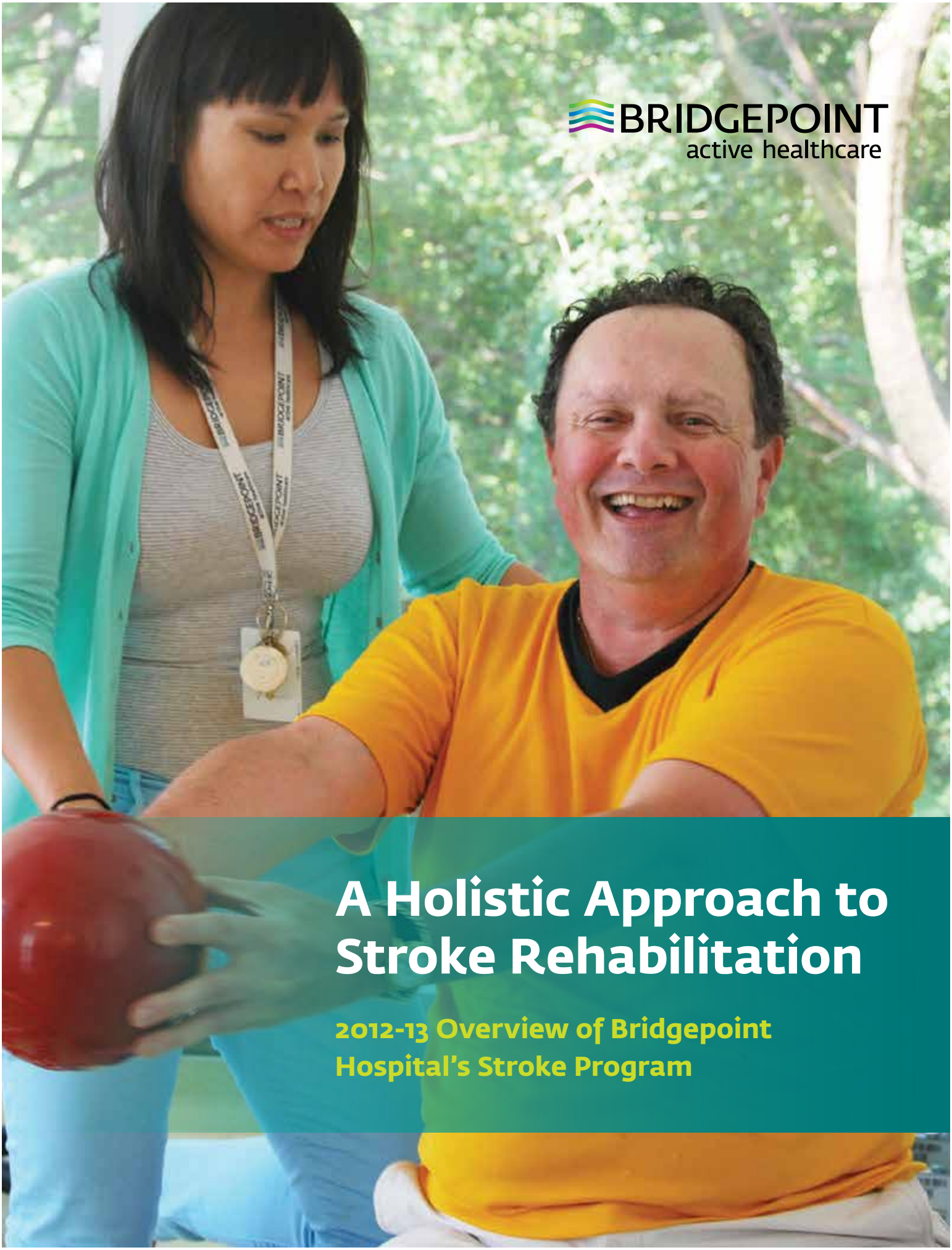


A Holistic Approach to Stroke Rehabilitation

2012-13 Overview of Bridgepoint Hospital's Stroke Program

About Bridgepoint Active Healthcare

As a pioneer of active healthcare, Bridgepoint is transforming the way patients with complex health conditions receive their healthcare and lead their lives.

Putting best practices into action, we provide a rehabilitation process that is not only progressive, dynamic, and goal-oriented, but that shifts away from the old model of isolated treatments by multiple care providers toward a fully-integrated team that can collaborate across the continuum of care to optimize the individual's potential for recovery.

Active healthcare puts the patient at the centre of their own care. By maintaining our focus on the whole person and empowering our patients to participate fully in their recovery, we work hard to support a seamless transition that gets them back to life in the community, which is where they belong.

Through groundbreaking research, outstanding care and a commitment to ongoing improvement and innovation, our goal is to be the leading provider of healthcare, community rehabilitation, wellness programs, education and research for patients with complex health conditions.

Bridgepoint Active Healthcare is made up of the Bridgepoint Hospital, Bridgepoint Family Health Team, Bridgepoint Collaboratory for Research and Innovation, and Bridgepoint Foundation.

Bridgepoint's Leading Stroke Rehabilitation Program

Since the Ontario Stroke Strategy was created in 2000, Bridgepoint has been actively engaged in supporting stroke patients through treatment, education and access to rehab services. From our collaboration with the GTA Rehab Network which saw the creation of the "Rehab Finder" in 2004 to our current work on the MSK/Stroke Implementation Group to realign and improve stroke rehabilitation across the GTA, we continue to act as system partners to improve outcomes for the leading cause of adult disability in Ontario.

Bridgepoint was among the first in Ontario to operationalize best practices at the heart of our stroke program and optimize the patient experience to actively manage inpatient time at Bridgepoint. Our commitment to standards, clinical excellence and leadership in stroke care is closing the gap between knowledge and practice at Bridgepoint, allowing us to deliver consistent, high-quality and evidence-based programs that are significantly reducing the impact of stroke on our patients.

Our complete program is supported by ongoing research designed to explore how stroke rehabilitation clinicians conceptualize complexity and the use of best practice recommendations in treating patients.

Our specialty is delving into complexity and both simplifying and streamlining treatment. The entire care plan is important to us and this approach helps patients as they prepare to transition back to life outside of the hospital.

Our stroke patients are active partners with our interprofessional team to help support their rehabilitation and return home and to the community. Our robust ambulatory care program includes vocational rehabilitation and provides our patients with a seamless transition to outpatient programming.

This report highlights Bridgepoint's holistic approach to stroke rehabilitation. This is evident from our integrated inpatient rehabilitation programs, to our unique 55 and under neuro-support program for stroke survivors and our support for staff through education programs such as "Choices and Changes".

Stroke Program by the Numbers

100%

Proportion of clients treated on stroke unit (inpatient rehabilitation)

43 Days

Average length of stay in an inpatient rehabilitation setting for patients admitted following an acute stroke event

96%

Proportion of (eligible) clients prescribed antithrombotic therapy (inpatient rehabilitation)

98%

Proportion of clients with initial dysphagia screening at admission (inpatient rehabilitation)

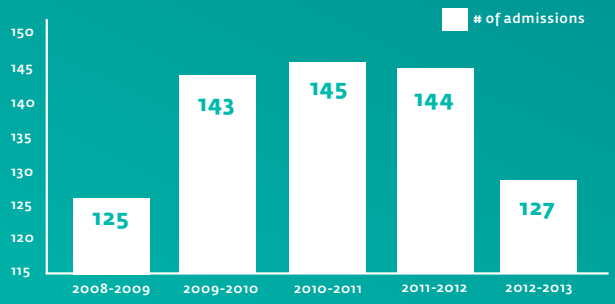
29

Average change in functional status using a standardized measurement tool

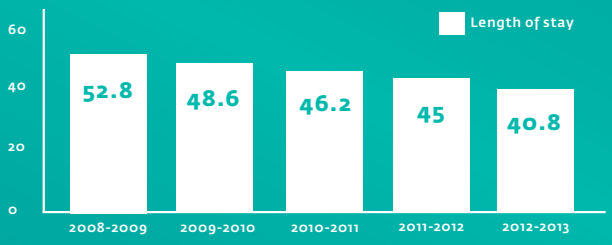
92%

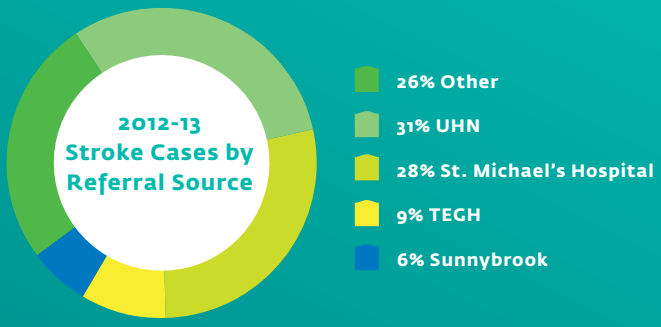
Proportion of stroke patients with documentation to indicate screening for depression

Number of admissions to High Intensity Stroke Program-5 year scan

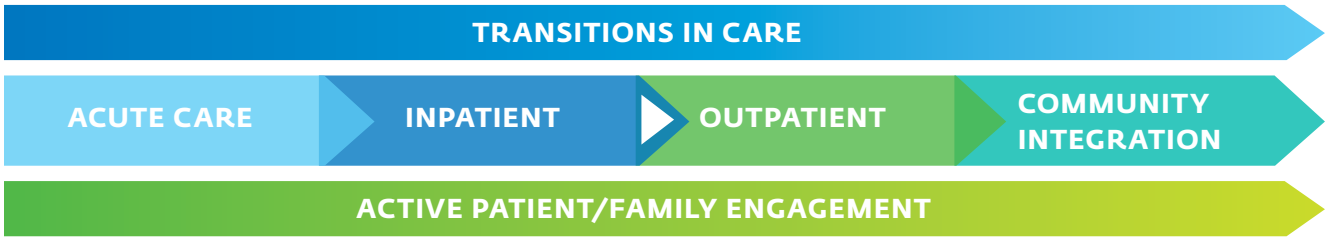


Average Length of Stay in High Intensity Stroke Rehab





An Integrated Approach to Stroke Care



Our integrated stroke program offers both inpatient and outpatient rehabilitation services for patients who have experienced moderate to severe impairment resulting from a stroke. Together, these complimentary programs allow our team to tailor treatment to individual patient goals, abilities and progress across the continuum of care. The following chart outlines how stroke patients are supported across all four patient programs at Bridgepoint.

High Intensity Stroke Care

- High intensity rehab program for patients who have experienced moderate to severe impairment resulting from a stroke
- Includes 180 min of therapy per day, 5 days a week (Occupational, Physio, Speech)
- 20 beds
- Average length of stay 6 weeks or less

Reconditioning Stroke Care

- Lower intensity rehab program for patients who require a slower paced therapy program or who may require a longer LOS
- 28 beds
- Average length of stay 12 weeks or less

Specialized Medical and Complex Care

- Designed for patients with significant health impairments who have finished a course of rehab or are not able to participate in a rehab program
- Emphasis on stabilization, health optimization, functional maintenance and risk reduction

Outpatient Stroke Care

- Held at the Christine Sinclair Ambulatory Care center
- A short-term, intensive active rehab program
- Average duration 2 times a week for 8 weeks
- Includes therapy (group and individual), education and case management services

An Integrated Team

Our stroke patients are supported by an interprofessional team of inpatient and outpatient physiotherapists, occupational therapists, nurses, physicians, physiatrists, social workers, speech language pathologists and recreation therapists who use best practices to help guide their treatment plans.

Patients recovering from a stroke at Bridgepoint have access to a wide variety of clinics and programs, including:

- Vocational rehabilitation
- Neuropsychology services
- Mindful Connections: A Young Stroke/Neuro Peer Support Group
- Augmentative Communication and Writing Clinic
- Seating Clinic
- Dental Clinic
- Spasticity Management Services
- Chiropody
- Ophthalmology
- Smoking Cessation
- Interpreter Services

In Focus: Mindful Connections

Bridgepoint's Mindful Connections: Young Neuro Peer Support Group is designed for patients between the ages of 18 and 55 years old who are looking for mutual support and education following a neurological diagnosis, such as stroke, ABI, or neurodegenerative disease. The group is facilitated by the ambulatory care social worker, with guest speakers occasionally invited to attend.

Topics are guided by group interest and focus on aspects of psycho-social adjustment following a neurological event. They include: relationship changes, return to work, emotional/personality changes, anger management, acceptance/adjustment to disability, stress management, self-management, and community/social reintegration.

The group meets biweekly for approximately 16 weeks. Mindful Connections is open to active outpatients or those within 6 months of their discharge from our inpatient program.

From Wheelchair to Walker to Work

The day that Dale Herceg arrived at Bridgepoint Hospital in a wheelchair in January 2013, his care team asked him to consider one question: What are your goals? The answer to that question – which, for Dale, was to return to his family at home, his career, and his active workouts – was the first step in creating a care plan that would put him on the path to recovery after suffering a stroke that left him with double vision and no balance. After three weeks of intensive inpatient rehabilitation at Bridgepoint, Dale was discharged home and continued his therapy at Bridgepoint as an outpatient.

"Just having those goals was really important in giving me something to work towards," recalls Dale, who, eight months later, has reached two of those three milestones and is well on his way to achieving the third.

A retired lawyer who now arbitrates disagreements between lawyers and clients, Dale admits that he asked his care team so many questions, they may have felt they were being cross-examined. "Every member of my care team at Bridgepoint – physiotherapists, occupational therapists, doctors, nurses, speech pathologists – I've felt a rapport with," he says. "I know I'm self-motivated, but I've never felt like I was doing this myself."

It's admittedly been a rough road for Dale, though, and it included one major setback. Everything was progressing well until mid-May. Then, one morning, Dale's wife of 34 years was unable to wake him. Rushed to hospital unconscious, Dale was diagnosed with ketoacidosis – a potentially fatal metabolic disorder that can affect diabetics.

After more than a week in acute care, Dale was once again discharged. The good news was that,

thanks to intensive physiotherapy during his hospital stay, Dale had maintained or improved on the physical progress he'd made over the previous four months at Bridgepoint. After a summer of continued regular outpatient and occupational therapy at Bridgepoint, he achieved his second goal: returning to work.

"When I arrived at Bridgepoint in January, I was in a wheelchair, and I was scared," Dale recalls. "I'll never forget the porter who took me to my first physio session. He reassured me that he'd seen people achieve remarkable things at Bridgepoint. That really lifted me. When I was discharged in February, I was walking with a cane. I'm happy, fortunate and grateful – and I couldn't have done it without Bridgepoint."

Transitions in Care from Inpatient to Outpatient Stroke Rehabilitation

As the Canadian Best Practices Recommendations for Stroke Care makes clear, patients, families, and caregivers need to be prepared for their transitions between care environments, and that requires access to information, education, training, emotional support and community services.

All recent stroke patients who are admitted as inpatients to Bridgepoint are encouraged to attend our comprehensive ambulatory care program to support their successful transition from our hospital back to the community. As part of our ongoing program improvement efforts, however, a recent review of current processes revealed that there was no formal mechanism to support the transition of patients post-discharge into the outpatient program.

To fill this gap in the continuity of care, representatives from our outpatient and inpatient teams met to identify opportunities to enhance the outpatient experience. The result was the implementation of a **'transitions in care'** pilot project.

Implemented in early 2013, this orientation program aims at facilitating patient transitions into ambulatory care. Toward that end, our **inpatient therapists are identifying eligible patients who are scheduled for discharge each week** and notifying the case manager in ambulatory care. Eligible patients are then directed to attend designated orientation sessions held twice a week that they can participate in, either individually or as part of a group.

These sessions include an introduction to the outpatient stroke program, a review of services provided, what to expect in the program and a detailed tour of the department.

To support the sustainability of the program, volunteers have been trained to deliver these orientations and physically support patients in their tour of the outpatient clinic.

So far, **informal feedback from our patients has been very positive.** They have told us that becoming familiar with the outpatient program, meeting therapists and hearing what to expect during their stay at Bridgepoint has enhanced their confidence in the next stage of care prior to discharge and on admission to the outpatient program.

As we move forward with the pilot, we are in the process of designing a more formalized and ongoing assessment of patient feedback as we strive for continuous quality improvement in our patient care. Development of a patient satisfaction survey and collection of data will provide additional information to inform this process and ensure sustainability of the project. Additional opportunities will be explored to enhance communication amongst the interprofessional teams and to foster increased integration of inpatient and outpatient programming for stroke care.

Research - Best Practices and the Complex Stroke Patient

The Bridgepoint Collaboratory for Research and Innovation is the only research facility in Canada – and among only a few worldwide – that is 100% focused on developing clinical evidence and best practice for treating patients with complex health conditions. Within it, the Stroke Rehabilitation and Multimorbidity program of research is led by Dr. Michelle Nelson whose interdisciplinary research team collaborates with our staff and external partners to put emerging, evidence-based knowledge to work to improve the lives of our patients

To date, four key projects are underway that will advance both our understanding of stroke patients with complex health conditions and our clinical practices for treating them more effectively.

CIHR Funded Project: October 2013 – September 2014

Stroke Rehabilitation and Patients with Multimorbidity – A Scoping Review: Stroke care presents challenges for clinicians, as most strokes (roughly 80%) occur in combination with other serious medical diagnoses. The purpose of this scoping review is to document the extent to which multimorbidity is included in stroke rehabilitation evidence, and identify the associated gaps in the evidence pertaining to rehabilitation for these patients.

Complexity in Clinical Practice

This exploratory study examined how stroke rehabilitation clinicians perceive patient complexity and the influence it has on their clinical practice (including the use of best practice recommendations). Clinical team members confirmed that patients in inpatient stroke units are very medically and socially complex, which influences their ability to benefit from rehabilitation. Indeed, the defining characteristic of complexity was whether or not a patient could be discharged. Clinicians questioned how applicable the current recommendations are for these patients whom they frequently see in their daily practice. Instead, clinicians reported primarily relying on their sound clinical judgement, team work and creativity to address the rehabilitation needs of these complex patients.

Appraisal of the Best Practice Recommendations

Stroke care in Canada is being transformed to align with the existing Best Practice Guidelines. But if most stroke patients have other co-occurring conditions, the question arises whether current recommendations are sufficient to specifically address this population. In response, we are conducting an appraisal of the recommendations regarding management of multimorbidity and any treatment guidance and/or contraindications noted.

Building a Multimorbidity Profile of Stroke Rehabilitation Patients

Although there is data regarding comorbidity/multimorbidity and the stroke patient population, the reports typically reflect the risk factor profile of patients (diabetes, hypertension, hyperlipidemia, obesity, and smoking). This project, conducted in collaboration with Institute of Clinical Evaluative Sciences provides a unique opportunity to examine multimorbidity data (Charlson Comorbidity Index and risk factors) collected for all stroke patients in Ontario to delineate patient characteristics and create a 'persona' (case style presentation) of multimorbidity and stroke.

Education Programs

Education is an integral part of our stroke program at Bridgepoint, and one that we address across the continuum of care, for both patients and staff alike. We know that this is vital to the efficacy of our programs, the clinical excellence of our teams, and, most importantly, the experience of our patients whose progress and transition back in to community benefits immensely from the insights and strategies that these programs impart. As always, the goal is ongoing improvement of our protocols and practices, which relies heavily on our highly effective collaborative team approach.

Patient Safety Education Program

In 2010, Bridgepoint became the first Canadian adopter of the Canadian Patient Safety Institute's (CPSI) Patient Safety Education Program (PSEP) and was given their inaugural award for innovation in this critical area of patient care. To date, we have delivered the six-month course, which combines 32 hours of classroom learning with group project work, to 81 of our staff members. On both occasions that the PSEP has been offered so far, staff from both the neurological inpatient and ambulatory care programs indicated their appreciation for what they described as a unique opportunity to collaborate on a quality improvement project that supports the safe transition of stroke patients from an inpatient setting to outpatients.

License to Drive

We know that a return to driving is a critical concern and goal for many of our stroke patients, so when an evaluation of our patient documentation revealed that driver status information was missing from over half of our patient files in our outpatient program, we moved quickly to address this gap. In doing so, our License to Drive project team chose to focus on mapping the driving status process at Bridgepoint Hospital and identifying the gaps in communication between the inpatient and outpatient programs.

Using PDSA (Plan, Do, Study, Act) cycles, the project team determined that driving status should ideally be documented in the Physiatry family meeting notes or documented during interprofessional clinical rounds. They recommended a consistent process for recording and communicating a patient's driving status among team members, the patient and his/her family. Early audits and evaluation revealed a 30% increase in the consistency of where and how patient driving status was communicated across interprofessional teams.

A one-page information sheet was also developed by clinicians and physicians to support patient education in this area.

Glucometer Training
The inpatient stroke and ambulatory care interprofessional teams identified barriers to safe discharge planning when their patients were not adequately trained on the proper use of a glucometer by their discharge date.

The culprit, the team determined, was that there was no consistent process for identifying patients requiring glucometer training and some internal discrepancy regarding who is responsible for the training process. The need for interdisciplinary collaboration was clear.

Using the PDSA approach, they introduced a modified rounds template that added glucometer training as a discussion item so that relevant patients would be identified and team input could be obtained on potential barriers to be addressed for successful training prior to discharge.

In addition, questionnaires were administered to patients to determine their understanding and comfort level with using a glucometer, prior to discharge. Upon their admission to ambulatory care, questionnaires were re-administered to the same patients to assess their management of the glucometer in the community.

As a result of this effort, we now have a more effective and modified ambulatory care referral form to incorporate glucometer training, which is an important piece in enabling diabetes self-management in stroke patients.

"Choices & Changes" – Empowering Clinicians to Support Changes in Health Behavior

Among smokers who have suffered a stroke, quitting the habit is one of the most effective changes they can make to prevent a future stroke, reducing the likelihood of recurrence by 50%. According to the Canadian Best Practice Guidelines for Stroke, "All members of the interdisciplinary team should address smoking cessation and a smoke-free environment at every healthcare encounter for active smokers". When asked, four out of five Bridgepoint patients who smoke say they think it is important for them to quit, and over 62% of smokers express a desire to quit during their hospital stay (over 75% on our Stroke & Neurological Care units).

In September 2012, Bridgepoint was one of fifteen Ontario hospitals to receive a 2-year Demonstration Project funding from the Ministry of Health and Long-Term Care for smoking cessation program implementation and enhancements in a complex care setting. Bridgepoint's project includes smoking cessation training and education for staff in the stroke program, as well as increased cessation support for patients, and funding to hire a smoking educator to further support individual and group smoking cessation counseling.

The project enables clinical staff in the inpatient and outpatient stroke programs to attend an accredited health communication skill-building workshop, 'Choices & Changes' is based on the latest theories of education and communication regarding health behaviour change, including the Stages of Change Model, Social Cognitive Theory,

Self-Efficacy Theory, Self-Determination Theory, Motivational Interviewing, and the Conviction & Confidence Model. Participants learn specific strategies and skills to apply in a clinical care setting to support changes in health behaviour, such as smoking cessation, and to provide self-management support to their patients.

Results to date:

- 46 staff have attended a full day 'Choices & Changes' workshop
- Positive results (both qualitative and quantitative) from workshop evaluations strongly support the value of this program to participants who report a marked improvement in their skills and techniques to support and encourage patient-centred health behaviour change

Building on these successes, planned next steps for the program include:

- Implementation of process improvements identified by teams, as well as making the documentation and referral processes electronic
- Building on the "Choices and Changes" workshop curriculum to develop a 'Community of Practice' for health coaching skills with Stroke unit clinicians
- Establishing a professional-led peer smoking cessation education group for patients
- Continuing to evaluate the impact of the OMSC and Demo Project on clinical practice, clinicians' attitudes and skills, and patients' participation in the OMSC program

Dale Mackey, right with LiveWell! Strategy Lead Susan Himel.

Dale Mackey Smoking Cessation Educator

Dale Mackey has practiced Health Science and Respiratory Health for 28 years. She obtained her B.Sc. from University of Waterloo, and is a licensed Registered Respiratory Therapist with the College of Respiratory Therapists of Ontario, as well as a Certified Asthma Educator, COPD Educator, Nicotine Dependency Specialist and Smoking Cessation Specialist.

Dale has supported special populations and programs using Smoking Cessation best practice guidelines, evidence-based education, motivational interviewing and behavioral modification. In 2012, Dale joined Bridgepoint Active Healthcare's LiveWell! program, working with complex rehabilitation and chronic care patients.

The Stroke Rehabilitation Team

Michael Calvert,
RN, Patient Care Manager
Michael holds a Bachelor of Science in Nursing from Ryerson University. He has worked on the neurological rehabilitation unit at Bridgepoint since 2001, first as a nurse clinician responsible for ongoing staff and patient education, then, since 2005, as a Patient Care Manager for the complex neurological rehabilitation units. During his time as Interim Director of Rehabilitation and Activation services (2010-13), Michael implemented Stroke Best Practice Guideline Initiatives. He is a member of the Southeast Toronto Stroke Network and serves as a chair of Bridgepoint's Rehabilitation Services Program Council.

Melissa Cutler,
Social Worker
Melissa holds a Master of Arts in Psychology and a Master of Social Work from the University of Toronto. She is a current member of the Brain Injury Society of Toronto, the Canadian Association of Social Workers, and the Internal Network of Social Workers in Acquired Brain Injury. She has practiced for over 12 years in the field of neuro-rehabilitation. Melissa's particular area of interest is the psychosocial experience of young neuro survivors, for whom she has developed and facilitated peer support groups for the last two years. Currently, she is conducting a qualitative study to measure group effectiveness on survivor psychosocial adjustment post event and presented preliminary findings at the 2010 South East Toronto Stroke Network conference on Chronic Disease Management and Stroke.

Sandy Duncan,
Occupational Therapist
Sandy is an honors graduate of the Occupational Therapy, Bachelor of Science program at the University of Toronto who has 18 years of professional experience. She is a member of the College of Occupational Therapists of Ontario and the Ontario Society of Occupational Therapists. Sandy joined Bridgepoint in 1996 and for the past 6 years has also functioned in the role of Clinical Practice Leader - Occupational Therapy service. She has taken a number of continuing education courses related to stroke rehabilitation, such as Motor Relearning Program, NDT – Introduction and 3 week courses, CMSA course, Unilateral Spatial Neglect workshop, Apraxia symposium, and stroke in young adults.

Shauna Hurnanen,
Physiotherapist
Shauna has a Bachelor's of Kinesiology from McMaster University and a Bachelor's of Physical Therapy from the University of Toronto. She has practiced for 10 years in the area of stroke and neurological rehabilitation and is currently a member of the Toronto Stroke Networks Cross-system Knowledge Translation & Implementation Committee for Best Practices. Shauna is a certified NDT therapist and has completed advanced NDT training in upper extremity function and gait, as well as being trained in the Chedoke McMaster Stroke Assessment. Shauna has completed the University of Toronto Educating Heath Professionals for Interprofessional Care course and the Bridgepoint Patient Safety Education Project. She holds a status-only appointment of lecturer with the University of Toronto Physical Therapy Department.

Marie Kranz,
RN
Marie graduated in 1985 and worked for 8 years in a university hospital in Germany before immigrating to Canada. She has worked at Bridgepoint since 1999 and in the neuro-rehabilitation program since 2007.

In 2010, Marie earned a Certificate in Neuroscience Nursing at George Brown College in conjunction with St. Michael's Hospital. Currently, she is actively involved in a research project on timely education for stroke survivors in transition of care.

Heather MacNeill,
MD, BSc (PT), MScCH (HPTE), FRCPC
Heather originally worked as a physiotherapist specializing in stroke, with NDT training. She obtained her medical degree at Queen's and completed her residency in Physical Medicine and Rehabilitation at University of Toronto. She has been practicing at Bridgepoint since 2006 with further training in spasticity management and the use of injectable botulism toxin. Heather is the Director of Medical Education at Bridgepoint and an Assistant Professor at the University of Toronto, Department of Medicine. She is currently working with the stroke teams to create a remodeled education program integrating peer and transitional support for patients and families of stroke survivors. She is the Principal Investigator on a qualitative study examining stroke survivor's educational needs as they transition from inpatient to outpatient and to the community.

Robin Mowforth,
Communications Disorders Assistant
Robin has a BA in Linguistics from York University and certification as a Communicative Disorders Assistant from Georgian College. She has worked at Bridgepoint Hospital in Neurological Rehabilitation with both inpatients and outpatients for the past 8 years. Robin has taken several continuous education/learning courses, including: the Supported Communication for Aphasia course from the Aphasia Institute; Practices in Stroke Rehabilitation for Assistants through Humber College; education sessions in Community Re-engagement Research; and Stroke Best Practice Chronic Disease Management and Stroke: Stroke and the Young Adult. She currently runs a hospital-wide aphasia group that serves people with low to moderate levels of aphasia.

Lynn Race-Head,
Occupational Therapist, Vocational Rehab
Lynne Race-Head is a graduate of University of Toronto Occupational Therapy program. She has focused her career on enabling patients to improve their community productivity and is the only therapist in the GTA offering vocational services to OHIP clients. Lynne has worked with clients with work-related injuries, low vision and blindness, and those wanting to return to work, school or volunteering post-stroke and acquired brain injury. She has worked at Bridgepoint since 2006 in the position of occupational therapist with the ambulatory care vocational program. She is General Aptitude Test Battery certified and is proficient with a number of other standardized work-related and cognitive assessments.

Tammy Sieminowski,
MD, CCFP, MEng
Tammy has been an attending physician for the neuro-rehabilitation program at Bridgepoint since 2002. She completed her medical degree and residency training at the University of Toronto, Department of Family and Community Medicine. Her research interests include interdisciplinary team processes and how these impact quality of patient care and health system resource management. She is the Principle Investigator for the Neuro-rehabilitation Registry at Bridgepoint which collects metrics that facilitate research and continuous quality improvement on the neuro-rehabilitation units. She is a Lecturer in the Faculty of Medicine at the University of Toronto and a clinical supervisor/ co-investigator working with undergraduate and graduate students in the Faculty of Engineering.

Ryan Wood,
Speech-Language Pathologist
Ryan holds a Bachelor of Science from McGill University and Masters in Health Sciences from University of Toronto. Since starting in 2009, Ryan's work at Bridgepoint has focused on the neuro population where he has had the opportunity to work in both high intensity and reconditioning programs. Ryan has provided ongoing education to staff, families and students regarding safe swallowing practices and communication strategies and is currently assisting with the development of a stroke education series for in- and outpatient populations. Ryan is a certified member of the Canadian Association of Speech-Language Pathologists and Audiologists.

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BRIDGEPOINT
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