

# PATIENT CARE



## TORONTO REHABILITATION INSTITUTE STRATEGIC PLAN 2005-2010




**Toronto Rehab**  
Everything Humanly Possible

The City of Toronto is home to a visionary hospital that is unique in Canada. The dramas that unfold within its walls are not the tense cliff-hangers of the emergency ward or operating room but epic narratives of ongoing human achievement: life affirming odysseys of challenge, hope and triumph. This extraordinary place is the Toronto Rehabilitation Institute.

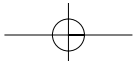
# FOCUS ON PEOPLE



# RESEARCH



# EDUCATION



## OUR VISION

To advance rehabilitation and enhance quality of life

## OUR MISSION

We partner with individuals, their families and supporting communities in innovative, effective adult rehabilitation, complex continuing care and long-term care. In affiliation with the University of Toronto, we lead the integration of service, research and education, and the development of a coordinated rehabilitation system.

## CORE VALUES

**CARING** – We are sensitive and compassionate in our interactions with individuals, their families and our colleagues, respecting the uniqueness, traditions and values of each person.

**DISCOVERY** – We support enquiry through research leading to the generation of new knowledge.

**LEARNING** – We foster creativity, critical thinking and the sharing of ideas to enable personal growth and professional development.

**COLLABORATION** – We are committed to open communication and working together, ensuring inclusion and participation.

**ACCOUNTABILITY** – We conduct our activities with competence and integrity and are responsible to the public for the efficient and effective use of resources.

**ADVOCACY** – We partner with individuals, their families and the community to advance societal beliefs and attitudes, and public policy.



## MAKING A WORLD OF DIFFERENCE—ONE PATIENT AT A TIME

Strategic Plan 2005-2010

### Rising demand

The number of individuals with disabilities is on the rise—worldwide.

- An aging and growing population
- Medical advances that preserve and prolong life
- Environmental changes
- A rise in chronic health conditions
- Increasing life expectancy
- The epidemics of diabetes and obesity

These are just some of the trends that are driving upward the global demand for

rehabilitation services according to the World Health Organization.

Currently, 3.6 million Canadians live with the consequences of disabling injury and illness. This number is expected to grow to more than 4.1 million by 2011. About one third of these people will live right here in Ontario.

At the Toronto Rehabilitation Institute, we believe something should be done to help individuals take on the life-altering challenges associated with heart disease

and stroke, brain and spinal cord injury, cancer, dementia, diabetes, kidney disease, multiple sclerosis, arthritis and other debilitating conditions.

And we passionately believe we can make a difference—one patient at a time. Our patients believe we can too: over 90 per cent of the people discharged from our rehab programs say they would recommend our hospital to others who need the services we provide. It's a satisfaction rating in which we take great pride.

**"Once you set aside the acute phases or crises that mark injury or disease, much of modern health care is indeed rehabilitation in one form or another."**

*David Naylor, MD, former Dean, Faculty of Medicine, and newly appointed President, University of Toronto*

This Strategic Plan, our second since Toronto Rehab was formed in 1998, lays out what we are committed to doing, over the next five years, to advance the knowledge and practice of rehabilitation in Canada, and to improve the quality of life of Canadians like Louise Russo and others, whose lives dramatically--often traumatically--change course as a result of disabling injury and illness.

Simply put, rehabilitation helps people who have experienced debilitating illness or injury to rebuild their lives. But more than that, as everyone at Toronto Rehab knows, it takes hard work by a team of dedicated people, including an array of specialists--physicians, physiotherapists, occupational therapists, speech-language therapists, nurses and others--as well as, and most importantly, the patient and his or her family. There is

no one-size-fits-all solution to recovery. Rather, each person requires a unique and tailored approach based on individual circumstances, specific concerns and impairments, best evidence and desired goals.



On April 21, 2004 **Louise Russo** (right) stopped at a Toronto restaurant to buy her 15-year-old daughter, Krista, a sandwich on their way home late in the evening. Louise, 46, was in the shop when bullets from a high-powered assault rifle peppered the store. One

bullet exploded in Louise's spine, causing paraplegia. After spending close to three months at Sunnybrook and Women's College Health Sciences Centre, Louise was transferred to Toronto Rehab's Spinal Cord Rehabilitation Program where she spent six months regaining her strength and learning the essential skills she would need to return home, which she did in December 2004. Louise is pictured here with Lynn Keats, a registered nurse who supported and helped her "to get through some really dark days."

## The national view

The need for rehabilitation services in Canada will increase dramatically over the next decade and beyond:

- The number of Canadians over 65 will swell from 3.9 million in 2001 to 4.8 million in 2011; and to 6.7 million by 2021. While life expectancy has risen to

an overall average of almost 80 years, over the course of their lives most Canadians will experience compromised health for about 8-10 years.

- Advances in medicine and technology are making it possible to save more and more lives previously lost to traumatic

injuries, including catastrophic brain and spinal cord injuries. Better perinatal care has increased survival rates of children born with disabilities who will require a lifetime of care. Similarly, people who acquire disabilities later in their lives are living longer, and will require care for the remainder of their lives.

- Cancer, which strikes approximately one in three Canadians, is now considered a chronic disease. Cancer treatment often involves aggressive, invasive interventions that frequently result in functional limitations and residual impairments that impact on quality of life.
- Obesity has reached epidemic proportions in Canada as it has elsewhere in the world. It is a major contributor to chronic diseases such as diabetes, heart disease and stroke, and some types of cancer.

- Chronic conditions, such as cardiovascular disease, diabetes and joint disorders, are the major cause of disability worldwide. They are also largely preventable.

Yet, as demand increases, so does the promise of innovation. The talented professionals at Toronto Rehab are finding new ways to enhance functionality, capacity and quality of life. Technology offers tremendous new possibilities and the potential to enhance, if not restore, speech, mobility, participation and independence.

This strategic plan is about the dream that the people at Toronto Rehab have of a future where not only their patients, but all people who have had a life-altering illness or injury, are able to overcome their challenges, despite disability and chronic illness. This plan will guide our progress toward that dream over the next five years.



**Arnold Lindsay** dreams of running again. But only a short time ago, he wasn't sure he would even walk.

At the age of 15, Arnold had a brain aneurysm that severely affected his left side. After a long rehabilitation process, he returned to school and life went on. Then, in 2001, he suffered another aneurysm. Angry and severely disabled, Arnold came to Toronto Rehab to start the slow process of coming back—again.

Like many Toronto Rehab patients, following his inpatient stay, Arnold attended the day hospital three days a week for specialized care from a team of health care professionals. His physiotherapists helped him recover his strength and endurance, his occupational therapists painstakingly re-taught him how to do every task of daily life, and his social worker helped him work through his anger.

Today, having gone back to school again, this time to become a physical/occupational therapy assistant, Arnold now helps other patients do what he had to do—focus on getting better rather than on what had happened in the past.

## The right stuff

Working in tandem with our health care colleagues and academic partners in Toronto, in Ontario, across the country and beyond, Toronto Rehab is ready, willing and able to lead rehabilitation services into the future.

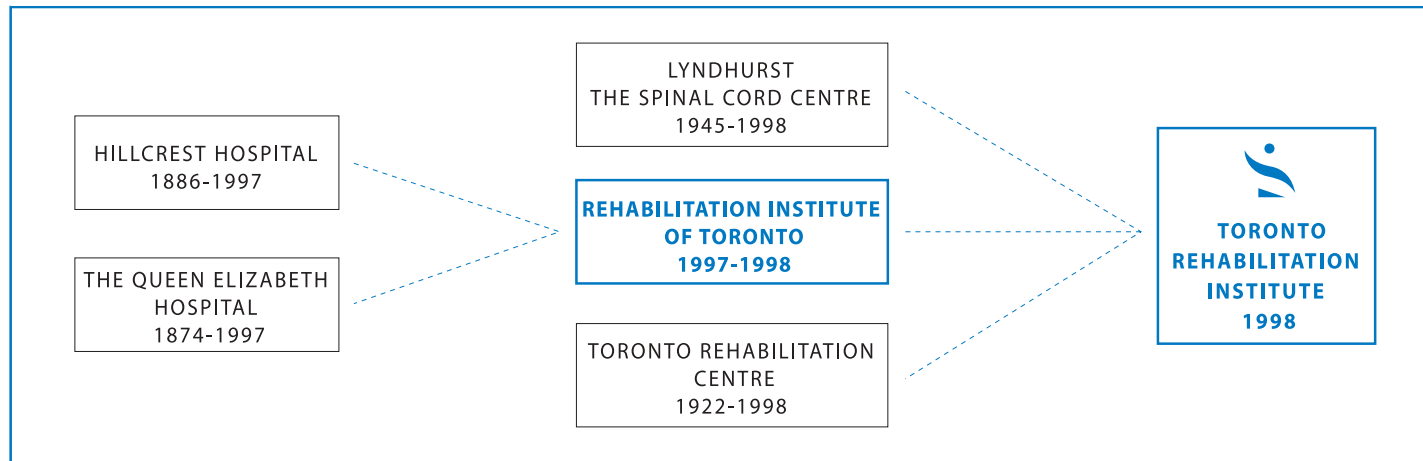
- Toronto Rehab brings together the wisdom and expertise of those associated with four historic institutions that collectively have more than 350 years of clinical experience in the field of rehabilitation. This rich heritage has created a powerful synergy of talent

that will spark innovation and yield breakthroughs to improve rehabilitation practices and patient recovery.

- We are already tackling the major issues, illnesses and injuries that affect Canadians: aging, heart disease and diabetes, stroke, brain injury, spinal cord injury and disease, arthritis and osteoporosis, multiple and traumatic injury, cancer, and progressive degenerative conditions such as multiple sclerosis and Alzheimer's disease, amongst others.

- We have made considerable headway in developing our rehabilitation research enterprise. This has grown from a \$600,000 a year operation in 1998 to one of the largest rehabilitation research centres in North America today with more than \$6 million in annual operating funds and over \$30 million in infrastructure support. Through scientific inquiry, we will determine the most effective approaches to rehabilitation and share our findings with all who can benefit from them.

### Toronto Rehab's evolution



■ We continue to strengthen our partnership with our academic affiliate, the University of Toronto. We also collaborate with close to 40 other educational institutions to offer our clinicians and students access to the best educators and the latest learning models to further their professional growth and development. Our integrated approach to clinical service, education and research will prepare tomorrow's rehabilitation providers and leaders.

With these essential building blocks now firmly in place, and mindful of our role as a key member of a rapidly evolving health system, Toronto Rehab is ready to take the next bold steps to truly make a difference. We are keen to work even more closely with our partners across the health services spectrum-- providers in primary care, emergency and acute care, rehabilitation, complex continuing care and long-term care, and in community and home care--to build a future where everyone who has

a serious illness or injury receives the most advanced and effective rehabilitation services and assistive devices in a timely manner and, as a result, is able to live the most productive and fulfilling life possible.



For David Dell, happiness is measured in the smiles of his adult son, **Simon**, a resident in Toronto Rehab's complex continuing care program.

Simon has a variety of serious issues that have left him severely disabled. As David and his wife get older, it is important to them that Simon resides in a friendly and caring

environment where he is happy and has the best possible quality of life.

Simon's care team includes a physician, nurses, physiotherapists, occupational therapists, wellness experts and dental professionals. All work to ensure he gets the care he needs to enjoy his life.

While Simon will never live at home again, his parents are happy that new programs planned for complex continuing care will ensure that the smiles keep coming.

# Achieving **excellence in rehabilitation** services means looking for the potential that lies within each individual— **determining what is possible** rather than what is not.

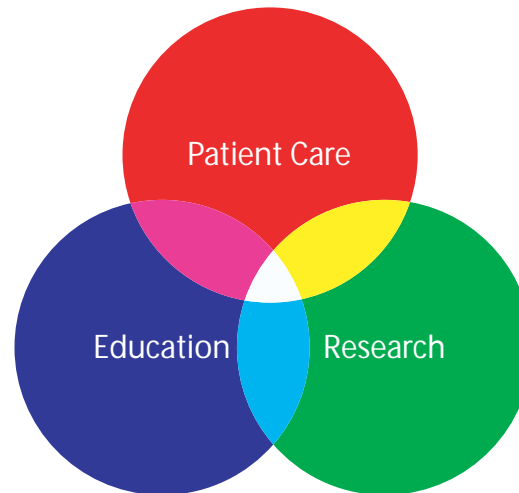
## Striving for excellence

At Toronto Rehab, patient care, research and education are intricately interwoven. It is impossible to imagine one without the benefit of the others. For our patients, this means that the care they receive is informed by the very latest research findings. For students, it means learning from the very best practitioners. And for researchers, it means being able to apply their knowledge and discoveries to the very people who experience the challenges investigators are trying to address.

Of one thing we are certain: every staff member at Toronto Rehab shares a passion to make a difference in whatever way they can. Together, we will strive for excellence in every aspect of our work. Collectively, we will help even the most seriously disabled person achieve greater potential.

Achieving excellence in rehabilitation services means looking for the potential that lies within each individual—determining what is possible rather than what is not. It means learning to tailor what we know to each person we see.

We will also relentlessly evaluate what we do to ensure that we have indeed achieved excellence and then, share what we have learned with patients, families and other health care practitioners.



Over the next five years, in **patient care**, we will:

- Introduce and evaluate new interventions that will improve the care we provide and the outcomes our patients experience.
  - Ensure that our patients are safe as they go through this phase of their recovery.
  - Create a climate of curiosity and learning
- that constantly asks what more can we do for people.
  - Transfer what we have learned to others who can benefit from our knowledge.
  - Build partnerships with hospitals and community-based providers to integrate

our services for the benefit of our patients and their families.

For details regarding what each of our seven clinical programs will be engaging in over the next five years, please refer to the Appendix.



Today, **Eddie Sabat** dreams of being a world champion. In 2003, he wasn't sure whether or not he would be alive.

At 19, in 1993, Eddie was diagnosed with hypertrophic cardiomyopathy, a degenerative heart condition that would eventually restrict blood flow to his body. After years of treatment

and rehabilitation, Eddie was listed for a heart transplant in 2003 as his heart began to fail.

To combat the physical and emotional ups and downs of possible organ rejection, Eddie joined the Toronto Rehab cardiac rehabilitation and secondary prevention program, five days a week. His individualized program of exercise, diet and education slowly but surely rebuilt his stamina, strength and spirits.

Eddie is proof that cardiac rehab improves the overall quality of life for heart patients after any cardiac event, even a transplant. He has since married his long-time girlfriend and will soon compete in his first World Transplant Games and, who knows, he may yet be a world champion!

## In **research**, we will:

- Tackle issues that will improve quality of life.
- Create an exciting research environment that will attract the best scientists and students who want their work to make a difference.
- Focus our investigative activities to improve activity, communication, cognition, knowledge translation, mobility, participation, sleep and cardiopulmonary function, assistive technology and the rehabilitation system itself.
- Translate new knowledge into effective patient care interventions and practical products that will be widely available to consumers and others in the health care community.



## iDAPT- unique to the world

Toronto Rehab will build iDAPT (Intelligent Design for Adaptation, Participation and

Technology), one of the most advanced rehabilitation research facilities in the world where new therapies and assistive technologies will be developed to help people recover from, and live with, disabling injury and illness.

The main feature of iDAPT, the Challenging Environment Assessment Laboratory (CEAL), will be located deep

underground in the hospital's soon-to-be renovated University Centre. CEAL will house a one-of-a-kind motion simulator that will be able to mimic different environmental conditions, such as ice and snow covered surfaces, and uneven terrain including slopes and bumps, that people with disabilities encounter every day. This will enable scientists to study the challenges people with disabilities experience first-hand, and to develop and evaluate innovative and practical solutions to help them overcome these barriers and participate more fully in society.

The \$36 million iDAPT research facilities will be located at Toronto Rehab's University and Lyndhurst Centres, and in the Rehabilitation Sciences building at the University of Toronto.

## In **education**, we will:

- Further strengthen our partnerships with educational institutions and develop innovative models of learning.
- Look for new ways to attract students who want to make a difference in people's lives.
- Provide exemplary patient and public education programs.
- Become a trusted source of knowledge to our professional colleagues and to the public-at-large.

## Blazing new trails in team education

Toronto Rehab and the University of Toronto are working together to develop a new way of educating health care professionals that better reflects how they will eventually work together when they graduate. Future health care providers need to be able to work effectively in teams to ensure that all aspects of a patient's care needs are addressed. To do that, they need to learn about what one another does, what expertise each discipline can contribute to the recovery process, and how health professionals from various disciplines can, through team work, make a significant difference in the lives of patients.

Helping students to develop that knowledge and understanding was the purpose of a recent pilot project to explore and evaluate the benefits of this interprofessional approach to learning. Students in occupational therapy, speech-language pathology, nursing, pharmacy, physiotherapy and social work, completed their clinical placements together, as a team, in Toronto Rehab's Geriatric Day Hospital. The results of the pilot exceeded expectations: so much so, in fact, that Toronto Rehab has created other similar placements, this time involving medical students as well, in other parts of the organization. Our success with this new learning model has prompted other teaching hospitals to trial similar programs.

## The passion of our people

At Toronto Rehab, we need visionaries—people who can see the possibilities in each and every patient and will work hard, in whatever their capacity, to help patients achieve their potential. We need people who are curious and will pursue every lead, however obscure or remote, to arrive at or develop new solutions. We need people

who delight in turning bright minds on to rehabilitation science and mentoring the professional caregivers and researchers of tomorrow. In order to attract and keep these extraordinary individuals, we are committed to building a workplace where every team member is heard and valued.

We will offer staff the best opportunities for professional growth and development: a place where experienced mentors guide this growth, where people's ideas count and where people can fulfill their responsibilities and make a difference. Staff will also have greater autonomy and opportunities for creativity and independence.

## Toronto Rehab scores high marks with its employees

- More than 82 per cent of employees rated Toronto Rehab as a great place to work.
- 80 per cent of staff are crystal clear about what we are here to do together and can explain the hospital's purpose, unique role and values.

– Close to 90 per cent of our employees believe they are able to make a difference in the lives of their clients and patients.

– The hospital also gets high marks when it comes to workplace dimensions such as respect, teamwork, diversity, role clarity and work expectations, work/life balance and a safe, hazard-free environment.

Source: Your Organization: Your Views Employee Survey, 2004

With our **focus on people**, we will:

- Attract and retain staff, physicians, students and volunteers who aspire to excellence.
- Promote a learning environment where staff participation will enrich the organization and demonstrate our commitment to investing in our people.
- Develop and implement innovative models for continuing professional development for all staff.
- Create a work and practice environment where the culture promotes quality, innovation and workplace health, and where all staff participate in planning and making decisions that drive our future.
- Develop an environment of excellence and accountability where staff performance is measured, and where exemplary work is recognized and rewarded.
- Increase the competencies of those engaged in both formal and informal leadership roles.

## Enabling us to do our very best

In order for this ambitious plan to succeed, Toronto Rehab must continue to build close and collaborative relationships with government and its community. Investment will be needed in new and enhanced programs and services, specialized space in which to undertake our teaching and research, redeveloped facilities that are more conducive to rehabilitation and recovery, and advanced information and decision support systems.

As we invest, we must maintain our long-term financial strength and our fiscally responsible approach to operational

planning and financial management. This means successfully increasing funds from existing sources and finding new revenue streams to support our continued growth.

The Toronto Rehab Foundation will continue to inspire the philanthropic spirit in our generous community. The invaluable contributions of donors will support patient care, enable us to make the required capital improvements to our facilities, build our research program, enrich our educational offerings, and extend the reach of all that we do.

Excellence in research will require not only sophisticated laboratories, design studios and prototyping workshops, it will also require comprehensive and high quality clinical data that is secure yet readily accessible to our scientists. Education requires reliable two-way communication systems to facilitate the transfer of information between Toronto Rehab and a host of its educational stakeholders. And patient care requires clinician-friendly information systems to facilitate best practices, to support quality decision-making and to ensure the safety of our patients.

Inspired by **those we serve**, we aspire to **excellence** in all that we do.

## Daring to dream

The impact of serious illness and injury affects all Canadians and costs our economy an estimated \$60 billion a year. The toll on the lives of individual Canadians, people we all know and love—a sibling, a parent or partner, a child—is incalculable.

At Toronto Rehab, we know that it is not enough just to provide access to our services. Inspired by those we serve, we aspire to excellence in all that we do. We are committed to generating new knowledge and interventions that will improve the lives of people everywhere who experience the challenges of a lifetime.

This is our dream. This is our future. And we believe that, with the hard work and dedication of our staff and the support of our community, over the next five years we will move closer to making it our reality.



## APPENDIX: CLINICAL PROGRAM COMMITMENTS

### Making a difference—one patient at a time

Our commitment to excellence is focused on what will make the most difference for individuals and their families. This means researching what works best for people who live day in and day out with a variety of challenging conditions. Each of our seven programs will tackle issues that affect patients, find innovative solutions and develop educational programs to share our learnings and our understanding about what works and what doesn't with others.

#### Improving the odds for people with heart disease

Heart disease and stroke continue to be the leading causes of death and disability in Canada. Approximately 420,000 Ontarians have some form of cardiac condition. And the numbers are rising at an alarming rate due to a variety of factors: the twin epidemics of obesity and diabetes, both of which carry a very high cardiac risk; more and more people are surviving heart attacks—in Canada about 60,000 people a year suffer hearts attacks, and an increase in the prevalence of congestive heart failure due to the aging of the population.

Despite the increasing prevalence of heart disease, the Cardiac Care Network of Ontario estimates that 75 per cent of patients

with cardiac disease do not have access to cardiac rehabilitation services. Unfortunately, many of these patients (and their caregivers) do not understand the benefits of rehabilitation and are never referred to a service. Yet the evidence is clear: for people with or at high risk of cardiovascular disease, comprehensive cardiac rehab and secondary prevention programs reduce subsequent cardiac events and the risk of dying by about 25 per cent during the five years following an acute episode.

#### Over the next five years, our **Cardiac Rehabilitation and Secondary Prevention Program** will:

- Develop specialized rehabilitation services to meet the unique and growing needs of people with congestive heart failure, diabetes and obesity to prevent primary and secondary cardiac events.
- Engage patients in the rehabilitation process sooner following their discharge from acute care hospitals.
- Partner with community agencies to create cardiac alumni programs to help patients maintain the benefits of rehabilitation.
- Increase patient and physician awareness of the benefits of rehabilitation.

- Advocate for and provide expertise in continuing education programs for primary care providers.
- Become the heart disease prevention and rehabilitation educator of choice for the public, and for students at all levels of training.
- Conduct studies to identify other population groups that could benefit from cardiac prevention, rehabilitation and disease management programs.
- Investigate the factors that ensure people continue to live what they have learned so that the benefits of cardiac rehabilitation are maintained over the long-term.

#### Maximizing the potential of people with chronic conditions

Shifting capacity within the health system; higher survival rates; increasing prevalence of chronic disease; the aging of the population—all of these factors are changing the care that is required by the people we see in Complex Continuing Care (CCC). Individuals now come to us with more acute and more complex issues. Sadly, they are also younger: almost 30 per cent of our patients are under the age of 50. Many of them have a significantly higher rate of neurological disorders and more severe functional limitations than patients in other CCC programs in the province.

Nonetheless, with the introduction of low-tolerance, long-duration rehabilitation, we are shortening stays in complex continuing care: the percentage of patients staying for more than one year is dropping while shorter stays are becoming more common.

With changes in care delivery elsewhere, we are also seeing a greater need for palliative care. Patients with degenerative neurological disorders need a comprehensive approach to end-of-life care that is currently not readily available.

In view of these significant shifts, over the next five years, the **Complex Continuing Care Program** will:

- Develop highly specialized services for people who need ongoing complex medical care and for people with severe functional limitations due to neurological disorders.
- Promote optimal functioning and quality of life for adults with neurological disorders as they move from acute care to low-tolerance, long-duration rehabilitation to other appropriate living environments.
- Respond to the specialized needs of families of younger patients with severe impairments.
- Adopt a comprehensive approach to wellness and aging for people with degenerative and chronic diseases.
- Develop, in partnership with others, a specialized palliative care environment.
- Work with our academic and other partners to develop unique learning opportunities for students, health care providers, patients and families.
- Identify, develop and evaluate interventions and activities that will improve function, and decrease the burden of injuries to caregivers.

### Supporting even the frailest of the elderly to live at home

Ontario's population is aging. In about 15 years, two and a quarter million Ontarians will be 65 years of age or older. The incidence of mental and physical disabilities increases with age. In fact, according to Statistics Canada, the disability rate for people 65 years and over is 40.5 per cent. Falls are particularly treacherous. One in three people 65 years of age and over fall every year; falls are the single greatest reason for hospitalization among the elderly.

One in twenty people over the age of 65 is affected by dementia. Incidence and prevalence increase sharply after the age of 85 when one in three people are diagnosed with the disease. By the year 2010, an estimated 127,000 Ontarians will have Alzheimer's disease.

According to the Regional Geriatric Program, these demographic changes will increase the need for specialized geriatric services for the frail elderly. The challenge will be to expand effective care into the communities where elderly people live—in their homes, and in retirement and long-term care facilities.

### In response to these changes, over the next five years the Geriatric Rehabilitation Program will:

- Continue to collaborate with the University Health Network to provide integrated rehabilitation services for the frail elderly, involving inpatient, day hospital, and outreach services and clinics.
- Address the functional needs of the frail elderly as they start hemodialysis, and evaluate the hemodialysis service.

- Collaborate in the development of a long-term care behavioural unit with enhanced geriatric psychiatry outreach.
- Implement and evaluate a team-based approach to teaching that promotes interprofessional teamwork in a hospital setting. Extend this interprofessional model to outreach programs.
- Advance knowledge about balance, falls prevention and dementia care both inside and beyond Toronto Rehab.
- Conduct research on the quality of life and quality of caregiving for those with Alzheimer's.
- Explore the use of artificial intelligence to increase the function, safety and independence of people with dementia.

### Making a home-away-from-home as close as possible to the real thing

While we will do all we can to help people as they age at home in their own community, some seniors will need around the clock nursing care and support later in life. Our job, in our new long-term care centre, will be to ensure that the quality of life in their new home-away-from-home is as good as it can possibly be. This applies to younger residents as well, who will need long-term care services for a variety of chronic conditions.

At Toronto Rehab, we see long-term care as a logical extension of the other services we provide. And we are keen to bring the elements of our mandate—research and education—into play in our new long-term care centre working in concert with our partner, Extencicare Inc. By combining Extencicare's expertise and success in long-term care with our experience in complex continuing care and rehabilitation, we expect to assume a leadership role in long-term care.

Over the next five years, Lakeside Long-Term Care Centre will:

- Address the needs of specialized populations requiring long-term care.
- Develop, implement, evaluate and share our quality improvement and best practice initiatives related to the elderly and other specialized populations.
- Improve access and a smooth transition for residents and their families through partnerships forged with referral sources.
- Create models of student education that improve the preparation of graduates and promote interest in working in long-term care.

Taking aim at a leading cause of long-term disability

People who need specialized musculoskeletal rehabilitation include victims of trauma, cancer survivors and people who have arthritis and other auto-immune disorders.

In 2000, close to 17,000 Ontarians were admitted to hospital due to trauma. About 75 per cent of them had injuries related to muscle and bone damage (their musculoskeletal system). Increasing numbers of people survive life-threatening trauma and require rehabilitation. At least 20 per cent of those who experience trauma would benefit from admission to a structured inpatient rehabilitation program. Unfortunately, only about half of these people will receive the care they need to get on with their lives.

The World Health Organization has declared cancer a chronic condition requiring rehabilitation to optimize function, quality of life and reintegration into the community. Toronto Rehab will work with Cancer Care Ontario and others to ensure rehabilitation is an integral part of cancer care in this province.

Arthritis is increasing at a rate of one per cent every five years. By 2011, more than one and a half million Ontarians are expected to have the disease that, in close to 20 per cent of cases, leads to joint replacement surgery. Faced with this significant rise in demand, the Ministry of Health and Long-Term Care is looking at alternative care delivery models to expedite joint replacement surgery and aftercare for those who need it. This will likely mean shifting some current rehabilitation resources from inpatient to outpatient and community services. However, specialized inpatient rehabilitation will still be required for those patients who suffer from complex, multi-system conditions that affect mobility and function.

In view of these trends, over the next five years the Musculoskeletal Rehabilitation Program will:

- Continue to focus on, develop and evaluate our three specialized streams of care to meet the needs of individuals with complex musculoskeletal conditions, cancer and trauma.
- Build and evaluate a comprehensive model of care for these populations that includes new care delivery models involving inpatient care, low-tolerance, long-duration rehabilitation, and outpatient and outreach services.

- Equip staff with the highly specialized skills they will need to care for increasingly complex patients.
- Increase educational opportunities for nursing, physiotherapy, occupational therapy and medical students.
- Translate our discoveries into unique educational offerings for health care providers and the public.

### Ensuring that people with neurological impairments get the right service at the right time

Every 10 minutes someone in Canada has a stroke, affecting more than 50,000 people a year. Close to 20,000 of these people live in Ontario. In the GTA, they account for 11,000 emergency room visits annually. Ten per cent will die; 40 per cent will be left with moderate to severe impairments; 10 per cent will be so severely disabled that they will need around the clock care for the rest of their lives. Due to the aging of the population and other factors, the incidence of stroke is expected to rise by 33 per cent over the next five years. What is particularly troubling is that we are seeing more and more young people who have had a stroke.

Also disturbing, is the number of traumatic brain injuries—the leading cause of death and disability for Canadians under the age of 45. The Ontario Brain Injury Association estimates that 18,000 people sustain brain injuries each year; about 3,000 of these individuals will need rehabilitation.

Canada has one of the highest rates of multiple sclerosis (MS) in the world: an estimated 50,000 men and women in this country have MS. Every day three more people are diagnosed with the

disease. About a third of them live in Ontario. MS is a progressive, often disabling, disease of the central nervous system for which there is no known cure.

More and different types of rehabilitation services are needed for people with these neurological conditions. Those with severe impairments appear to do better in what's called slow stream rehabilitation, which is currently not available. Additional services are also required for people with minor brain injuries where early intervention is the key to a fuller recovery. And the ability to re-access the rehab system when setbacks occur is critical.

### In view of these service demands, over the next five years the Neuro Rehabilitation Program will:

- Develop slower stream low-tolerance, long-duration rehabilitation services.
- Institute innovative services, including outpatient and outreach services, and brief re-admissions that facilitate transition to the community.
- Build and evaluate evidence-based fitness and wellness programs for each patient population.
- Provide specialized courses, training placements and public education in neuro rehab.
- Evaluate the benefits of functional electrical stimulation (FES) in the recovery of upper arm function, and of early assessment and treatment of sleep apnea after a stroke.
- Apply new interventions to improve mobility, including improved walking aids and wheelchairs.

### Making life more livable for people with spinal cord injuries and disease

Imagine being told that you will never walk again. Each year, two to three Canadians a day will hear this chilling news and have to come to grips with this reality. An estimated 900 to 1,100 Canadians a year sustain permanent physical impairments due to spinal cord injury and/or disease. Almost half of them live in Ontario.

We are seeing more and more patients with diseases of the spinal cord and fewer cases involving traumatic injury. Ten years ago, 75 per cent of our patients had traumatic spinal cord injuries; by 2004 that number had decreased to 44 per cent. The majority of patients we see now are admitted with diseases of the spinal cord, including cancer, infections and degenerative conditions. In fact, according to the Canadian Institute for Health Information, non-traumatic spinal cord injury outnumbers traumatic injury by a factor of four.

Another 36,000 Canadians are living with the effects of spinal cord injury. Their life expectancy has increased dramatically and is now approaching that of the general population. As a result, there are increasing needs for: primary care for people with spinal cord damage; specialized rehabilitation to address the effects of aging; accessible transportation outside of major urban areas; appropriate housing and attendant care services; as well as enhanced services in the community.

Faced with this changing landscape, over the next five years the **Spinal Cord Rehabilitation Program** will:

- Extend outreach services, short-stay assessments and external partnerships for referral and consultation to facilitate and support integration back into the community.
- Lead the development of a case management model that will ensure access to the best and most comprehensive care in the community.
- Develop highly specialized education programs for patients and families, primary care providers and other health care professionals in the areas of assistive devices, functional electrical stimulation, bone and skin health, seating and urological management.
- Evaluate interventions that improve bone health and reduce complications from fractures, and study the impact of electrical stimulation on recovery and function.
- Use longitudinal data and client feedback to develop better functional services for spinal cord patients.
- Apply technology to provide people with quadriplegia better access to, and control of, their environments.



For additional copies of this Strategic Plan summary, contact:  
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