionals and researchers work in a centre that is home to cutting edge tools and exceptional talent, and supports their well-being.

Academic and clinical partners value our partnership and believe that together our work is elevated and more impactful locally and globally.

Government and system level partners recognize the value of collaborating with us as a critical component of ensuring value in investments in health and achieving better outcomes for all Canadians.

Donors and supporters invest in the Princess Margaret because they see the exceptional impact of their generosity at home and across our global network.

LOOKING AHEAD

This plan outlines the strategic priorities that we will pursue as part of a long-term strategy. Our objectives will be achieved over a number of horizons - some setting the foundation for growth, and others pushing the boundaries of innovation. We recognize that our success will depend on flexibility in implementation and our priorities will be adapted to take into account emerging issues, our resources and talent pool.
ACKNOWLEDGEMENTS

This plan was developed through extensive consultation with and significant contributions from patients, families and staff across the Princess Margaret and UHN who together will enable our vision for Future Care Now.