



# Best Practice Nursing Care Across the Acute Stroke Continuum

## MODULE 4: Stroke Rehabilitation & Community Reintegration

VER 1.2 SEPT 2009



# 1. Introduction

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## Module Objectives

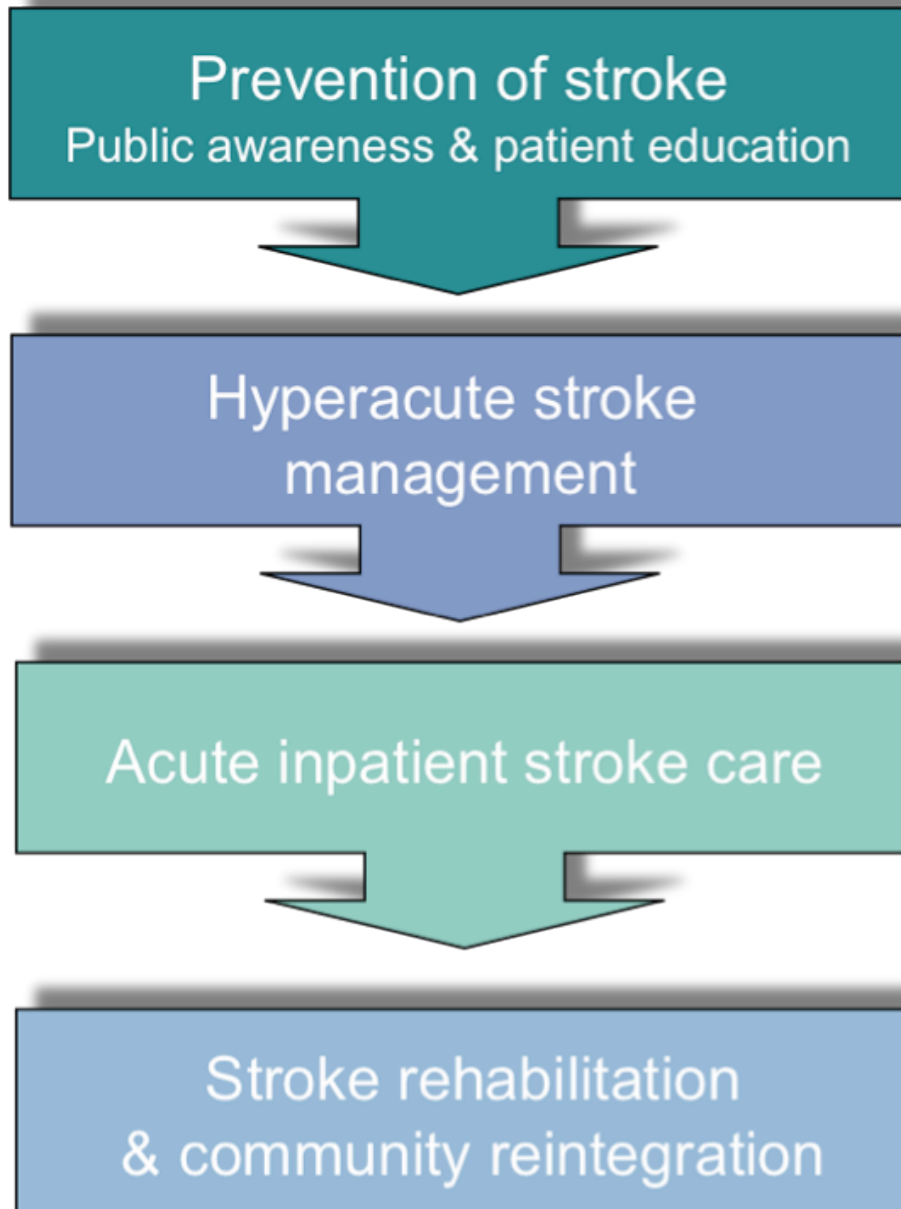
- Identify the goal of stroke rehabilitation and community reintegration within the stroke care continuum
- Identify the benefits of early assessment and stroke rehabilitation
- Review Best Practice Recommendations related to stroke rehabilitation and community reintegration
- Identify opportunities to begin to implement these at your institution
- Identify your role in patient and caregiver education
- Create a stroke care action plan for stroke rehabilitation and community reintegration

## Expectations

Identify one or more expectations you have for this module (e.g. address a key question, acquire specific knowledge or skills, learn more about available resources and support), then check off whether or not each has been met at the end.

EXPECTATIONS	CHECK
1.	<input type="checkbox"/>
2.	<input type="checkbox"/>
3.	<input type="checkbox"/>
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## Continuum of Stroke Care



## Why Is Stroke Rehab and Community Reintegration Important?

- ▶ Early consultation with rehab professionals can reduce complications from immobility such as falls and DVT
- ▶ Facilitates early discharge planning for transition to rehab units or the community

**Early assessment should reduce overall cost of episode of care through improved outcomes and reduced time to discharge.**

## Canadian Best Practice Recommendations for Stroke Care

**CMAJ·JAMC**

DECEMBER 2, 2008, VOLUME 179, 12 • LE 2 D'ECHEMBRE 2008, VOLUME 179, 12

**Canadian Best Practice Recommendations  
for Stroke Care**  
(updated 2008)



CMAJ 2008;179(12):SUPPL1-E1-E99



Canadian Stroke Network  
Réseau canadien contre  
les accidents cérébrovasculaires



HEART & STROKE  
FONDATION  
DU CŒUR  
& DU CERVEAU  
FUNDATION  
DU CŒUR  
& DU CERVEAU

- ▶ Synthesis of best practice recommendations for stroke care across the continuum
- ▶ Address critical topic areas
- ▶ Commitment to keep current and update every two years
- ▶ First edition released in 2006
- ▶ Current update released in 2008
- ▶ With four new recommendations
- ▶ Elaboration of existing ones
- ▶ [www.cmaj.ca](http://www.cmaj.ca) December 2, 2008

## 2. Early Assessment & Stroke Rehabilitation

### When Should Stroke Rehabilitation Start?

- ▶ Acute stroke accounts for the longest length of stay in Canadian hospitals and places a significant burden on inpatient resources, which increases further when complications are experienced
- ▶ Consider that ***rehabilitation is a process, not a place***

Rehabilitation and discharge planning begin at the time of admission to acute care

### Benefits of Early Assessment & Rehabilitation

- ▶ Assessment should start as early as possible in the ER and continue through the inpatient and community reintegration phases
- ▶ Early consultation with rehab professionals:
  - Contributes to reductions in complications from immobility such as joint contracture, falls, aspiration pneumonia and DVT
  - Contributes to early discharge planning for transition from acute care to specialized rehabilitation units or to the community
  - Should reduce the overall cost of care through improved outcomes and reduced time to discharge (BPG 5.1)

### Examples of Assessment Tools

Domain	Selected Measure
▶ Measures of stroke severity	▶ Orpington Prognostic Scale (OPS) ▶ National Institute of Health Stroke Scale
▶ Upper/lower extremity structure and function	▶ Chedoke-McMaster Stroke Assessment (CMSA)
▶ Language	▶ Screening in acute care and follow-up, with Frenchay Aphasia Screening Test (FAST) ▶ Boston Diagnostic Aphasia Examination (BDAE)
▶ Cognition	▶ Montreal Cognitive Assessment (new addition by Canadian Stroke Strategy cognitive working group, January 2008)
▶ Self-care activities of daily living	▶ Functional Independence Measure (FIM)

**ACTIVITY** Your Role in Early Assessment and Stroke Rehabilitation

1. At your tables discuss
  - What are the benefits of early assessment and stroke rehab at your institution?
  - Where can you make a difference in realizing these benefits?
  - What barriers and enablers do you see?
2. Use the worksheet on the next page to record you answers
3. When done, we'll review some of your pearls of wisdom

### Your Role in Early Assessment and Stroke Rehabilitation

What are the benefits of early assessment and stroke rehab at your institution?

Where can you make a difference in realizing these benefits?

What barriers and enablers do you see?

## 3. Initial Stroke Rehabilitation Assessment

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### 5.1 Initial Stroke Rehabilitation Assessment

- ▶ All persons with stroke should be assessed for their rehabilitation needs:
  - Inpatients should have initial assessment as soon as possible, preferable within 24 to 48 hours
  - Patients not admitted to hospital should undergo a comprehensive outpatient assessment for functional impairment
  - Clinicians should use standardized, valid assessment tools to evaluate the patient's stroke-related impairments and functional status
  - Survivors of a severe or moderate stroke should be reassessed at regular intervals for their rehabilitation needs

## 4. Provision of Inpatient Stroke Rehabilitation

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### 5.2 Provision of inpatient stroke rehabilitation

- ▶ Treatment in a comprehensive or rehabilitation stroke unit by an interdisciplinary team:
  - Rehabilitation care formally coordinated and organized
  - Specialist rehabilitation team on a geographically defined unit
  - Delivered by a variety of treatment disciplines, experienced in providing post-stroke care
  - The interdisciplinary rehabilitation team should assess patients within 24 to 48 hours of admission and develop a comprehensive individualized rehabilitation plan
  - Opportunity to participate in inpatient stroke rehabilitation
  - Stroke unit teams should conduct at least one formal interdisciplinary meeting per week
  - Use standardized, valid assessment tools to evaluate the patient's stroke-related impairments and functional status

### 5.3 Components of inpatient stroke rehabilitation

- ▶ All patients with stroke should begin rehabilitation therapy as early as possible once medical stability is reached:
  - Should receive the intensity and duration of clinically relevant therapy defined in their individualized rehabilitation plan
  - Should receive, minimum of 1 hour of direct therapy
  - Should promote practice of skills gained in therapy into daily routine
  - Should include repetitive and intense use of novel tasks
  - Should conduct at least one formal interdisciplinary meeting per week at which patient problems are identified, rehabilitation goals set, progress monitored and support after discharge planned
  - Care management plan should include a pre-discharge needs assessment to ensure smooth transition back to the community

**ACTIVITY** Rehabilitation Assessment Briefing**PART 1**

Imagine you have been asked to brief your colleagues back home on Initial stroke rehabilitation assessment.



1. At your tables, review one of the following recommendations:
  - 5.1 Initial stroke rehabilitation assessment
  - 5.2 Provision of inpatient stroke rehabilitation
  - 5.3 Components of inpatient stroke rehabilitation
2. Have each person select one of the following topics to prepare a briefing on:
  - Recommendation
  - Rationale
  - System implications
  - Performance measures
3. Use the worksheet on the next page to structure your briefing
4. When done, present your briefing to your table and discuss

### Rehabilitation Assessment Briefing

Recommendation

Rationale

System implications

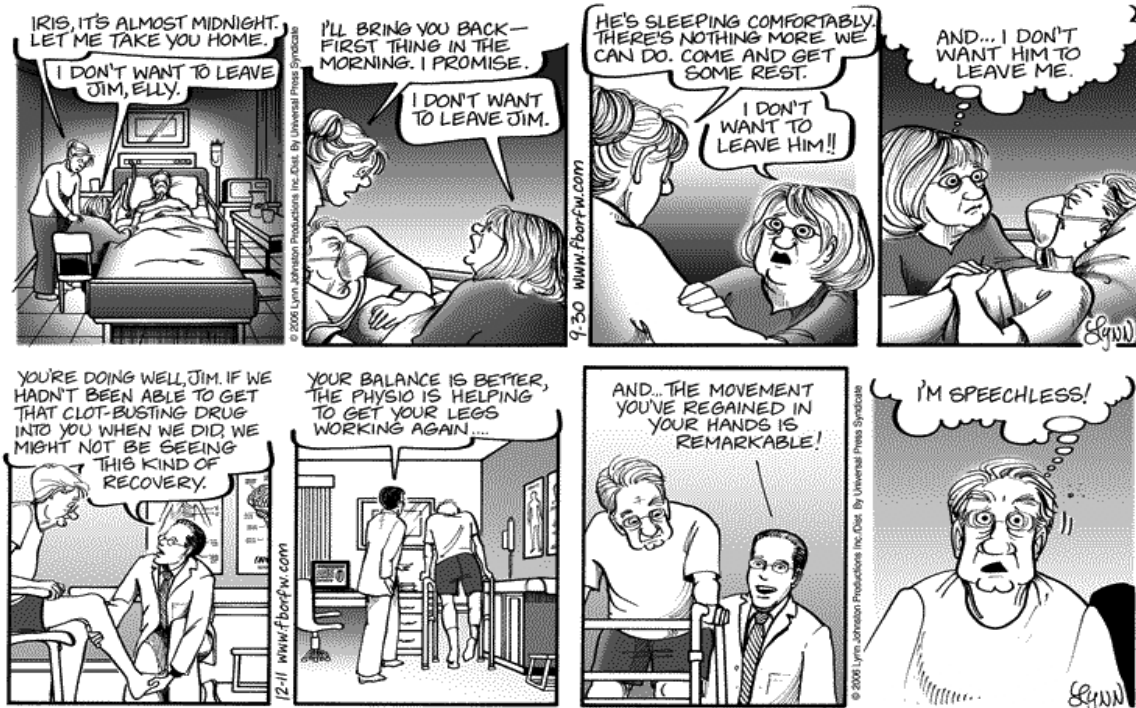
Performance measures

**ACTIVITY** Rehabilitation Assessment Briefing**PART 2**

1. Now, we'll debrief the large group on the following key questions about this recommendation:
  - How will this recommendation improve stroke care at your institution?
  - What role can you play in implementing it?
  - What barriers or enablers do you see?



## 5. Patient and Family Education



### ACTIVITY Where You Can Make a Difference!

- At your tables, discuss
  - What would be your role in educating and supporting patients and caregivers about rehabilitation and community reintegration?
- When done, we'll debrief the whole group to identify some best practices



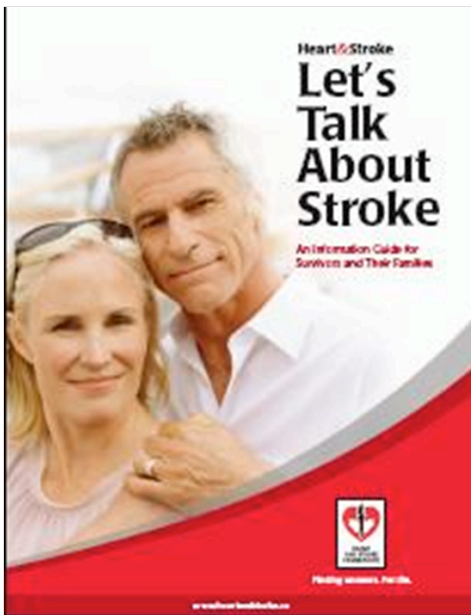
#### KEY POINT

Did you know that skills training of caregivers makes a huge difference in patient outcomes in areas of functionality and depression!.



Education content should be specific to;

- The phase of care
  - Patient/caregiver readiness
  - Patient/caregiver needs
- ▶ Education should be timely, interactive, up to date and provided in a variety of formats, languages including aphasia friendly
- ▶ Processes should be established by clinical teams for education including designating team members for provision and documentation of education
- ▶ Education content should include:
- The nature of the stroke and its manifestations
  - Signs and symptoms of stroke
  - Impairments and their impact on the person
  - Caregiver training to manage
  - Risk factors
  - Post-stroke depression
  - Cognitive impairment
  - Discharge planning and decision making
  - Community resources
  - Home adaptations



**Visit**

**[www.heartandstroke.ca](http://www.heartandstroke.ca)**

## 6. Community Reintegration

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### 5.4 Outpatient & community-based rehab

- ▶ After leaving hospital, stroke survivors must have access to specialized stroke care and rehabilitation services appropriate to their needs:
  - Early supported discharge services and transition planning
  - Occupational therapy or multidisciplinary interventions
  - Multifactorial interventions re: risk of falling,
  - Exercise program and monitored throughout
  - Supportive conversation techniques
  - Swallowing therapy and opportunity for reassessment

### 5.5 Follow-up & community reintegration

1. People with stroke should have regular and ongoing follow-up assessment to assess recovery, prevent deterioration and maximize functional outcome:
  - Follow up by primary care provider
  - Individual psychosocial and support needs reviewed
  - Access to therapy to improve or prevent deterioration
  - Identification and management of post-stroke depression
  - Assessment for appropriate targeted rehabilitation
  - Provision with timely, up-to-date information
  - Offered education programs to assist in adapting

**ACTIVITY** Selling the Recommendations

Imagine you have been asked to “sell” the recommendations for community reintegration to your institution!



1. At your tables, review the recommendations for community reintegration, then put together a briefing for selling them to your institution:
  - How will they improve stroke care at your institution?
  - What role can you play in implementing them?
  - What barriers or enablers do you see?
  - What are the system implications?
  - What performance measures would you use?
3. Use the worksheet on the next page to structure your briefing
4. When done, we'll debrief to identify some key points

### Selling the Recommendations

How will they improve stroke care at your institution?

What role can you play in implementing them?

What barriers or enablers do you see?

What are the system implications?

## 7. Putting It All Together

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### **ACTIVITY** Case Study

1. Review the case study on the next page
2. With your team, answer the questions on the worksheet at the end of the study
3. We'll review when done to share some best practices and get ready to create a Stroke Care Action Plan



### **ACTIVITY** Creating a Stroke Care Action Plan

1. With the case study we just reviewed in mind, create a stroke care action plan
  - Identify 1-2 key learnings from today that you could take back to help kick start your change initiatives
2. Use the Stroke Care Action Plan worksheet in this section to record your plan



## Case Study

- ▶ Muriel is an 82 year old woman who had a L MCA stroke 2 weeks ago and has now been admitted to the inpatient stroke rehabilitation unit.
- ▶ Muriel had lived with her husband Bob on a farm for the last 62 years and 3 months prior to her stroke they had sold the farm and moved to a retirement home.
- ▶ Both Muriel and Bob have expressed sadness over the move
- ▶ On arrival to the stroke unit, Muriel is found to have a moderate right sided weakness in both her arm and leg but can walk with a walker.
- ▶ She has reduced right ankle range of motion and frequently trips when walking.
- ▶ She tells you that she has right sided shoulder pain and has difficulty dressing
- ▶ Her balance is poor and she is nervous when going in the shower
- ▶ Her speech still remains slurred but she is understandable with some word retrieval difficulties
- ▶ Muriel tells you that she would like to be as independent as possible including in her dressing, grooming, meal preparation. She would also like to be able to continue with her knitting.

### Case Study Questions

- ▶ What would you anticipate to be achievable goals for Muriel on the stroke rehabilitation unit?
- ▶ What key team members would be involved in Muriel's rehabilitation?
- ▶ What type of ongoing rehabilitation would you recommend for Muriel on discharge?
- ▶ What your patient/family education focus on at this stage?

### Stroke Care Action Plan

Use this worksheet to record and implement a plan of action for implementing the recommendations around stroke rehab and community reintegration in your institution.

#### Steps I can take

#### Resources needed

#### Issues and barriers, and ideas for resolving them



## Appendix

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### Resources

1. Canadian Stroke Strategy Best Practices and Standards  
Canadian Best Practice Recommendations for Stroke Care 2008
2. Faaast FAQs for Stroke Nurses 2007
3. [www.strokerecoverycanada.com](http://www.strokerecoverycanada.com) Providing support, throughout Canada, to stroke survivors and their families
4. [www.strokesurvivors.ca](http://www.strokesurvivors.ca)  
Provides information about rehabilitation, physiotherapy, caregiving, support services, and more. ... underinvestigated and undertreated in Canadian emergency rooms.
5. [ww2.heartandstroke.ca](http://ww2.heartandstroke.ca)  
The Heart and Stroke Foundation is a reliable source of medical information about stroke and heart disease, surgeries and treatments in Canada
6. [ww.hc-sc.gc.ca](http://ww.hc-sc.gc.ca)  
Stroke is one of the leading causes of death in Canada. ... Health Agency of Canada's Centre for Chronic Disease ... Heart and Stroke Foundation of Canada
7. [www.canadianstrokenetwork.ca](http://www.canadianstrokenetwork.ca)  
The Canadian Stroke Network was established to create a national consortium.
8. [www.strokeconsortium.ca](http://www.strokeconsortium.ca)  
The Canadian Stroke Consortium is an academic network pursuing anti-stroke therapies through research projects and clinical trials.
9. [www.cwhn.ca/resources/kickers/stroke.html](http://www.cwhn.ca/resources/kickers/stroke.html)  
Almost 60% of the 50,000 strokes in Canada each year affect women. ... In 1999, a total of 9,038 women died in Canada as a result in stroke.
10. [www.nlm.nih.gov/medlineplus/stroke.html](http://www.nlm.nih.gov/medlineplus/stroke.html)  
Offers basic information about strokes, diagnosis, risk factors, prevention, treatment, and related issues.
11. [www.ninds.nih.gov/health\\_and\\_medical/disorders/stroke.htm](http://www.ninds.nih.gov/health_and_medical/disorders/stroke.htm)  
Stroke information sheet compiled by the National Institute of Neurological Disorders and Stroke (NINDS) ... Stroke: Hope Through Research
12. [www.stroke.ninds.nih.gov](http://www.stroke.ninds.nih.gov)  
National Institute of Neurological Disorders and Stroke. Home. About the Campaign. Stroke Materials. Health Professional Resources. Campaign Partners
13. [www.strokeassociation.org](http://www.strokeassociation.org)  
Dedicated to decreasing disability and death from stroke through educational programs, products and services, and advocacy.

14. [www.mayoclinic.com/health/stroke/DS00150](http://www.mayoclinic.com/health/stroke/DS00150)  
Comprehensive overview covers symptoms, causes, treatment of interruption of brain's blood supply. ... Stroke is a medical emergency
15. [www.stroke.org](http://www.stroke.org)  
National voluntary health care organization focusing on stroke prevention, treatment, rehabilitation, and research for stroke survivors/families
16. [www.cmaj.ca](http://www.cmaj.ca)  
Contains current and past issues of the Canadian Medical Association Journal