



University Health Network

Strategic Directions 2011:



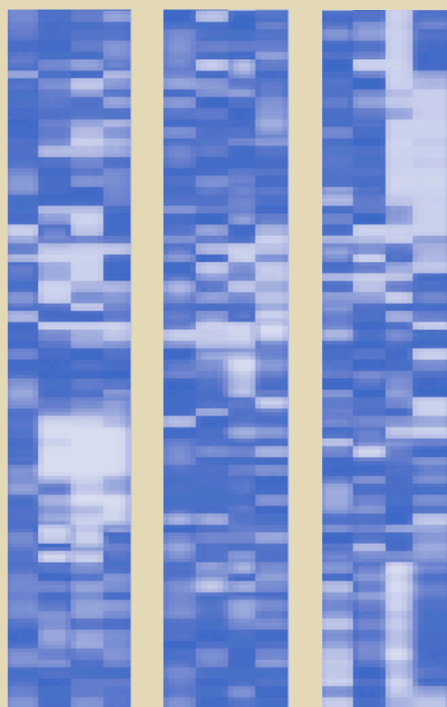
Exemplary Patient Care
and Global Impact

Toronto General Hospital

Toronto Western Hospital

Princess Margaret Hospital

This is a cluster analysis of gene expression (as determined in microarrays) in three human cancer cell lines including hepatoma, colorectal carcinoma, and cervical carcinoma.



Stem cells to repair damaged organs, internet monitored medication, fully integrated care from diagnosis to rehabilitation, global patients served electronically, real-time research results applied at the bedside, globally broadcast teaching rounds – it will all be second nature. Welcome to the future, where health care will be a different place indeed.

In order to set the context for growth and development over the next decade, UHN has consulted widely with experts, both internal and external, and created this strategic directions document. UHN Strategic Directions 2011 outlines the major trends in health care, establishes ten strategies in five major areas of concentration, introduces seven comprehensive program groupings and declares four priority technologies.

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UHN Vision

Achieving global impact.

Mission

Exemplary patient care, research and education.

Values

Caring

Excellence

Teamwork

Innovation

Integrity

Leadership

Preamble

“We wanted to be able to identify those initiatives which would allow us to place ourselves in the future in the best position possible for patients, education and research.”

Tom Closson,
CEO

The purpose of this document is to answer a single question: How should UHN position itself for the changes we expect over the next 10 years so that we can achieve global impact?

The process of finding an answer began in November 2000 and included five major steps:

- Using task forces to do analysis and develop recommendations related to the most significant trends in health care that will affect UHN.
- Deciding on Program Groupings to focus UHN's clinical activities and link them to research and education.
- Re-defining UHN's Vision.
- Incorporating UHN's Information Management Strategy and Project 2003 already in progress.
- Synthesizing these into UHN Strategic Directions 2011: Exemplary Patient Care and Global Impact.

The first part of this document sets the stage: where we are and where we are going. We start with drawing a big picture that includes global health care trends and a short list of our key strategies for the future (The Big Picture: A Summary). Pulling the focus closer, we set out where we are today (The Starting Point), our goals for the next five years (Timelines and Targets), and then where we hope to be in ten years (Comparison 2001:2011).

The second part of Strategic Directions 2011 looks at our future in greater detail. It describes the Trends and Challenges that face us and delves into how we intend to achieve global impact over the next decade.

We've divided the discussion into the five areas of concentration that are the foundation of UHN: Our Patients, Our Team, Capital, Information, and Funding.

We have also taken some time in the final pages to explain our Program Groupings and four Priority Technologies.

This document is intended to help navigate trends, set general directions and plan for the years ahead.

This is not a static piece, nor the result of a one-time planning initiative. We will be monitoring our progress by the benchmarks we set out here and we will be re-shaping our strategies to keep pace with ongoing developments.

The Big Picture: A Summary

What's Happening...

12 Big Trends

- Globalization
- More ethnically diverse patients
- Aging population
- Self-care and complementary medicine
- Internet in health care (patients and providers)
- Genetics revolution
- Advances in imaging technology and medicine
- Evidence-based practice
- Greater accountability
- Difficulty attracting and retaining skilled staff
- Evolving sources of health care funding
- Health services integration

University Health Network (UHN) Response...

7 Program Groupings

- Advanced Medicine & Surgery
- Community & Population Health
- Heart & Circulation
- Musculoskeletal Health & Arthritis
- Neural & Sensory Sciences
- Oncology & Blood Disorders
- Transplantation

4 Priority Technologies

- Genomics/Proteomics and Patients
- Clinical Informatics
- Regenerative Medicine
- Advanced Clinical Technologies

"Major changes are required to ensure the continued viability and sustainability of the Canadian health care system and as a leading academic health sciences centre, the University Health Network is well positioned to take a leadership role."

Tony Fell,
Chair of the Board of Trustees

UHN Plans...

10 Future Strategies

- Address the health needs of target populations
- Provide a supportive patient experience
- Provide leadership in research and patient outcomes
- Become the workplace of choice for employees, medical staff, students and volunteers
- Be an internationally leading educator of health professionals
- Create well-designed space and obtain leading-edge equipment for patients and staff
- Obtain space and equipment that support research and education growth
- Develop information systems that support clinical practice, research and education
- Attain world leadership in performance measurement and clinical improvement
- Generate dramatically increasing revenues to enable clinical, educational and research programs to flourish



"You can't stand still. You can expect that the world is going to change, so you need to be changing yourself in order to thrive and survive."

Tom Closson,
CEO

Starting Point 2001

The cornerstone for Strategic Directions 2011 rests firmly in the rich traditions, heritage, and culture of UHN's component parts that have come together during recent years. This history has seen the Toronto Hospital – including two of Toronto's oldest and finest hospitals, the Toronto General and Toronto Western – amalgamate with Canada's premier cancer centre, Princess Margaret Hospital in 1998. This was soon followed by the transfer of important community programs and services from the former Doctors Hospital to Toronto Western Hospital.

In April 1999, the organization officially changed its name to University Health Network. Now, Toronto General Hospital, Toronto Western Hospital and Princess Margaret Hospital operate under this umbrella and receive excellent support from three foundations (Toronto General & Western Hospital Foundation, The Princess Margaret Foundation and the Arthritis & Autoimmunity Research Foundation).

Summary of Research Funding 2000/2001

Program Grouping	Total Research Funding (\$Million)
Advanced Medicine & Surgery	\$8.7
Community & Population Health	\$2.6
Heart & Circulation	\$7.9
Musculoskeletal Health & Arthritis	\$6.6
Neural & Sensory Science	\$14.1
Oncology & Blood Disorders	\$35.4
Transplantation	\$3.5
Miscellaneous	\$24.0
TOTAL	\$102.8

Volume of Patient Services at UHN 2000/2001

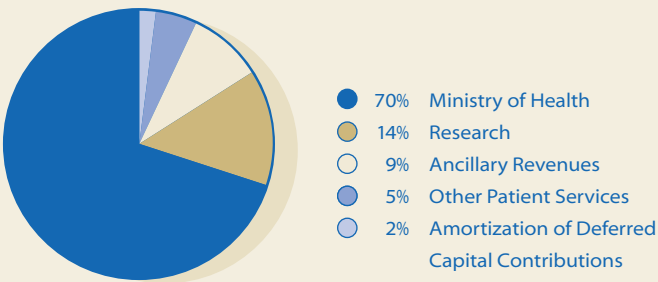
Program Grouping	Inpatient & Day Surgery Cases	Outpatient Visits
Advanced Medicine & Surgery	5,419	174,569
Community & Population Health	15,498	203,108
Heart & Circulation	11,732	51,030
Musculoskeletal Health & Arthritis	4,424	84,793
Neural & Sensory Science	8,333	89,475
Oncology & Blood Disorders	9,855	158,266
Transplantation	952	9,056
TOTAL	56,213	770,297



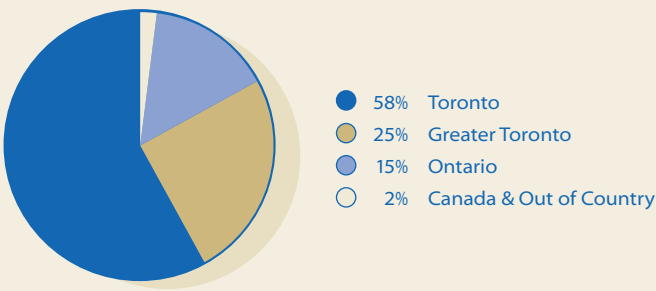
**Key current statistics
are as follows:**

- There are 910 beds at UHN and almost 800,000 outpatient visits a year
- UHN spends approximately \$100 million annually on research
- There are 34 endowed research chairs
- UHN trains nearly 3,000 future health care professionals per year
- The three hospitals employ close to 10,000 people
- 520 full-time physicians practice at UHN
- 1,200 volunteers give 92,000 hours of time each year to UHN
- There are 135 full-time national and international clinical fellows per year
- UHN buildings consist of 4.5 million square feet
- UHN has approximately 400,000 square feet of research space
- UHN's 3 Foundations raise approximately \$57 million per year
- Intellectual Property achieves revenues of approximately \$200,000 per year and has a valuation of approximately \$1.5 million
- The total UHN revenues are approximately \$766 million per year

Revenue by Type
Total Revenue \$766,103,000 for 2000/2001



Patient Origin 2000/2001



UHN Timeline and Targets

2002

- Staff Satisfaction scores move from below average to average
- Clinical activity targets for program elements established
- 10 year master facility plan completed

2003

- Patient Satisfaction scores move from below average to average
- UHN Physicians in Alternative Funding Plans
- 250,000 square feet of research space added
- New Clinical Services Building opened at TGH
- UHN offers national clinical telemedicine
- Major components of patient record available electronically

2004

- UHN a preferred place to work and learn -- Staff Satisfaction scores above average
- Urquhart Wing at TGH renovated
- East Wing rebuilt at TWH
- Patient Appointment Scheduling System implemented

2005

- Patient Satisfaction Scores move from average to above average
- UHN offers global clinical telemedicine
- UHN virtually paperless
- Hospital information technology linked with other providers and agencies

2006

- Full-time national and international clinical fellows almost doubled to 250
- Funding commitments for 90 endowed research chairs
- Clinical activity targets achieved
- UHN established as a world leader in performance measurement
- UHN spends approximately \$170 million per annum on research
- Foundations reach campaign goal of \$400 million (2001 to 2006)
- Intellectual property achieves cumulative revenue and valuation of \$20 million

*"We need to decide where
we want to make our mark."*

Dr. Richard Reznick,
Vice President, Education

*"UHN is the largest
academic health science
centre in the country
and one of the largest in
North America and
therefore it has to
demonstrate leadership."*

Dr. Peggy Leatt,
Liberty Health Chair in Health
Management Strategies, U of T

Comparison 2001 to 2011

2001

Patient satisfaction
below average

Staff satisfaction
below average

UHN spends approximately \$100
million annually on research

There are 34 endowed
research chairs

UHN has 400,000 square feet of
research space

There are 135 full-time national
and international clinical fellows
per year

Many buildings are old and
poorly designed

Foundation fundraising almost
\$57 million per year

Intellectual property revenues
approximately \$200,000 per year
and valuation of approximately
\$ 1.5 million

UHN total revenues are
\$766 million per year

2011

**Patient satisfaction
above average**

**Staff satisfaction
above average**

**UHN spends \$240 million
annually on research**

**There is committed
funding for 150 endowed
research chairs**

**UHN research space reaches
800,000 square feet**

**There are 350 full-time
national and international
clinical fellows per year**

**All UHN buildings are
replaced or renovated**

**Foundation fundraising
reaches \$100 million
per year**

**Intellectual property
achieves cumulative
revenues and valuation of
\$40 million**

**UHN total revenues reach
\$1.4 billion per year**

Our Patients

"We must always offer the best care possible to patients."

UHN Staff

"Better healthcare requires better knowledge of the causes of disease, the progression of disease and the response of disease to intervention."

Research drives new knowledge."

Dr. Christopher Paige
Vice President, Research

Patients are at the centre of everything we do. Whether it is exemplary research, education, keeping and attracting the best staff, erecting new buildings, or implementing e-charts – the focus is a constant one: patient care. UHN has a proud history of great outcomes and medical firsts. These traditions must continue as we follow our vision of achieving global impact. Organizing and focusing clinical activity growth within program groupings will help as will emphasizing investment in priority technologies.

Trends & Challenges

There are two major trends that will profoundly affect how patients are cared for:

- The new patient
- Health services integration

The first, and most critical shift that is taking place is in patients themselves. Patients are expecting more. They need more information about what is ailing them and the road to recovery. They now, understandably, want to have a prominent role in medical decision making. In addition to increased involvement and understanding about traditional healthcare, they also often incorporate complementary medicine into their own care programs.

In addition, the population served by UHN is aging and there is growing cultural, linguistic and ethnic diversity.

At the same time, patients are also becoming more medically literate. Health care consumers are increasingly turning to the Internet as a resource for health information. People look online for information about diseases, prevention and cures, nutrition, prescription drugs, exercise, support groups and unconventional therapies.

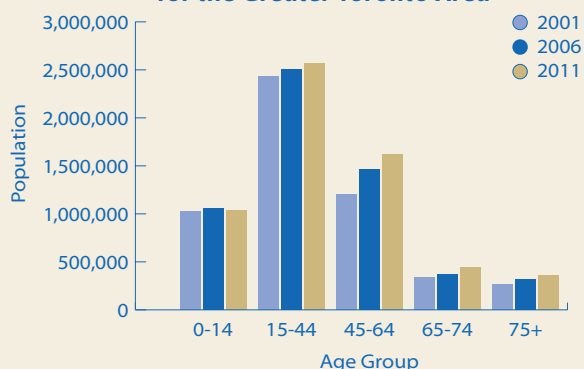
Ultimately, patients are more pro-active about their care. They demand more knowledge, more communication and better care – and they don't want to wait too long for it.

The second trend is health services integration, which refers to the move toward greater coordination of care between hospitals, long-term care, rehabilitation, family physicians, and community services. "You can access

UHN Program in eHealth Innovation Internet Survey
(n=1,070 patients)

- 54% Patients using the Internet
- 37% Patients retrieving health information from the Internet
- 18% Patients sharing health information from the Internet with health professional

Projected Growth by Age Group for the Greater Toronto Area



“We are already serving a mini-model of the world here. If we serve effectively the global community of Toronto, we will be learning lessons that could improve healthcare around the world.”

Dr. Alex Jadad
Director e-Health Innovation

your bank account from anywhere in the world,” says the Chair of the Board of Trustees, Tony Fell, “But the health care providers across the street don’t share information.” That situation is already shifting, and will continue to evolve toward more information exchange.

From the patient’s perspective, an integrated health care system means that care comes from a network of organizations. These organizations share formal linkages for information, common clinical protocols for the treatment of disease and consistent patient education materials. While patients may have to travel as they work through a continuum of care, the transitions should be seamless.

By the year 2011, the health care system in Ontario will be virtually integrated – co-ordinated (primarily electronically) through the establishment of networks. Ideally, integration should reduce duplication and service fragmentation, improve co-ordination of services, standardize information and increase clinical accountability.

Closely connected to the move toward integration are UHN’s Program Groupings created in 2001 to better organize the major services of UHN. Program Groupings were designed to fit services together so that they can act as areas of focus for patient care. (See more on Program Groupings on page 28.)

The entire health system needs to change to better serve patients. Besides focusing on being the best it can be, UHN needs to advocate for broad system change to ensure that all components of the health system work well together for exemplary patient care.

Our Patients: *Solutions*

How will we get there?

*“Start with the basics:
treat patients with
respect and dignity.”*

UHN Employee

*“Excellent clinical care
includes coordinating
with the community.”*

UHN Employee

Strategy 1:

Address the health needs of the target populations by:

- Organizing and focusing clinical activity growth within seven program groupings including Advanced Medicine & Surgery, Community & Population Health, Heart & Circulation, Musculoskeletal Health & Arthritis, Neural & Sensory Sciences, Oncology & Blood Disorders, and Transplantation. (See page 28)
- Emphasizing investments and recruitment in the four priority technologies of Genomics/Proteomics, Clinical Informatics, Regenerative Medicine and Advanced Clinical Technologies. (See page 31)
- Implementing our programs in collaboration with partners.
- Providing education to our students in integrated care.
- Researching and evaluating outcomes of integration.
- Advocating for broad health system change to ensure exemplary patient care.

Strategy 2:

Provide a supportive patient experience by:

- Seeking the perspective of the people we serve and engaging them in the planning, decision making and evaluation of care and services.
- Developing a strong patient education capability in all programs.
- Implementing initiatives to improve clinical staff communication with patients.
- Building processes that facilitate patient flow through the healthcare system.
- Taking into account the diversity of the patients we serve.

A Peek Into The Future. It is 8:30 a.m. when 55 year-old Armelindo Silva feels pressure in his chest. He has a heart condition and is wearing a monitoring device for continuous contact with the health care system. He knows to call an ambulance as he has researched his condition online – but it is peak rush hour. As he waits for the ambulance, he clicks on to a two-way video dialogue with a Portuguese-speaking nurse, who is concurrently looking at Mr. Silva’s electronic health chart.

Mr. Silva’s wife, Maria, has been trained in first aid at her community health centre and she attaches a device to him that monitors twenty physiological variables. She opens an electronically tagged medication package for his potential heart attack.



Strategy 3:

Provide leadership in research and patient outcomes by:

- Establishing supportive infrastructure to promote excellence in research.
- Funding fundamental, translational and clinical research activities which have the promise of global impact.
- Collaborating with Program Groupings (See Strategy 1) to foster disease specific research.
- Improving processes to enhance patient safety.

Strategy 1

Strategy 2

Strategy 3

Strategy 4

Strategy 5

Strategy 6

Strategy 7

Strategy 8

Strategy 9

Strategy 10

Address the health needs of target populations

Provide a supportive patient experience

Provide leadership in research and patient outcomes

Become the workplace of choice for employees, medical staff, students and volunteers

Be an internationally leading educator of health professionals

Create well-designed space and obtain leading-edge equipment for patients and staff

Obtain space and equipment that supports research and education growth

Develop information systems that support clinical practice, research and education

Attain world leadership in performance measurement and clinical improvement

Generate dramatically increasing revenues to enable clinical, educational and research programs to flourish

Maria is getting progressively more worried and hoping that she won't have to resort to the online coaching protocol to slow down the heart attack. A nurse connects with the Silvas by two-way video and reassures her that Mr. Silva is doing well. As a back up, they have linked in a community-based physician who has been following this on her hand-held computer and is heading toward the Silva's home, assisted by satellite.

The ambulance does arrive, and minutes later, the doctor. Together they take Mr. Silva to TGH and a week later he is back at home, feeling much better. The entire process of Mr. Silva's emergency care is being studied by an e-health research group in Lisbon who are hoping to implement a similar system there.

Our Team

“I’m an optimist. I think that if you make this a great place to work, you will get people to come and stay.”

Emma Pavlov,
Vice President, Human Resources
and Organizational Development

Nothing is more important to the health of UHN than its team, which includes employees, medical staff, students and volunteers. Creating a workplace where people are challenged, recognized and valued is paramount. But what is also crucial is giving people the right tools and support to do their jobs and giving them a voice and an opportunity to share in leadership.

UHN now and forever will concentrate on creating a workplace where people enjoy the challenge of their career, create and engage in best practices and are treated with respect.

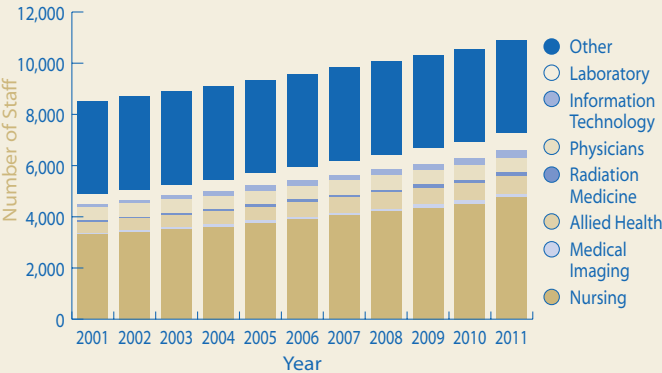
UHN also needs to ensure that its Board of Trustees is positioned to provide effective leadership. Board development has never been more important.

Trends & Challenges

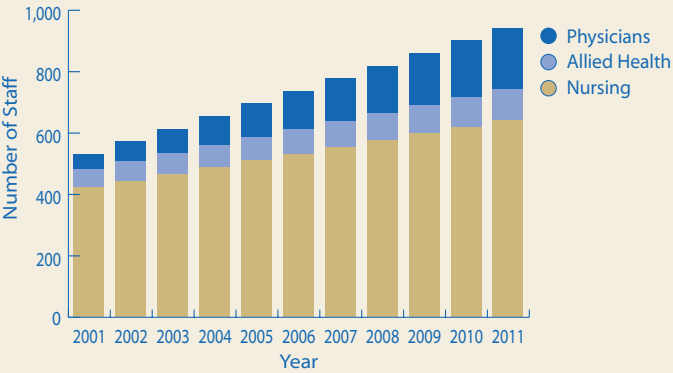
The last decade has seen extraordinary change in the healthcare sector. Restructuring, downsizing, salary freezes, and funding cuts have impacted everyone – and all within a context of an increasingly diverse and aging population whose needs for health care are on the rise.

“Our biggest issue as an organization is the shortage of staff,” explains Tom Closson, “It’s bigger than UHN, it’s a national concern.” Not only have there been fewer people trained in the professions, fewer have been attracted to it – and many have left. UHN faces an unprecedented challenge to successfully retain, attract, and engage a workforce that has the capacity to deliver the highest quality of patient care, education and research.

10-Year Forecast for Healthcare Staff at UHN



Projected Hiring Requirements for Selected Health Disciplines



“Respect and recognition do not come from paper policies and directives. They must come from genuine conviction, communicated directly by personal contact with all staff.”

Fiona Nelson,
TGH Community Advisory
Committee.

“Our commitment to the execution of our Human Resources strategies is more important than the strategies themselves. We have to make it happen.”

Courtney Pratt,
Member, Board of Trustees.

UHN must become the workplace of choice in the health care sector. In order to achieve this, human resource planning must be integrated into everything that UHN does – including strategic, capital and operational planning.

The goal is that health care professionals will seek out employment at UHN because of its supportive and productive work environment, respectful and empathetic work culture, career progression opportunities, attractive rewards and recognition initiatives, and opportunities to learn, grow and to practice at the leading edge of their profession.

Employees and medical staff are looking for opportunities and support for career advancement. Students desire an excellent learning experience that will provide a firm foundation for a career. Fellows, both national and international, are looking for work and educational practice in an organization with a global reputation. Volunteers (students, those between careers and retirees) are seeking meaningful experiences and opportunities to contribute to the hospital.

The link between UHN and the University of Toronto is a crucial one both for the global impact of UHN and the experience of the patients. Similarly, UHN's partnerships with other educational institutions like Ryerson University and the Michener Institute reflect our commitment to the training of health care providers across the full spectrum of health services. UHN is a leader in providing the full ladder of education – from first year undergraduates in physiotherapy to clinical transplantation fellows – and everything in between. UHN's leadership in education must continue and move forward. It must focus on producing more and better educated health professionals than currently exist.

It won't happen overnight, but there are a number of clearly identified steps that will help UHN survive staff shortages and maintain educational leadership, beginning with: recruitment as a key priority and retention as a strategy in and of itself. In addition, redesigning of work processes and specific jobs and creating new training initiatives will be essential to cope with staff shortages. The attention to educational priorities will be of vital importance.

People tend to affiliate more strongly with teams rather than overall corporations. The new Program Groupings (see page 28) are like teams – as are the smaller divisions within them. Each has a crucial role to play in the functioning of the hospital and provides a nucleus for staff activity.

Our Team: Solutions

How will we get there?

*"Staff recognition must
begin with front-line
staff first."*

UHN Employee

Strategy 4:

**Become the workplace of choice for employees,
medical staff, students and volunteers by:**

- Integrating human resource planning into strategic, capital and operational planning.
- Advocating to government to ensure an adequate supply of each health discipline.
- Developing managers to lead improvements of the work environment.
- Using innovation, knowledge creation and advanced technology as a recruitment and retention strategy.
- Giving staff a voice and opportunity to develop themselves, share in leadership and contribute to organizational decisions affecting their work.
- Re-evaluating the appropriate mix of providers to deliver care.
- Establishing training programs to address specific staff shortages in partnership with educational institutions.
- Removing any barriers that limit staff members from achieving their full potential.
- Ensuring that new hires reflect the communities we serve.
- Implementing new solutions for physician compensation.
- Exploring opportunities to make use of international physicians.
- Making volunteer recruitment efforts as important as staff recruitment.
- Focusing on volunteer satisfaction and recognition.
- Developing the Board of Trustees to provide effective ongoing leadership.

A Peek Into The Future. Its 7 a.m. and Elaine Chang arrives for her first day at work in the Neuroscience Centre at TWH. Just 4 years ago, before she got her nursing degree, Elaine began volunteering at UHN helping out with translation for stroke patients. She originally found out about UHN through her local community centre where she worked in an immigrant welcoming office.

Elaine was attracted to UHN as an employer because it was close to her downtown apartment, offered a competitive benefits package, gave her the opportunity to work in the specialty she loves, neuroscience, and also needed her ability to speak Mandarin



“The strategic plan process emphasized the fact that the main ‘assets’ a hospital has are its people.”

Laurie Hicks,
Member, Board of Trustees

Strategy 5:

Be an internationally leading educator of health professionals by:

- Expanding leadership into research in education.
- Increasing national and international fellowship and graduate positions.
- Ensuring that every UHN program has a world class leader in education.
- Developing leadership in continuous learning for all levels of staff.

Strategy 1	Address the health needs of target populations
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to patients and their families. Elaine was also particularly interested in joining the Neural and Sensory Sciences team as it brought together both her interest and education in health and her desire to be part of a high technology service.

Next year, with financial support from UHN, Elaine plans to take an upgrading course and in the long-term, she's thinking about doing her Master's. Elaine and her partner are putting off having children for a few years yet, but once her career is well-established Elaine expects to work part-time for a year or two to raise her family.

Capital

"There's a need for constant change to keep pace with the requirements of patients, research and education. We will always be re-evaluating our capital needs."

Susan Conner,
Vice President, Real Estate
Solutions

"The physical environment we work in is so important. It makes an incredible difference to how you feel about going to work every day and you can see the positive impact it has on patients."

Sarah Downey,
Director of Corporate Planning

Buildings and equipment for clinical services, research and education may not seem very compelling on paper. But when you consider the impact that a well-designed, highly-functional, clean, open, friendly environment has on how patients are cared for and how staff are able to do their work, suddenly the relevance of capital investment becomes profound. In addition, the age and functionality of equipment has an immediately demonstrable effect on care and research.

Trends & Challenges

Back in 1997, an assessment of the UHN facilities made one thing perfectly clear: in order to better serve patients, educate students and undertake research, there needed to be significant change and investment. Thus, Project 2003 was born. It was an ambitious plan that would call for new state-of-the-art surgical suites and intensive care units, world-class ambulatory centres, improved patient flow and care, cost efficiency and above all, a transformation in how the UHN facilities are experienced.

Project 2003 includes a number of equally important goals focused on construction and improvement at the Western and General sites. Every piece of the redevelopment project will lead to a vast improvement. Patients will experience UHN as more spacious, open, bright, friendly, and more easily navigable.

Project 2003 is just the beginning. The next steps in the ongoing capital evolution of UHN incorporate a number of new developments including: rebuilding of the East Wing at TWH; 250,000 square feet of space for UHN research at TGH; a new master plan for the renovations of the remainder of TGH, TWH, and PMH buildings; and the development of 150,000 square feet of research space at TWH.

In addition to spatial requirements, UHN has a great need for equipment – a need that will require substantial investment in the coming years.

"At UHN we want to maintain our leadership in clinical services and to be a leader in research. To do that we have to find resources to invest in new equipment and technology."

Kevin Empey,
Vice President Finance



Consider that equipment demands range widely, from the costs of a small piece of lab equipment (\$10,000) to the cost of a PET Scanner (\$10 million). The equipment needs also include things like wheelchairs and I.V. pumps – the practical things that get patients and staff through the daily basic demands of care.

In the 2003 plan alone, there is significant need for new equipment, both for diagnosis and treatment. Also, the new buildings and renovations are designed for a significant reduction in paper use and filing – so there is a real imperative to achieve fully digitized systems.

Because UHN is considered a Canadian-leader in the services it provides, there is a mandatory requirement that it stays ahead of the field – and invests in equipment accordingly. For example, UHN is already investing heavily in interventional radiology and interventional cardiology (high-tech, low-invasive treatments). These requirements will increase as research results move into clinical practice – when a new discovery is made or application is uncovered, there is often a subsequent equipment need.

In light of these pressures, over the next decade it is expected that the annual equipment need will increase to \$35 million a year. It's the price of being first.

Capital: *Solutions*

How will we get there?

Strategy 6:

Create well-designed space and obtain leading-edge equipment for patients and staff by:

- Completing Project 2003.
- Developing the East Wing at TWH and an additional 3 floors on the new clinical services building at TGH.
- Developing and implementing a 10 year plan to maintain and re-develop all remaining buildings.
- Developing and implementing a 10 year plan for capital equipment required for modern patient care.
- Improving way finding.

A Peek Into The Future. It's 4:00 p.m. and Dave Smythe is walking down University Avenue from the subway. He's on his way to apply for a job in Food Services. He's never been to TGH before and is a bit nervous about finding his way so he's early for his appointment. It's easy to see where the main entrance is: there's a magnificent monument to Edith Cavell, a heroic nurse, he reads on the plaque. He turns toward the main entrance and is struck by how an old arch has been incorporated into the bright and modern entrance way. As he walks in, the signs are clear and easy to read. He's already feeling like this would be a good place to work.

Meanwhile, Anna Gregory is resting after her physiotherapy session in the 4th floor glass-enclosed patient court in the Clinical Services building. She's been working with physiotherapist, Jean Marchand since her surgery and they're making great progress.



Strategy 7:
Obtain space and equipment that supports research and education growth by:

- Establishing 400,000 square feet of new research space to double our space.
- Developing education facilities and classrooms that address the need for space for our growing number of national and international students.

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The sun is bright and warm making it easier for Anna to read an article Jean gave her on new exercises.

Over at TWH Janine DaCosta is on her way home after a busy shift of developing new menu options for vegan patients. She stops to pick up bath salts from the one of the many shops in the retail area so she can have a long soak at home.

Upstairs, taking a break from their hectic day, in a Staff Resting Area are lab technicians, Francisco Santos and Helen Weir. They are both longtime veterans of UHN and are quietly reminiscing about the days when they used to spend a considerable amount of time in gloomy passageways and elevators as they carried patient samples from building to building. Now pneumatic tubes speed biopsies and blood samples from all parts of UHN to core labs.

Information

*“e-health has
no boundaries.”*

Tom Closson,
CEO

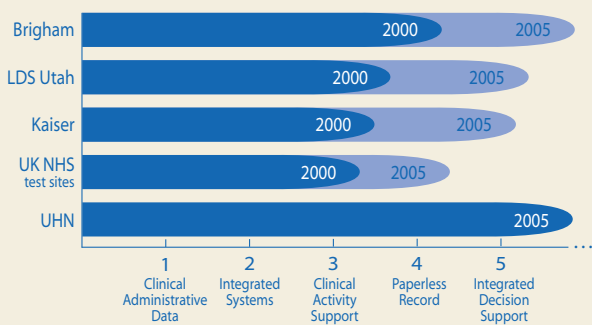
Information is a building block for the best health care in the world, fueling everything from research to education to patient care. At UHN information is both the knowledge of the best possible ways to get things done and the technological infrastructure to make that happen.

“We’re at an incredible point in our development of information systems,” explains Matthew Anderson, Chief Information Officer, UHN. “Technology brings tangible improvements to every part of patient care: from what we know about people before they arrive, what we learn about their condition, how they are cared for while they are in our hospital, and how care continues at home.”

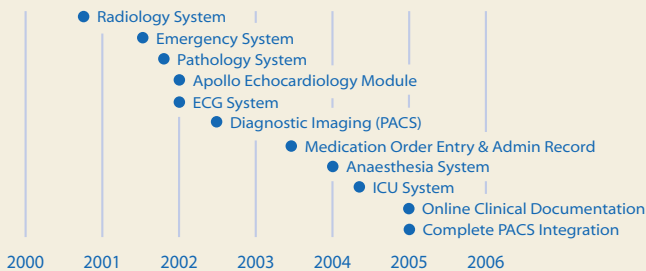
Trends & Challenges

In order to implement advances in both measurement and practices, information technology has a crucial role. Care@ UHN is a 5 -year plan – spanning from 2000 to 2005. This strategy focuses on technical solutions and supporting clinical practice to enable the ongoing development of evidence-based medicine. A cornerstone for health informatics is the e-Chart. It represents the creation of the paperless patient record, integrating the average 250-page patient chart into a single, confidential and secure electronic document.

Care @ UHN Vision for 2005



E-Chart Project Implementation



To better coordinate a patient's visit to the hospital, resource management and scheduling will optimize patient flow for the most efficient path for tests and appointments. Ultimately, this will reduce waiting times and make the whole hospital experience easier.

Supporting the decision making of our clinicians, clinical decision support will provide access to research, information and clinical alerts at the point of care. Research informatics will integrate clinical and research data from "bench to bedside" to support groundbreaking research activities.

Community integration will connect the technology of the hospital to that in our community and throughout the world – improving information sharing with other care providers.

Redesigning administrative processes through business systems implementation will realize efficiencies and improve communications throughout the organization. Spanning all of this is telecommunications that will develop the advanced technologies to facilitate data exchange and access to information within UHN and beyond.

"Information technology in the Canadian health care industry across Canada is in the dark ages and the system is drowning in paper resulting in gross inefficiencies and costing taxpayers billions of dollars. The development and implementation of a modern national information technology system for the Canadian health care industry must be an absolute top priority."

Tony Fell,
Chair, Board of Trustees

“Canada’s academic health sciences centres desperately need significant incremental investment in information and communication technologies. Only then will we be able to measure what needs to be measured and, in turn, coordinate, plan and execute more efficiently.”

Richard Ivey,
Member, Board of Trustees

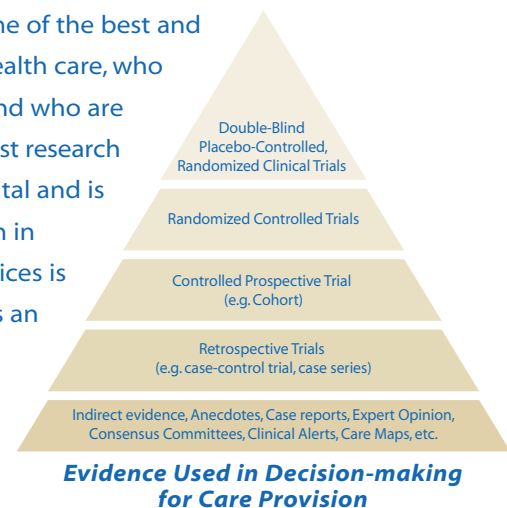
“Business is doing advanced performance measurement; so should we.”

UHN Employee

These technological innovations will help make performance measurement and accountability easier. Performance measurement and clinical improvement are quickly becoming an absolute requirement for any advanced healthcare institution. Patients, the public and practitioners are demanding that there be systemic and standardized ways to constantly improve health care – and to measure that improvement quantitatively. People now want to know which hospital is the leader in a specific procedure and who has the most qualified team.

Performance measurement does the evaluation part of the equation, and best practice implementation refers to the practices that will help improve care. UHN has a number of initiatives already underway, but more will be needed to meet the future demand.

UHN is in an excellent position to be a global leader in best practices: it is already a leader internationally in scholarship. It is staffed with some of the best and most talented professionals in health care, who are willing to listen to patients, and who are eager to learn. UHN has the largest research enterprise of any Canadian hospital and is the Canadian Centre for Research in Education. A focus on best practices is much more than an initiative, it is an institution-wide emphasis on discovery, information and communication.



A Peek Into The Future. It’s 2:00 in the afternoon at PMH and Dr. Yousef Khan, an internationally renowned expert in the diagnosis and treatment of pancreatic cancer, is participating in global teaching rounds, broadcast over the web, exchanging information with colleagues from 32 medical schools around the world.

At the same time, Reena Ross is being seen by Dr. Katherine Lazier, a renowned breast cancer specialist. Reena had her biopsy this morning and now her e-chart is being reviewed. Medical lab specialist, Mark Stokes thinks that Reena may have good results with a new breast cancer drug so he checks out the drug’s applicability on Medline. Dr. Rozenthal, director of a drug study, e-mails him to concur that Reena is a good candidate. Dr. Lazier cross references Reena’s presentation on the split screen and determines that it’s a good match and then wirelessly e-mails Reena’s prescription to the pharmacy. Reena picks up the prescription that afternoon,

Information: *Solutions*

How will we get there?

Strategy 8:

Develop information systems that support clinical practice, research and education by:

- Implementing the secure paperless patient chart.
- Implementing comprehensive clinical alerts at the point of care.
- Implementing patient-centred scheduling for tests and appointments.
- Connecting hospital systems with other providers and organizations.
- Implementing clinical telemedicine nationally and internationally.
- Implementing systems to assist patients with education on their disease.
- Implementing eHealth innovation to accelerate transformation of care.

Strategy 9:

Attain world leadership in performance measurement and clinical improvement by:

- Developing resources for performance measurement and clinical improvement.
- Providing incentives for best practice initiatives.
- Developing an annual report of UHN's performance.
- Expanding education and research on clinical improvement.

Strategy 1	Address the health needs of target populations
Strategy 2	Provide a supportive patient experience
Strategy 3	Provide leadership in research and patient outcomes
Strategy 4	Become the workplace of choice for employees, medical staff, students and volunteers
Strategy 5	Be an internationally leading educator of health professionals
Strategy 6	Create well-designed space and obtain leading-edge equipment for patients and staff
Strategy 7	Obtain space and equipment that supports research and education growth
Strategy 8	Develop information systems that support clinical practice, research and education
Strategy 9	Attain world leadership in performance measurement and clinical improvement
Strategy 10	Generate dramatically increasing revenues to enable clinical, educational and research programs to flourish

and has a long discussion about side effects with pharmacist Robin Scully. She then goes home to review her own e-chart – and look at the drug website. Back at the hospital, Reena's information is being entered into an international study on small lump responsiveness to the new drug. Her statistics are also being submitted to a genome study to determine if she'll be a good candidate for chemotherapy should she need it.

Funding

“While we strive to balance our budget year after year, our financial future is never assured. For that reason we look beyond government to new sources of revenue — and we will continue to do so.”

Tony Fell,
Chair, Board of Trustees

“ We have to be creative in the ways we look at commercialization, privatization, and philanthropy — as well as government funding.”

Dr. Keith Stewart,
Director Toronto General
Research Institute

Funding touches every staff member, every corner of the hospital and, most importantly, affects patients in very immediate ways. Because UHN has ambitious goals: maintaining the best staff, becoming a world-leading academic health sciences centre, and providing the ultimate in multi-disciplinary patient care, the funding requirements are, and will always be, extensive.

Trends & Challenges

Funding has many purposes: operations, research and capital. The sources are even more diverse.

UHN has numerous funding streams. Global budget revenue from the Ontario Ministry of Health is UHN's biggest source of revenue and UHN must advocate to ensure that it keeps pace with inflation, new technology and more complicated care. Priority program revenue, a second stream from the Ministry, provides funding for specific volumes of highly specialized services such as heart bypass surgery. The Ministry of Health also provides capital funding from time to time for equipment and for specific building projects.

Foundation revenues are going to increase considerably due to intensive fundraising campaigns. Research revenue from public and private granting agencies is targeted for specific projects. The Research Development Business Office generates revenue through:

- collaborating with private sector partners,
- licensing technologies,
- creating spin-off companies.

Patient services revenue comes from supplements like private rooms. Ancillary revenues are currently from areas such as pharmacy, parking and food services. These revenues will expand as UHN opens new commercial ventures.

“We need to improve our current sources of revenue, then we must look beyond them to new sources.”

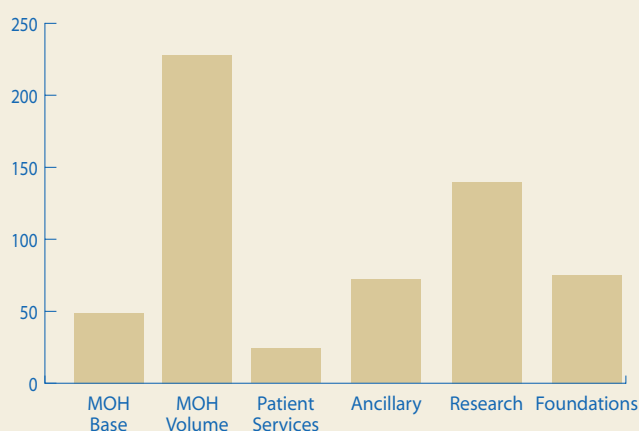
UHN Employee

UHN needs a predictable funding model from the Ministry, combined with growth in funding for priority program volumes. It also needs to meet challenging targets in the other areas of revenue generation.

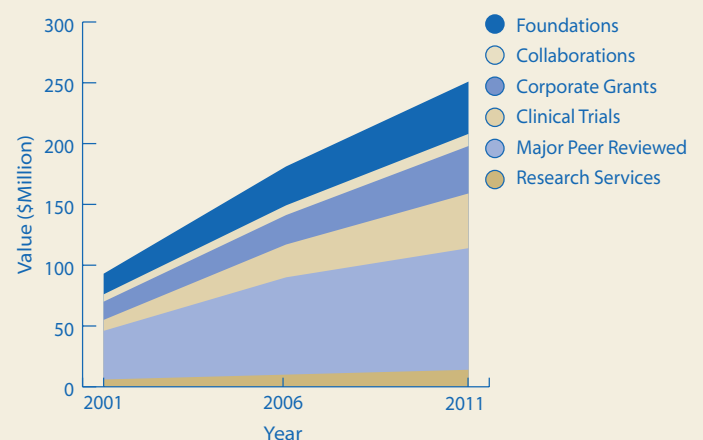
New commercial ventures will have a part to play in the funding answer, as will successful research institutes, entrepreneurial research staff, solid expansion of donations, and profitable new retail outlets.

The requirements for additional funding will inspire ambitious efforts, aggressive ideas, and implementable strategies to ensure that UHN can meet the needs of its patients, its staff, its researchers and its educators.

Percentage Total Revenue Growth 2011 vs 2001



Projected Growth in Research Funding



Funding: Solutions

**How will we
get there?**

**Strategy 10:
Generate dramatically increasing revenues to enable
clinical, educational and research programs to
flourish by:**

- Setting targets for revenue growth.
- Dedicating resources to advocate for increased funding from the Ministry of Health.
- Obtaining predictable multi-year funding from the Ministry of Health.
- Growing revenue in pharmacy, retail services, preferred accommodation, non-resident care, Rehabilitation Solutions, and Toronto Medical Laboratories.
- Supporting research institutes in pursuit of increasing grants from public and private agencies.
- Expanding capability to commercialize intellectual property from UHN research.
- Supporting the Foundations to increase revenues.
- Introducing new high-growth healthcare services with profit potential including: Health Screening Programs and Long Term Disability Management.
- Exploring, advocating and pursuing alternative mechanisms for funding health care.

Strategy 1	Address the health needs of target populations
Strategy 2	Provide a supportive patient experience
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Strategy 8	Develop information systems that support clinical practice, research and education
Strategy 9	Attain world leadership in performance measurement and clinical improvement
Strategy 10	Generate dramatically increasing revenues to enable clinical, educational and research programs to flourish

A Peek Into The Future. It's 11 p.m. and Zev Lewis is exhausted from dancing at the UHN Ball. This year's event will probably raise over \$5 million for research. He loosens his tie and has a sip of water. No one could have predicted that Zev would be back on his feet so soon. Just two weeks ago, Zev had the lead replaced in his pacemaker using laser technology. Once a procedure he would have gone to the U.S. for, he had it done just blocks from his office headquarters. As he watches the dancers whiz by, he thinks to himself that making a major donation to UHN to support the great work they do would be a very good thing indeed.

Across the floor Dr. Tara Desimini is sitting down for this number too. She's been having a great time tonight energized by the spectacular celebration. Dr. Desimini has her own reasons to celebrate tonight; she's received CIHR funding for a study she's doing on stem cell work for Parkinson's.

Program Groupings

Organizing the work of UHN into program groupings was a central component of the strategic planning process. The programs are both a response to the new directions of the hospital and the foundation of the teams that will drive UHN through the next decade – and beyond.

What are they?

Program groupings are an organized system of services or interrelated activities designed to address the health needs of a target population. They are a crucial step in the evolution toward integrated health care. Program groupings are not limited to departments, divisions or hospital sites, but are instead grouped together as areas of expertise and practice.

There is no simple way of ordering and describing the vast variety of services that UHN provides. But over the course of several months in 2001, UHN undertook a process of realigning its clinical activities into program groupings and linking them to research and education.

“For the first time in the years I’ve been with the hospital, there’s a sense that the corporate entity that embraces the three hospitals is meaningful.”

Dr. Richard Reznick,
Vice President, Education

Groupings had to:

- meet a significant health need,
- have a critical mass of services provided at UHN,
- promote interdisciplinary service delivery,
- encompass the health continuum,
- have a critical mass of educational activity,
- have a critical mass of research activity,
- and support UHN’s vision, mission and values.

Back at UHN, Jane Casey in Housekeeping is working the late shift. It’s the best time to get work done. Jane’s proud to be part of an organization that works so hard to find cures. Her cousin has Parkinson’s so she’s very interested in the new work being done in the field.

Meanwhile, Ed Connolly is turning out the lights at Rehabilitation Solutions. He’s stayed late tonight to review the books. It’s very good news. Now in its tenth year of operation, the Centre is going to be able to report a 27% increase in revenue from last year.

Program Groupings at UHN

*"We must all work
together as a team."*

UHN Employee

Program groupings also needed to demonstrate that they would have significant impact on patients and have the potential to achieve excellence. The result is 7 new program groupings and their component program elements:

Advanced Medicine & Surgery consolidates a number of complex programs in Medicine and Surgery including Benign Digestive Diseases, Benign Kidney Diseases, Benign Respiratory Diseases, Infectious Diseases, Endocrinology/Diabetes and a Clinical Studies Resource Centre.

Community & Population Health brings together the expertise in delivering services to local groups and groups with emerging health needs. These include Seniors' Health, Women's Health, Health of Children and Youth, Mental Health and Addictions, Family and Community Health, Complex Consultative Services and Community and Multicultural Health.

Heart & Circulation integrates Vascular Surgery, Cardiovascular Surgery, Interventional Cardiology, Cardiology, Cardiac Diagnostics and Secondary Prevention and Rehabilitation to improve the continuum of care for patients with heart and circulatory diseases.

Musculoskeletal Health & Arthritis consolidates all Musculoskeletal activities in a single entity that provides a full range of care including: Arthroplasty, Arthritis and Related Disorders, General Orthopaedics, Hand, Plastics, Rehabilitation Solutions and Sports Medicine.

Neural & Sensory Science encompasses diseases that affect the nervous system and its sensory and motor output. It focuses on elements including: Epilepsy, Neurodegenerative Diseases, Neuromuscular Disorders, Neuro-Oncology, Neuro-Ophthalmology and Ophthalmology, Neuropathology, Neuropsychiatry, Neuropsychology, Neuro-Urology, Neurovascular Disease, Ophthalmology, Spinal, Pain, Swallowing and Balance.

Oncology & Blood Disorders incorporates all the cancer services across three hospitals. It includes a wide range of activities: Radiation Medicine, Medical Oncology, Surgical Oncology, Psychosocial Oncology and Benign Blood Disorders.

Transplantation is a concentration of both the treatment of patients with organ failure and the development of innovative approaches to prevention. The transplantation program includes Lung, Heart, Heart-Lung, Liver, Kidney, Pancreas, Kidney & Pancreas, Small Bowel/Intestinal, Microsurgical Repair and Tissue.

In addition to the Program Groupings are UHN's Core Clinical Services, including crucial support functions such as Anaesthesia, Laboratories, Operating Rooms, etc.

Clinical Activity Target Setting

All these program groupings and their program elements are important but they can't all expand. For UHN to achieve global impact, it must be selective about what expands and what does not; UHN will not have the space, staff or funding for everything to grow. However, just because a program is not targeted to enlarge its clinical activity does not mean that it won't receive the support necessary to nurture excellence in what it does.

Plans for growth / maintenance / reduction of each of the elements of the seven program groupings are being determined using the following six criteria:

- Ministry of Health priority (protected funding, volume funding) or revenue generating.
- Impact (market share, uniqueness of service).
- Interdependence with other program groupings or a core service such as Emergency.
- Educational strength.
- Research strength.
- Ability to apply priority technologies (genomics/proteomics, clinical informatics, regenerative medicine, advanced clinical technologies – see next section).

Evaluation and ranking of program elements using these criteria will result in specific clinical activity targets for each program element. These targets will be published in a separate document and updated over time based on technological change and discoveries as well as provincial and regional planning exercises.

Priority Technologies

“ If we just consider this as a one-off exercise with a finite end, we carry the risk of missing other opportunities that will undoubtedly come our way.”

Dr. Alex Jadad,
Director, e-Health Innovation

Over the next decade diverse branches of science will come together in powerful ways that promise to generate many dramatic breakthroughs in diagnosis and treatment. Technology – and particularly advanced treatment technologies – are a critical part of what allows a hospital to have global impact. Staying ahead of the curve is something that is expected by patients and demanded by clinicians, researchers and students – it’s what keeps UHN at the cutting edge.

It isn’t easy predicting what technologies will have impact, and which won’t. In fact researchers often fail to accurately foresee new trends. With that in mind, UHN consulted broadly with scientists and practitioners and came up with a focused list that concentrates on broad, high impact trends that already have grounding in reality and support from the academic literature. A central component of this technological need is determining what areas UHN should specialize in – after all, money is never unlimited, UHN must focus on a few areas.

There are four areas in which UHN could lead globally. These are the new technologies that are most likely to have an effect on health care delivery over the next 5 to 10 years.

Genomics / Proteomics and Patients ... involves using genetic/molecular profiles to identify risk, determine diagnosis and target treatment. Genomics is the study of the human genome. Proteomics is the study of proteins within a cell or tissue – and how proteins and disease relate to one another.

Clinical Informatics ... is marrying electronic patient records and e-Health innovation with clinical and biological studies. It deals with the storage of biomedical information for clinical problem solving and decision-making.

Regenerative Medicine ... focuses on healing using the body’s own cells to repair or grow tissues, organs and cells. It will include gene, stem cell, cell, tissue and organ-transplantation.

Advanced Clinical Technologies ... includes minimally invasive, robot-assisted and image guided procedures, laboratory automation, handheld patient care devices – all using electronics, optics and miniaturization.

How will we get there?

- Invest in these four priority technologies.
- Focus the search for new funds (grants, donations, partnerships, Ontario Ministry of Health) in these four areas.
- Focus recruitment in these areas.



UHN Strategic Directions 2011: Achieving Global Impact is not intended to be a prescriptive document that describes our every move for the decade to come. It is more akin to a snapshot of where we are and where we intend to be. The landscape may change over time, but the milestones we have set out here are the marks we will look for when measuring our progress. This plan is not a roadmap, it is a compass. It will be updated every few years as conditions change and opportunities present themselves.

Resources

- **Strategic Planning Task Force Reports**
- **UHN Strategic Directions 2011:
Exemplary Patient Care and Global Impact**
- **Program Groupings Clinical Activity Targets**

are available online or through:

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