



Monday, March 9, 2009  
8:30 a.m.- 4:00 p.m.

## Rehabilitation Transforming Healthcare

Toronto Marriott Downtown Eaton Centre Hotel • 525 Bay Street • Toronto, Ontario

**Abstract Title:** Traumatic Brain Injury Rehabilitation Outcomes in a Canadian Health Care Environment: A Comparison with the U.S. Model Systems Database

**Primary Presenter:** Nora K. Cullen

**List of Authors:** Nora K. Cullen, Matthew McInnes, Kristine Kelly, Kattleya Tirona

**Affiliation:** Toronto Rehabilitation Institute

### Abstract:

Objective: to explore the differences between the descriptive findings from a traumatic brain injury (TBI) rehabilitation data set in Canada compared to the published results of the US Model Systems Database Study. Design: Prospective, longitudinal study. Setting: The Toronto, Ontario, Canada and inpatient rehabilitation facilities included in the US Model Systems Database Study. Participants: Canadian and US patients receiving inpatient rehabilitation following TBI. Results: Across both groups, TBI patients were typically male, white, employed at the time of injury, and sustained a TBI in vehicle-related injuries. TBI patients in Canada were older and more educated than in the US. Measures of initial severity of injury were higher for Canadian patients. Canadian patients had lengthier hospital stays in both acute care and during rehabilitation and achieved lower functional gains compared to US patients. Conclusions: Differences in severity of injury and functional outcome were found between the Canadian and US groups. These may be indicative of how the different systems of care in the two countries could have an effect on service delivery models and rehabilitation outcomes. Patients receiving care through an insurance driven system such as the US health system may be undergoing more intensive rehabilitation programs within shorter time periods because the system itself demands efficiency. On the other hand, publicly funded health systems like in Canada that do not put limitations on the length of hospital stays provide patients the time to undergo more assessments and spread out their rehabilitation treatment over an extended period of time.

# *Rehabilitation Transforming Healthcare*

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**Abstract Title:** Specialized Community Rehabilitation Team Outcomes Compared to Generic Service Model for Persons with Acquired Brain Injuries: A Two-Year Follow-Up Study

**Primary Presenter:** Gary J. Gerber

**List of Authors:** Gary J. Gerber, Kathryn A. Boschen, Judith Gargaro

**Affiliation:** West Park Healthcare Centre

**Abstract:**

Purpose To compare outcomes for persons with acquired brain injury (ABI) living in and around two small cities in Ontario, receiving publicly funded services from two Community Care Access Centres (CCACs). Relevance Research in community mental health suggests that specialized coordinated community interdisciplinary teams achieve better outcomes than brokered services. The community team model has not been applied widely for persons with ABI. Instead, most CCACs provide generic services assigned by case managers. This study compares outcomes of an ABI team model to those of a generic model serving ABI clients as part of a broader caseload. Hypothesis, Subjects, Methods Hypothesis: The community ABI team clients will show better outcomes than the brokered generic services clients. Subjects: Adults with acquired brain injury living in their home, and a designated family member, if available. Methods: Repeated measures face-to-face instrument administration by an independent research assistant at baseline, 1 year, and 2 years. Outcome measures were: Productivity Status, Mayo-Portland Adaptability Index, Disability Rating Scale, SF-36v2, Community Integration Questionnaire, Community Integration Measure, Burden Assessment Scale, Goal Attainment Scaling, and Family and Client Satisfaction with Services. Analysis The data were analyzed using descriptive methods, crosstabs, and T-tests. Results One-year follow-up data (N=42) showed that both groups had expected improvement toward individual goal achievement. The ABI Team clients showed improvement in health status and were more satisfied with the provided services compared to the Generic Service clients. Generic Service clients showed a decrease in functioning and in health status over 1 year. Preliminary two-year follow-up data (N=27) for both groups showed a decrease in family burden. Discussion Clients served by the ABI Team had better outcomes than clients receiving generic services. Conclusions Specialized multidisciplinary teams are effective in meeting rehabilitation goals for client living in the community and improving their health status. Generic services are able to maintain clients in the community.

# Rehabilitation Transforming Healthcare

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**Abstract Title:** Expanding the role of cardiac rehabilitation to cardiovascular rehabilitation. Improvement in exercise physiology after Stroke/TIA after six months of exercise training. Lakeridge Health Experience.

**Primary Presenter:** Ravi Tahiliani

**List of Authors:** Ravi Tahiliani

**Affiliation:** Lakeridge Health Corporation

## Abstract:

Relevance: Cardiovascular disease represents 38% of the chronic disease burden (Statistics Canada 2006), with almost 20,000 strokes per year in Ontario. Stroke survivors are at an increased risk of stroke as evidenced by many of the clinical trials (CATS, Caprie, ESPS2, TASS). Physical rehabilitation has been demonstrated to prevent recurrent stroke and reduce disability (Sacco et. Al, Circulation 2006 113; e409-49, Goldberg et. Al, Stroke. 2005 Oct;36(10):2206-11) but has also demonstrated improvements in cognition (Psychological Inv 2003), gait cadence and symmetry (Smith et. Al. Neurorehabil Neural Repair. 2000;14(1):65-71). Functional imaging studies show that such exercise also induces sub-cortical reorganization in stroke patients. (Hanley et. Al, Cleve Clin J Med. 2008 Mar;75 Suppl 2:S83-6). Overall, low cardiorespiratory fitness is a significant predictor of stroke and all cause mortality (Gibbons et. Al, JAMA, 1996, Jul 17;276(3):205-10 ) Hypothesis/Purpose: We sought to determine the impact of our cardiac rehabilitation program on exercise capacity in patients that were referred following a stroke as part of a new initiative at our centre. Methods: A retrospective chart review was carried out on patients referred from the Lakeridge Health Stroke Prevention Clinic to the cardiac rehabilitation program between 2007-2008. All patients underwent a Stage II stress test, with either treadmill or cycle ergometre at the initial visit and at six months. Measurements included exercise parameters such as peak VO<sub>2</sub>, Ventilation threshold and workload. Cardiac risk factors including smoking, blood pressure, weight in kilograms and waist circumference were also documented. Statistics was carried out using SPSS for windows, and a p-value of 0.05 was chosen for significance. Results: A total of 45 patients completed this program during this time frame. Peak VO<sub>2</sub> improved from a mean of 15.3 to 17.2 (p=0.001), ventilation threshold improved from 10.1-10.9 (p=0.031). There were improvements in walk time from 24.16 s to 48.08 seconds (p<0.001) and walk distance (1.21 miles to 2.6 miles p<0.001). Although not statistically significant, the mean weight decreased from 83 kg to 82 kg, and the waist circumference decreased. Comparing those patients who completed the program to those patients that did not complete the program, there were statistically significant differences in waist circumference, ventilation threshold, peak VO<sub>2</sub>, and resting heart rate. Limitations: This is a relatively new program for Lakeridge Health Corporation, and as the sample size is quite small. In addition, this was a retrospective chart review and not a randomized controlled trial. Discussion: The data clearly indicates that those stroke survivors who do not complete the program are generally "less fit" as demonstrated by significant differences in peak VO<sub>2</sub>, ventilation threshold, waist circumference and resting heart rate. And, for those who complete six months of exercise training, there is significant difference between initial "fitness level" and "their change in fitness". Since there is evidence from the clinical trials that exercise reduces morbidity and mortality, it is possible that earlier intervention in our stroke population would improve outcome levels. Conclusions: In our hospital, we are changing the name of cardiac rehabilitation to cardiovascular rehabilitation, and have expanded our program to include patients with TIA's and strokes.



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## Rehabilitation Transforming Healthcare

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**Abstract Title:** Development and Implementation of an Electronic Referral and Waitlist Management System: Transforming Patient Flow

**Primary Presenter:** Carol Anderson

**List of Authors:** Carol Anderson, Lexan M. Wheaton

**Affiliation:** Lakeridge Health Corporation

### Abstract:

Purpose: In 2006 Lakeridge Health (LH) identified that patient flow into the rehabilitation program was often delayed. This was directly related to the existence of a cumbersome paper referral system and lack of understanding of patient types appropriate for a rehab setting. Given that LH is a fully automated health care facility, an electronic solution would not only be feasible, but optimal to ensure transparency and clarity. In this presentation, the authors will demonstrate the fully interactive product, discuss the benefits and the future applications. Relevance: There is immense pressure to flow patients efficiently between and among services with patients who have increasingly complex needs. The GTA Rehab Network identified that "referral process inefficiencies have contributed to delays in the submission of and response to rehabilitation referrals, and although bed occupancy rates are high, further exploration of opportunities to improve bed utilization and reduce waitlists for rehabilitation is warranted". (GTA Rehab Network; Beyond Acute Care: Next Steps in Understanding ALC Days; March 2008). Results/Findings: After several attempts to develop an interactive waitlist using existing software applications, LH obtained a software license for "Sharepoint Services". In 2007, LH successfully developed the first fully interactive waitlist management tool achieving: 1) Immediate notification of a potential client (automatically populates from Order Entry system); 2) A common understanding/language amongst all providers re: rehab candidacy/readiness and medical stability; 3) Shared accountability for updating relevant information on a patient's current health status and care needs; 4) A reduction in wait time to admission; and 5) Significant improvement in communication amongst providers. Conclusions: Stakeholders, initially skeptical about utilizing the system, can now not function without it. Advance notification of potential rehab patients and the ability to monitor progress towards rehab readiness has allowed LH to expedite appropriate referrals, timely transfers and increased occupancy.

# *Rehabilitation Transforming Healthcare*

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**Abstract Title:** Minimizing the potential age-related differences in the functional recovery following traumatic spinal cord injury (SCI): the importance of best practices in the acute care and rehabilitation centres

**Primary Presenter:** Julio C. Furlan

**List of Authors:** Julio C. Furlan, Michael B. Bracken, Michael G. Fehlings

**Affiliation:** Toronto Western Research Institute

**Abstract:**

**PURPOSE:** Given the increasing incidence of SCI in the elderly ( $\Rightarrow$ 65 years), we sought to examine whether age is a key determinant of functional recovery after acute traumatic SCI. **RELEVANCE:** This study emphasizes the role of the best practices in the acute care and rehabilitation of this complex disease regardless of patient's age. **SUBJECTS:** All patients who were enrolled in the Third National Acute SCI Study (NASCIS-3) trial were included. **METHODS:** Functional Independence Measure (FIM) scores were obtained at 6 weeks, 6 months and 1 year following SCI. **ANALYSIS:** Data analysis was performed using Fisher's exact test, Mann Whitney U test and multiple linear regression. **RESULTS/FINDINGS:** There were 499 patients (423M, 76F; ages 14-92 years, mean of 35.7) who were received 24-hour methylprednisolone, 48-hour methylprednisolone or 48-hour tirilazad mesylate. Both younger ( $n=455$ ) and elderly groups ( $n=44$ ) were comparable regarding ethnicity, weight, Glasgow coma score (GCS) and drug protocol, but significantly different regarding sex, cause, severity and level of SCI. While increase in age was significantly correlated with lower FIM scores at 6 weeks after SCI ( $p=0.025$ ), there were no significant correlations between age and FIM scores at 6 months ( $p=0.289$ ) and at 1 year ( $p=0.61$ ) in the unadjusted models and after controlling for major potential confounders (gender, ethnic group, GCS, alcohol level, drug protocol, cause of SCI, level and severity of SCI). **DISCUSSION/OBSERVATIONS:** These results are consistent with our previous study that showed no age-related differences regarding motor/sensory recovery and axonal survival within the spinal cord white matter. However, our results challenge ageist attitudes in the access and practice of some acute care and rehabilitation centers. **CONCLUSIONS:** Age at time of injury was not significantly correlated with functional recovery in the chronic stage following SCI. Our results, therefore, reinforce the need for individualizing treatment protocols for elderly patients with SCI who have the potential to functionally recovery.



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## Rehabilitation Transforming Healthcare

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- Abstract Title:** Implementation of a New Decentralized Model for Collection of NRS Data: an E-Health Success Story
- Primary Presenter:** Heather S. Reid
- List of Authors:** Heather S. Reid, Lynn Tkac, Karl Wong, Len Forde, Theresa Gottschalk
- Affiliation:** Rouge Valley Health System

### Abstract:

**Purpose:** To implement a new software solution for the electronic collection of NRS data. Decentralize the model of data collection to incorporate inputting by the interdisciplinary team. **Methods, Materials, Principles:** A project team of rehabilitation experts and clinical informatics specialists was created to plan, implement and evaluate the project. Clinical champions in nursing, physiotherapy, occupational therapy were identified. Key principles included stakeholder involvement and educational support. A change management strategy with a clearly articulated vision was incorporated. A workflow analysis, assessment of staff computer literacy, and education to improve staff computer skills and knowledge of FIM principles was completed. **Analysis:** Pre and post implementation evaluation activities were conducted. Analysis of user satisfaction with the software, education and support completed and data quality comparisons were conducted to identify key successes and opportunities for improvement. **Results/Findings:** The results showed enhanced data quality resulting in improved accuracy of coding practices and FIM knowledge by the interdisciplinary team, improvement in data submissions with no errors after the Q1 submission. Staff time spent completing the assessments was reported to be reduced by 30 to 38% and 80% felt that reporting the data electronically made their job easier. **Discussion/Observations:** Adverse affects on data quality were expected initially, however, improvements were realized. Staff engagement was high and teams managed the transition to the new method quickly. **Conclusions:** The collaborative planning model and use of change management principles was necessary to change the culture. Stakeholder involvement was critical. This project provides the building blocks and process to enable spread to the Complex Care Units and Mental Health for the CCRS and OHMRS reporting respectively. The ability for staff to become more involved in reviewing patient outcomes and results has improved and the project has moved the entire program closer to being ready for electronic charting at the enterprise level.

# Rehabilitation Transforming Healthcare

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**Abstract Title:** Motor and sensory assessment of patients with traumatic spinal cord injury in the rehabilitation setting: psychometric properties of the American Spinal Injury Association (ASIA) standards

**Primary Presenter:** Julio C, Furlan

**List of Authors:** Julio C, Furlan, Michael G. Fehlings, Charles H. Tator, Aileen M Davis

**Affiliation:** Toronto Western Research Institute

**Abstract:**

**PURPOSE:** This systematic review examines the psychometric properties of the ASIA Standards in assessing impairment of individuals with traumatic spinal cord injury (SCI). **RELEVANCE:** The ASIA Standards has been commonly used as the best practice for examination of SCI patients in the rehabilitation setting. **MATERIAL:** This review included papers, which examined the psychometric properties of the ASIA Standards. **METHODS:** Papers were obtained from Medline, CINAHL and EMBASE databases (1982-2008). Additional papers were captured in a secondary search using the bibliographies from original articles and published reviews **ANALYSIS:** The ASIA Standards were evaluated regarding item generation, item reduction, reliability validity and responsiveness. **RESULTS/FINDINGS:** The primary search strategy identified 39 publications of which 18 fulfilled the inclusion/exclusion criteria. An additional 51 publications were captured in the secondary search. The key findings from the studies examined indicate that (a) a detailed neurological examination at 72 hours should be obtained for comparison with subsequent neurological assessments in the rehabilitation setting; (b) the use of ASIA upper- and lower-extremity motor subscores instead of a single ASIA motor score reduce the potential ceiling/floor effects; and (c) further investigation of the minimal clinically important difference of the ASIA Standards is required. While the ASIA Standards cannot be evaluated in terms of criterion validity due to the lack of a "gold standard", there are several studies that suggest divergent and convergent construct validity for the ASIA Standards. **DISCUSSION/OBSERVATIONS:** Those results are compatible with the clinical and research experience in the patient's assessment using the ASIA Standards. **CONCLUSIONS:** Our review provides evidence that the ASIA Standards represent an appropriate instrument to discriminate and evaluate spinal cord injured patients in a longitudinal manner with respect to motor and sensory function. Nonetheless, further investigation of the psychometric properties of the ASIA Standards is recommended due to a paucity of studies focused on some key elements of the measurement responsiveness.

# Rehabilitation Transforming Healthcare

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- Abstract Title:** A Provincial Integrated Model to Improve Care for Patients following Hip Fracture: Helping Patients to Return Home
- Primary Presenter:** Janet E. Legge McMullan
- List of Authors:** Janet E, Legge McMullan, John F. Flannery
- Affiliation:** Sunnybrook Health Sciences, Hollan Orthopaedic & Arthritic Centre

**Abstract:**

**Purpose:** To improve hip fracture care through the implementation of an integrated model that focuses on best practices across the care continuum, including early access to inpatient rehabilitation.

**Relevance:** Until recently, hip fracture services have been fragmented and limited, varying considerably across hospitals, with access to rehabilitation occurring only for a select few of higher functioning patients. Recent advances through a Greater Toronto Area pilot project have implemented an integrated hip fracture model of care that offers new access to inpatient rehabilitation for all patients coming from the community and requiring intensive rehabilitation regardless of cognitive issues. Methods included hospitals/community partnerships, standardized clinical pathways, targeted delirium and dementia education, and feedback using performance indicators. These learnings were extended provincially through a knowledge translation initiative using consensus building approaches to synthesize project experiences to develop a provincial model of care and best practice tool kit. Spread was achieved through Orthopaedic Expert Panel leadership to engage Local Health Integration Networks, provincial networks with access to experts, an interactive website, and an education initiative.

**Analysis:** Hip fracture model of care implementation was measured by monitoring both process and performance indicators. Provincially success was measured through Wait Time monitoring of 2 days to surgery, tool kit creation and process indicators for model implementation.

**Results/Findings:** Pilot project rehabilitation results demonstrated over 70% of patients are now accessing rehabilitation earlier, have stays of 26 days, and for most patients (over 80%) new opportunities to return home. Provincial uptake includes planning for hip fracture model implementation in 5 new LHINs.

**Discussion/Observations:** Rehabilitation health professionals that have the knowledge and skills to effectively manage frailties and cognitive issues can help all patients with a hip fracture to have success in rehabilitation.

**Conclusions:** The hip fracture integrated model is improving the system for patients by helping them access appropriate rehabilitation and have new opportunities to return home. These approaches should be considered for other health populations.



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## Rehabilitation Transforming Healthcare

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**Abstract Title:** A Pilot: Coaching Workshops to Develop a Model Environment for Interprofessional Education and Collaboration for Patient and Family Centered Care

**Primary Presenter:** Karen Hayeems

**List of Authors:** Karen Hayeems, Roula Tzianetas

**Affiliation:** Mount Sinai Hospital

**Abstract:**

**PURPOSE:** To develop leadership capability and model an environment for interprofessional education and collaboration (IPE and C) for patient and family centered care (PFCC) **RELEVANCE:** A focus on IPE and C will aid in fostering a PFCC healthcare environment **METHODS:** A three phase approach was used. Phase one - development of core interprofessional team. Phase two - selection of target clinical service (general internal medicine), assessment of team's learning needs, patient, family and staff focus groups to develop curriculum. Phase three - development and delivery of interactive workshop to ninety four participants. Four patient advisors were faculty members and aided to pilot the coaching workshop. A quantitative program evaluation was completed by participants. The evaluation focused on identifying learning outcomes from the workshop. **ANALYSIS:** Thematic approach to data analysis was used. **RESULTS:** Participants developed a better understanding of their colleague's roles and a stronger understanding and commitment to PFCC. **DISCUSSION:** Participants stated that the workshop "opened my eyes" to different professional perspectives due to role plays, mixed seating at the workshop tables, opportunities to socialize at lunch and workshop exercises. Participants gained an increased value of the patient voice and increased drive to provide PFCC through the workshop exercises and patient presentations. **CONCLUSIONS:** The initiative reinforced the need for ongoing opportunities for formal teaching about different provider roles and responsibilities to contribute to providing PFCC.



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**Abstract Title:** Interprofessional education in home care: A University-Community Partnership

**Primary Presenter:** Kristen J. Parise

**List of Authors:** Kristen J. Parise, Lynn Corbey, Patty Solomon, Cathy Risdon

**Affiliation:** Community Rehab

**Abstract:**

**Purpose:** Implement and evaluate an Interprofessional Collaborative (IPC) clinical learning experience for nursing and medical students and rehabilitation clinicians (OT, PT, SLP, RD, SW), in home care and develop a toolkit to facilitate sustainable IPC programmes  
**Relevance:** As health care shifts into communities, there is a need for understanding the roles and scopes of practice among health professionals to improve IPC, avoid duplication of services and promote continuity of care for patients.  
**Methods:** In teams of 2, 180 future physicians and nurses engaged in two, 1/2 day experiences, with 2 different rehabilitation clinicians. Afterwards students and clinicians met in tutorial groups to discuss their experience. Students completed a personal reflection and a program evaluation. Clinicians completed a program evaluation and provided feedback on each student.  
**Analysis:** Quantitative analysis (frequencies, descriptive statistics) was conducted on quantitative data. Thematic analysis was conducted on personal reflections, open-ended answers to program evaluation, focus group and interview data.  
**Results/Findings:** 87% of students were satisfied or very satisfied with the opportunity to learn about roles and scopes of practice of other professionals. Over 80% of students and clinicians stated that they were satisfied or very satisfied with the experience. 90% of clinicians strongly agreed that this experience allowed students to see the effects of the home environment on a patient's health.  
**Discussion:** Clinicians' were excited to expose students to the complexity of Home Care and the vital role of health professionals who work there and how this might impact their future practice. Students were enlightened on the scope of practice of rehabilitation professionals and the impact of the determinants of health on their patient's health  
**Conclusion:** Through providing future physicians and nurses with an understanding of home care and the role of rehabilitation professionals in this environment, we hope to promote a change in practice.



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**Abstract Title:** Caregiving Strategies for Depression in the Elderly: Positive Outcome Case Study

**Primary Presenter:** Colleen S. O'Brien

**List of Authors:** Colleen S. O'Brien

**Affiliation:** Queensway Carleton Hospital

**Abstract:**

Depression in the elderly client adversely affects function and outcomes and is associated with high mortality and morbidity and increased length of hospital stay. Depression is under-recognized and under-treated in clinical settings. This case study describes the experience of one elderly client in the Rehabilitation Unit in a community hospital. The goal of this presentation is to demonstrate assessment and multi-component interventions using the Flow Diagram on Caregiving Strategies for Depression developed by RNAO Nursing Best Practice Guidelines: Caregiving Strategies for Older Adults with Delirium, Dementia and/or Depression. Care strategies were initiated that targeted specific predisposing and precipitating factors for this client with dramatic positive outcomes. This case study demonstrates the need and benefit of implementing Best Practice Guidelines in delivering excellent nursing care.



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**Abstract Title:** Right Place, Right Time, Right Care Patient Flow Project

**Primary Presenter:** Paula Raggiunti

**List of Authors:** Paula Raggiunti, Kathi Colwell

**Affiliation:** Bridgepoint Health

**Abstract:**

Background: A major emphasis in healthcare today is reducing Alternative Level of Care (ALC) days and reducing wait times in acute care facilities. Our organization, which offers Complex Care and Rehabilitation, plays a critical role in reducing the ALC burden and has made improving patient flow a top priority. The Right Time, Right Place, Right Care strategy was launched September 2007 to address internal issues associated with patient flow. This strategy emphasizes the application of innovative and sustainable solutions through the use of Lean techniques and principles. Two substantial changes, led by a group of multi-disciplinary staff, were developed and implemented: 1. A Patient Flow Board The goal was to design a process that reduced delays in discharge planning. The team identified key process milestones and developed a visual management board, the Patient Flow Board, to track a patient's discharge plan. The Patient Flow Board allows staff to identify, at a glance, where a patient is on their activation journey and what tasks need to be completed to ensure that the patient is on track. 2. A Patient Passport The second initiative was the development of a Patient Passport - essentially a communication tool for patients and their families, summarizing key milestones of their care plan. Results: . The average number of days that a patient remains on the unit past their discharge date has gone down to zero from 32. . Standardizing workflow resulted in a 16.5% decrease in the Average Length of Stay



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# Rehabilitation Transforming Healthcare

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**Abstract Title:** An Organizational Model and Process of Clinical Best Practice in Rehabilitation & Complex Continuing Care

**Primary Presenter:** Mandy McGlynn

**List of Authors:** Mandy McGlynn, Sherra Solway, Heather Flett

**Affiliation:** Toronto Rehabilitation Institute

**Abstract:**

**PURPOSE:** The Toronto Rehab model and process of clinical best practice were developed to facilitate a systematic and consistent approach to best practice, shorten the path between best knowledge and clinical practice and link this process to patient needs and outcomes. **RELEVANCE & DESCRIPTION:** There is increasing recognition of the role of the organization in facilitating innovation and best practice, particularly in constructing a best practice culture through appropriate structures and processes. The Toronto Rehab model and process of clinical best practice defines best practice in the context of rehabilitation and complex continuing care by taking into account related internal and external factors. The model and process guide clinicians in identifying patient needs, reviewing present practice, determining best practice, conducting gap analysis, and preparing for, facilitating and implementing practice change. The model and process also support the evaluation and sustainability of changes in practice. This presentation will describe how the Toronto Rehab process has been applied to two patient care areas. **DISCUSSION & CONCLUSION:** Best Practice is an approach to the planning and delivery of patient care that is patient centered, research and outcomes based, refined through quality improvement and benchmarking, and compatible with system policies and resources. Toronto Rehabilitation Institute via its model and process of clinical best practice recognizes the role of the organization in facilitating innovation and best practice, particularly in constructing a best practice culture through appropriate structures, processes and support. The Toronto Rehab model and process of clinical best practice reflects, enables and facilitates the integration of patient care, education and research for best patient outcomes.



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## Rehabilitation Transforming Healthcare

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**Abstract Title:** Exploring the Applicability of the RNAO Best Practice Guidelines for Pain Assessment and Management

**Primary Presenter:** David P. Ryan and Judy Moir

**List of Authors:** David P. Ryan, Tina Saryeddine

**Affiliation:** Sunnybrook & Women's College Health Sciences Centre

### Abstract:

The purpose of this project was to explore the applicability of the Registered Nurses Association of Ontario's (RNAO) Best Practice Guideline (BPG) for Pain Assessment and Management to the hip fracture population transitioning from the last 24 hours of acute care to the first 24 hours of inpatient rehabilitation. The impetus for this research was based on evidence that provider-related barriers to effective pain management practices are related to misperceptions and poor information. The research was based on a case study design. Using a unique facilitation methodology called Build-a-Case, 8 focus groups with a total of 66 professionals from acute care and inpatient rehabilitation developed patient cases that reflected their actual practice. The focus groups were asked to discuss pain management, specifically as it relates to this population. The participants were then presented with the best practice guidelines, asked to reflect on the specific patient case and given a questionnaire related to the guidelines to complete. The participants were asked to indicate the extent to which they believed the point was best practice and the extent to which they believed it was feasible in the practice setting. The emerging themes in the hip fracture cases fell into the categories of describing the hip fracture patient, managing pain, barriers to pain management and acute and rehabilitation processes. Transcripts were professionally prepared and analyzed using thematic analysis techniques. The data was entered into a qualitative software package was used to facilitate the organization of the data. Descriptive statistics were used to summarize data from the questionnaires. As a result of this study, we demonstrated that the RNAO BPG for Pain is applicable to the hip fracture population. Overwhelming the guidelines were considered to be best practice, however, when it came to feasibility, there were three items considered problematic.



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**Abstract Title:** The Rehabilitation of Younger Stroke Patients: Conclusions from the Stroke Rehabilitation Evidence-Based Review (SREBR) 11th edition

**Primary Presenter:** Ross Graham

**List of Authors:** Ross Graham

**Affiliation:** Lawson Health Research Institute SJHC

### Abstract:

**Purpose:** To examine the etiology and the processes of care associated with the rehabilitation of young stroke patients. To identify ways in which this may differ from stroke rehabilitation in older adults, particularly given varying social roles associated with youth. **Relevance:** The young stroke population represents a significant rehabilitation challenge. Young patients are more often employed, caring for dependants, and rely on work-related income. For every 5 individuals who experience stroke, 1 is under the age of 65 and 5% of all stroke patients have been found to be younger than 45 years. This represents a significant number of patients with many unique rehabilitation needs. **Methods:** The present review of the literature was conducted as part of the Stroke Rehabilitation Evidence-Based Review. The SREBR is a systematic review of therapeutic interventions following stroke, which uses multiple databases. The SREBR includes studies published through July 2008. **Results:** 139 studies examining young stroke were included; however, no RCTs were identified. Overall, studies demonstrated that in approximately one-third or more of young stroke rehabilitation patients, stroke etiology was not determined. Hemorrhagic strokes comprise one-third of all strokes. Young stroke patients demonstrate greater neurological and functional recovery, although they presented various issues unique to this population. While employment is important, few return to previous or full-time work. They are more likely to be responsible for child care. Family stress is high and marital conflict common. Associated fatigue is common. Young stroke patients are more likely to benefit from stroke rehabilitation if they suffer a more severe stroke. **Conclusions:** Young stroke patients present many issues in rehabilitation that are specific to this population. Although they may make a more rapid and complete neurological recovery, there are a number of important psychosocial issues that should be given attention during the rehabilitation process.

# Rehabilitation Transforming Healthcare

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**Abstract Title:** Partnering with patients and families to balance safety and autonomy

**Primary Presenter:** Angie Andreoli

**List of Authors:** Angie Andreoli, Carol Fancott

**Affiliation:** Toronto Rehabilitation Institute

**Abstract:**

**PURPOSE:** The purpose of this qualitative study is to explore patient and family perspectives on safety, risk and autonomy within a rehabilitation and complex continuing care (CCC) setting. **RELEVANCE:** Given the strong ethical, professional and political implications for respecting independence and promoting safety, there is a clear onus on the interprofessional rehabilitation team to understand patient and family attitudes towards safety and risk-taking. This understanding may help us to better support patients and families in their decision-making throughout the rehabilitation process and as they transition beyond the institution. **METHODS:** A total of 12 focus groups were conducted across each of our six clinical programs including including cardiac, geriatric, musculoskeletal, neuro and spinal cord rehab, and CCC. Six of these groups were conducted with former patients (n =57) of a large adult academic rehabilitation and CCC hospital; and six were conducted with family members of former patients (n=49). **ANALYSIS:** Grounded theory data analysis using a constant comparative method identified major themes that highlight patient and family issues related to safety, risk and autonomy in a rehabilitation context. **RESULTS:** Changing Identity and Searching for Autonomy are inextricably linked themes that form the basis of how patients and families rebuild their lives following disease, illness or injury. Underlying the emerging self and the search for autonomy is an enabling care setting. This setting is comprised of the human environment (teamwork, communication, staffing issues and supports) and the physical environment (space, security, equipment and mixed traffic) that is critical in supporting patients and families during and after rehabilitation. **DISCUSSION:** Understanding patient and family views on safety and risk is invaluable in engaging them as active partners in their healthcare team. This knowledge can be used to optimize patient and family participation in providing care and safety, as well as taking the necessary risks inherent in the rehabilitation process.