

Promoting Bladder and Bowel Continence with Nursing Restorative Care

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As well as.



**Central South Regional Stroke
Program. 2007. Continence and Stroke.**



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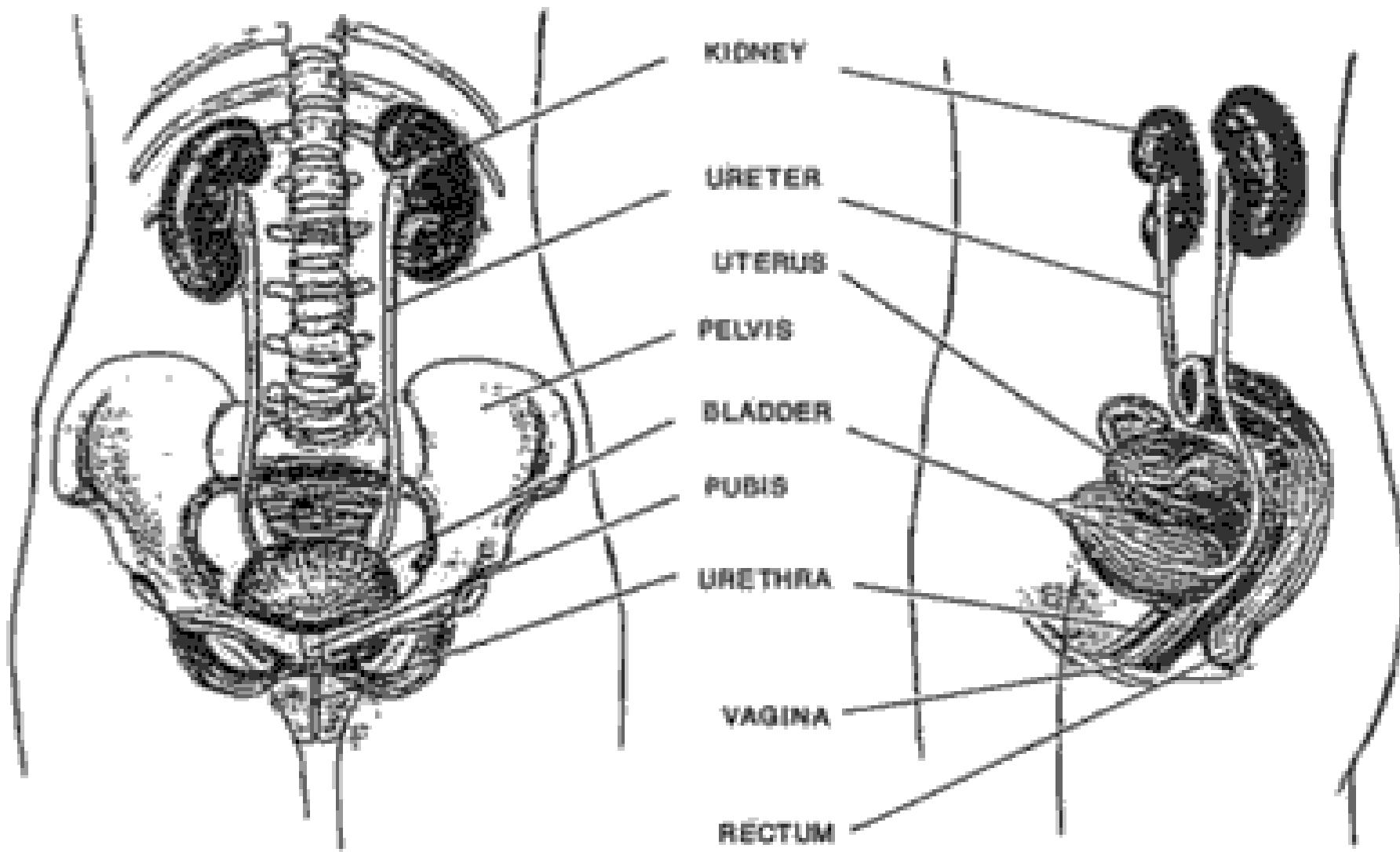
Goal & Objectives

Goal: Share strategies for managing bladder and bowel problems in stroke survivors.

Objectives:

- Describe normal bladder function, urinary incontinence and the effects of stroke on bladder continence
- Describe normal bowel function, bowel incontinence and the effects of stroke on bowel continence
- Discuss assessment and management of bladder and bowel incontinence
- Connect Nursing Restorative Services and Incontinence.
- Apply learning to a case study

Normal Bladder Anatomy



Normal bladder function

- Most adult bladders hold 500–600 ml of urine.
- When the bladder is about half full, the urge to urinate starts.
- Urination urge can be suppressed for 1 or 2 hours until the bladder is full, in a person with normal bladder function.
- Most people urinate 3 to 6 times in the day and possibly 1-2 times during the night.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010



Incontinence:

- ‘A condition where involuntary loss of urine or stool is a social or hygienic problem.’
(International Continence Society ICS, 1987)
- Affects over half of Long Term Care Residents (RNAO Prompted Voiding Best Practice Guideline, 2011)
- Is the most common cause of admission to Long Term Care (Canadian Continence Foundation, 2007)

Incontinence Myths & Truths

- Incontinence is a normal part of the aging process.
- Little can be done for incontinent residents.
- Toileting residents every 2 hours can prevent incontinence.
- Restricting fluids can reduce incontinence.
- Prompted voiding is an effective method to use with incontinent patients.

Types of Urinary Incontinence

- **Physical :**
 - Stress: cough
 - Urge: need to go Now
 - Overflow: leaks out
- **Functional:**
 - Need help
- **Transient**
 - Short term problem



Stress Incontinence

- Loss of urine with a sudden increase in intra-abdominal pressure (e.g. coughing, sneezing, exercise)
- Most common in women
- Can also happen to men after prostate surgery.



Urge Incontinence

(Overactive Bladder)



- Loss of urine with a strong unstoppable urge to urinate
- Usually associated with frequent urination during the day and night
- Common in women & men
- Sometimes called an overactive bladder

Overflow Incontinence

- Bladder is full at all times and leaks at any time, day or night
- Usual symptoms are a slow stream and difficulty urinating
- More common in men as a result of prostate problems



Functional Incontinence

- Associated with decreased cognitive capabilities or physical abilities (e.g. Alzheimer's Disease, Stroke)
- Resident is unable to go to the toilet in time without help.



Transient Incontinence

A short term decline in continence usually with sudden or recent onset caused by:

- **DIAPPERS (mnemonic)**
 - Delirium, depression
 - Infection
 - Atrophic Vaginitis
 - Pharmaceuticals
 - Psychological, pain, polyuria
 - Excess fluid, environmental barriers
 - Restricted mobility
 - Stool impaction or constipation



**Stroke can cause a loss
of bowel and bladder
control.**

http://www.medicine.mcgill.ca/Strokengine/module_ui_intro-en.html

Urinary incontinence is common after stroke

- 40-60% of stroke survivors are incontinent after having their stroke.

Over time bladder continence can improve.

- Upon discharge from hospital:
 - 25% of stroke survivors are incontinent
- 1 year later:
 - 15% of stroke survivors are incontinent

Thomas LH, Barrett J, Cross S, French B, Leathley M, Sutton C, Watkins C. Treatment of urinary incontinence after stroke in adults (Review). **Cochrane Database of Systematic Reviews** 2009, Issue 1.

Stroke and risk factors for urinary incontinence

- The more severe the stroke, the greater the likelihood of urinary incontinence
- Older age
- Female sex
- Speech difficulties
- Motor weakness
- Visual field defects
- Cognitive impairment

(Barrett 2001)

Urinary Incontinence and stroke

- Loss of the ability to identify and respond to the need to urinate.
- Loss of bladder control occurs to many stroke survivors right after a stroke but resolves within 8 weeks.
- The incontinence may come and go or be permanent.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

- Continuing incontinence is assoc with poor outcome in both stroke survivor & care giver

(Thomas LH, Barrett J, Cross S, French B, Leathley M, Sutton C, Watkins C. Treatment of urinary incontinence after stroke in adults (Review). *Cochrane Database of Systematic Reviews* 2009, Issue 1)

Stroke and incontinence

- Damage to frontal lobe associated with urinary dysfunction after stroke
- Size of lesion, rather than its location, is more likely to predict urinary incontinence
- Unclear if incontinence is a direct (site of lesion) or indirect (eg functional impairment preventing access) consequence of stroke
- More of an effect on the lives of stroke survivors when compared to other groups of people with incontinence

• (Thomas LH, Barrett J, Cross S, French B, Leathley M, Sutton C, Watkins C. Treatment of urinary incontinence after stroke in adults (Review). *Cochrane Database of Systematic Reviews* 2009, Issue 1)

Stroke and Urge Incontinence

- Stroke may cause involuntary bladder contractions.
- This causes the stroke survivor to feel a strong urge to urinate and lose control before reaching a toilet.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Stroke and urinary retention

- Stroke may interrupt nerve pathways that control bladder emptying.
- The survivor does not feel an urge to urinate.
- The bladder fills, but the person is unable to empty it.
- Then urine backs up.
- This can increase the risk of urinary tract infection and damage the kidneys.

Stroke & Functional Incontinence

Continence can be impaired by a stroke:

- **Vision problems:** The survivor may be unable to find the bathroom/urinal or use the toilet independently.
- **Decreased mobility:** The survivor may be unable to get to the bathroom independently or quickly enough.
- **Lack of motor coordination:** The survivor may have difficulty managing clothing, adult diapers, transfers, or the toilet.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Stroke & Functional Incontinence cont'

- **Communication difficulty-aphasia** affects ability to communicate need to void
- **Neglect**-visual or body inattention-unaware of one side of body. Risk of injury/fall.
- **Impulsiveness**- affects ability to wait for assistance. Risk of injury/fall

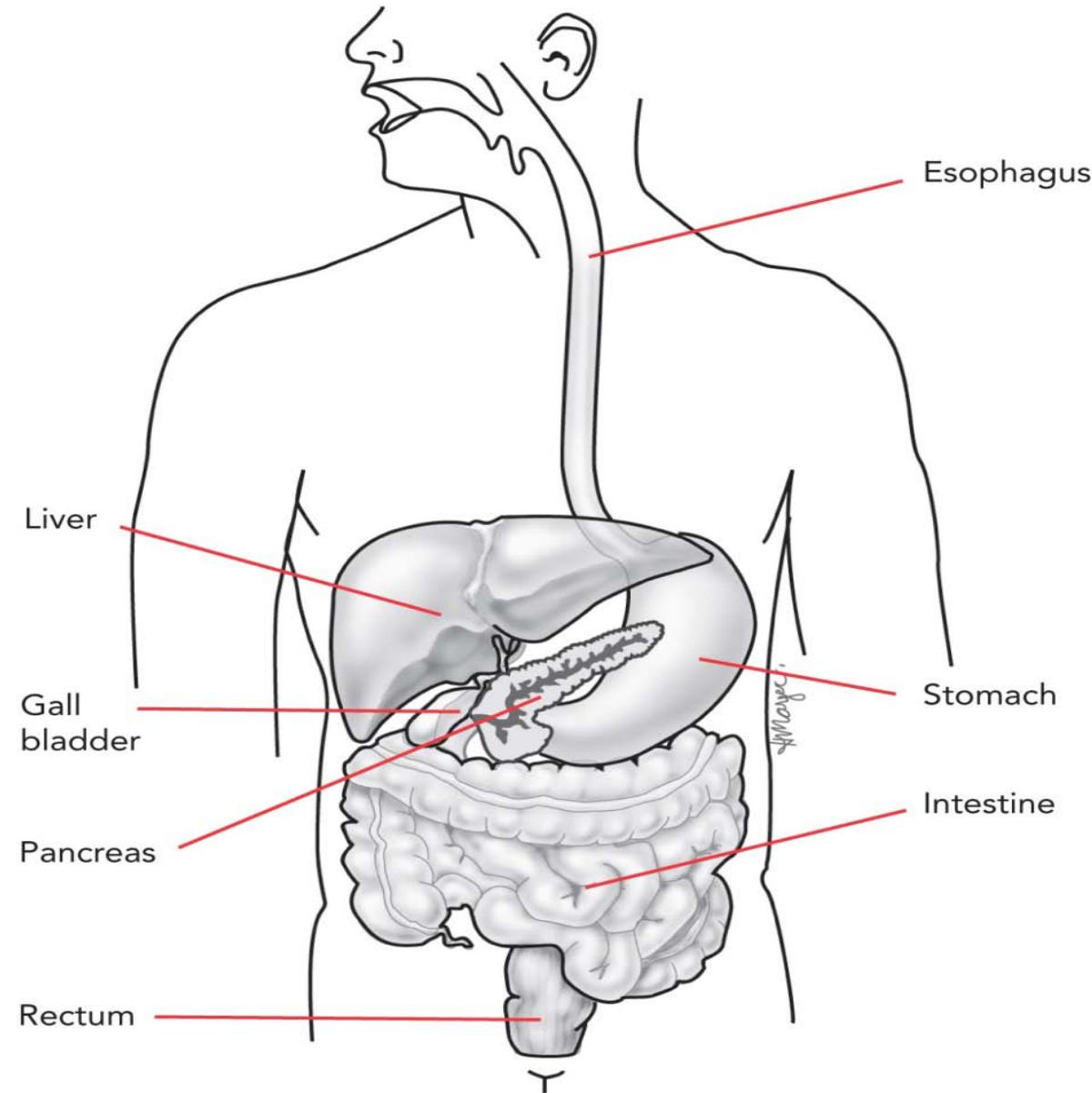
Key Points

(adapted from Heart and Stroke Tips and Tools for Everyday Living 2010)

- Almost half of stroke survivors who have problems with incontinence had the same problems before the stroke
- It is important to identify all the factors that affect the stroke survivor's bladder control
- With lifestyle changes and your support, about 80% of incontinence problems can be resolved
- Incontinence is a strong predictor of stroke functional outcome (Meijer 2003)

Normal Bowel Anatomy

Adapted from Heart & Stroke Tips and Tools for Everyday Living
2010



Normal Bowel Function

A healthy bowel depends on:

- How the muscles and nerves work together
- Eating a high-fibre diet
- Drinking 6 to 8 cups of non-caffeinated fluids each day

Usually, bowel movements occur anywhere from 3 times a day to 3 times a week.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Constipation - Definition

Two or more symptoms in the past 12 months of:

- Straining*
- Hardened stools*
- Feeling of incomplete stool evacuation*
- Feeling of blockage or obstruction*
- Need for manual stool evacuation*
- Less than 3 bowel movements per week

* A person has these problems for more than one-quarter of their bowel movements.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Constipation

- Pushing too hard and too often when having a bowel movement can weaken pelvic floor muscles
- Stool “impaction” (hard, “stuck” feces in the rectum) adds to urinary incontinence
- “Smearing” or “staining” of stool, may be caused by constipation or possible rectocele.



How stroke can affect bowel function

- Communication deficit
- Immobility
- Poor oral intake
- Change in diet-texture and intake
- Lack of appetite
- Feeding difficulties
- Mood change

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Incontinence Management Plan

- Assess the incontinence problem
- Develop a care plan
- Implement an individualized toileting plan that addresses contributing factors
- Evaluate effectiveness of interventions
- Revise as needed

Continence Assessment

- Key Elements

- Incontinence History
 - Onset
 - Duration
 - Daytime / Nighttime
 - Accidents
 - Stress Loss
 - Urge Loss
 - Aware of Loss
- Fluid Intake
- Bowels
- Medical History
- Medications
- Functional Ability

Incontinence - Assessment

- Medical Problems like Cognitive Impairment, Stroke, etc.
- Past Medical or Surgical History ie Childbirth
- Aging - Loss of pelvic muscle tone & atrophic changes
- Urinary Tract Infections
- Overweight



Incontinence – Assessment

- High Caffeine Intake
- High Alcohol Intake
- Poor Fluid Intake
- Medications
- Constipation
- Decreased Mobility
- Environmental Factors



Assessment- Cognitive Capacity

Requirements for Continence

- aware of urge to void
- able to get to the bathroom
- able to suppress the urge until resident reaches the bathroom
- able to void when resident gets to the BR



Stroke & Bowel Problems

Constipation:

- Stroke can weaken the muscles that expel the stool and cause constipation. This also happens when the bowels don't move often enough

Diarrhea:

- Diarrhea is marked by frequent, watery stools.
- Causes can range from viral infections (flu) to serious medical problems (ex Crohn's disease)
- Fecal incontinence is often mistaken for diarrhea

RAI MDS SECTION H: CONTINENCE IN LAST 14 DAYS

H1a BOWEL CONTINENCE

Control of bowel movement, with appliance or bowel continence programs, if used

H1b BLADDER CONTINENCE

Control of urinary bladder function (if dribbles, volume insufficient to soak through underpants), with appliances (e.g. foley) or continence programs, if used

H2 BOWEL ELIMINATION

PATTERN (*Check all that apply in LAST 14 DAYS.*)

- a. Bowel elimination pattern regular—at least 1 movement every 3 days
- b. Constipation
- c. Diarrhea
- d. Fecal impaction
- e. *NONE OF ABOVE*

RAI MDS SECTION H: DEFER CONTINENCE IN LAST 14 DAYS (Cont.)

H₃ APPLIANCES AND PROGRAMS

(Check all that apply in LAST 14 DAYS.)

- a. Any scheduled toileting plan
- b. Bladder retraining program
- c. External (condom) catheter
- d. Indwelling catheter
- e. Intermittent catheter
- f. Did not use toilet, commode, urinal
- g. Pads or briefs used
- h. Enemas, irrigation
- i. Ostomy present
- j. *NONE OF ABOVE*

H₄ CHANGE IN URINARY CONTINENCE

Resident's urinary continence has changed as compared to status of 90 DAYS AGO (or since last assessment if less than 90 days).

- o. No change 1. Improved 2. Deteriorated

Individualized Assessment Tool

RAI-MDS Complementary Assessment

- An assessment for use with residents who trigger the Continence Resident Assessment Protocol (RAP) or where a more detailed continence history is required.

St. Joseph's Care Group Thunder Bay, ON		Resident Name:	
BLADDER AND BOWEL CONTINENCE ASSESSMENT – RAI/MDS Complement			
BLADDER			
Urinary Incontinence (UI) Frequency and timing	No daytime incontinence		
	Less than daily		
	1 - 2 times a day		
	Night time only		
	Both day and night		
Urinary Incontinence-Volume	Entire bladder contents		
	Small volume leaks, drips, spurts		
	Continuous bladder leakage		
	Unable to determine		
Onset	Sudden		
	Gradual		
Duration	< six months		
	6 mo - 1 year		
	> 1 year		
	Unknown		
Symptoms over the past 6 months	Worsening		
	Stable		
	Improving		
	Fluctuating		
	Unknown		
Stress Incontinence	Leakage with cough, sneeze, activity		
Urge Incontinence	Strong uncontrolled urge prior to UI		
	UI moderate, large volume (gush)		
	Frequency present		
	Nocturnal > 2 times		
	Nocturnal bed wetting		
	Difficulty starting stream or strain on voiding		
	Fullness after voiding		
	Suprapubic pressure and pain		
	Spurt of urine with movement		
Function Incontinence	Limited mobility		
	Requires assistance with toileting		
	Requires aids (mechanical lift, raised toilet etc)		
	Aware of urge to void		
	Unable to get to the toilet on time		
	Can't hold urinal or sit on toilet		
	Can't reach/use call bell		
	Restraints or geri-chair		
ASSESSMENT			
Bladder	Continent		
	Potential for continence		
	Incontinent		
Bowel	Continent		
	Potential for continence		
	Incontinent		
Relevant Medical/Surgical conditions or previous consults:			
Medications that affect Continence		diuretics analgesics other	
Care plan developed		Signature/date	

Developed by Nadia Thatcher St. Joseph's Care Group, Thunder Bay, 2007 based on work done at the Pearly Veteran's Institute

Assessment Tool

Monthly Bowel Record:

- This record describes bowel movements, laxative use and effectiveness.

MONTHLY BOWEL RECORD

IDENTIFICATION

Resident	
Start Date	
End Date	

DAY	Bm (v)	Description Consistency, Size, Colour, Etc.	Signature	Lax (L) Supp(S) Enema(E)Given	Results	Signature
1	N					
	D					
	E					
2	N					
	D					
	E					
3	N					
	D					
	E					
4	N					
	D					
	E					
5	N					
	D					
	E					
	N					

<http://ltctoolkit.rnao.ca/resources/continence#Assessment-Tools>

Continence & Restorative Care

- In Ontario, Continence Retraining **is not captured or documented** Nursing Restorative Care (P₃).
- A Resident on- Any scheduled toileting plan (H_{3a}) or a Bladder Retraining Program (H_{3b}), **may contribute** to the RUG's score.

Continence Program Criteria

- Resident must have been assessed by RN to ensure that they have restorative potential

AND

- Resident has difficulty locating the toilet OR
- Resident has difficulty in transferring and/or walking to the toilet OR
- Resident may have symptoms of incontinence, ie. Stress, urge, frequency, etc.

Toileting Programs

- Resident's care plan must show that the resident's toileting program was:
 - organized,
 - planned,
 - Documented,
 - monitored and
 - evaluated.
- Toileting programs are for residents whose continence can be improved or maintained by their toileting plan.

Incontinence Management Strategies

- The Best Incontinence Intervention for your resident depends on:
 - the resident's history and
 - the type of incontinence,
 - etc.

Thomas LH, Barrett J, Cross S, French B, Leathley M, Sutton C, Watkins C.
Prevention and treatment of urinary incontinence after stroke in adults. **Cochrane Database of Systematic Reviews** 2005, Issue 3.

Scheduled Toileting Plan (H3a) using Prompted Voiding

- Assess resident's bowel/bladder pattern with a voiding record to determine the most appropriate times to toilet the resident.
- Set a measureable, resident-centered goal:
 - Resident will be 100% bladder continent during days and evenings.

Scheduled Toileting Plan (H3a) using Prompted Voiding

- Clearly describe toileting plan so all staff can toilet the resident.
- Document the resident's incontinence daily.
- Monitor the effects of toileting program and make adjustments to the plan as necessary.
- Reevaluate the resident at least quarterly.

Assessment Tool

Voiding Record:

- A 3-day, hourly fluid intake and urine output record.
- Useful for determining when a resident voids in relation to intake for a prompted voiding intervention.

Voiding/Fluid Record										
Addressograph										
VOID = Amount measured			Intake: type of fluid and amount							
D = Dry	WS = Wet small	WM = Wet medium	WL = Wet large	Juice glass = 120 ml Water glass = 180 ml Tea cup = 180 ml Soup bowl = 125 ml						
DAY 1			DAY 2			DAY 3				
TIME	Date	VOID	WET	FLUIDS	Date	VOID	WET	FLUIDS	Date	
6:00 AM										
7:00 AM										
8:00 AM										
9:00 AM										
10:00 AM										
11:00 AM										
12:00 PM										
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<http://ltctoolkit.rnao.ca/resources/continence#Assessment-Tools>

Prompted Voiding

- Approach Resident when he/she would normally void.
 - **Monitor** - Ask the resident if he/she needs to use the toilet.
 - **Prompt** - Remind the resident to use the toilet and try not to void between prompted voiding sessions.
 - **Praise** - Give positive feedback to resident to reinforce dryness and appropriate toileting
- Carefully record and monitor resident's response

Bladder Retraining

Bladder retraining gradually increases the time between going to the bathroom. This helps the survivor to:

- Correct the habit of frequent voiding
- Increase bladder capacity
- Suppress the feeling of urgency
- The plan may include pelvic floor exercises which involve tightening and relaxing the muscles of the pelvic floor

Adapted from **Heart & Stroke Tips and Tools for Everyday Living** 2010

Bladder Retraining

The protocol also includes a schedule for urinating such as this:

- Periodically increase the interval between voids by 15 minutes (or less if needed)
- Continue increasing the intervals until the time between voids is 3 to 4 hours

What you can do to help:

- Remind and encourage the survivor to practice pelvic floor exercises, as needed

Adapted from **Heart & Stroke Tips and Tools for Everyday Living 2010**

Incontinence Strategies

- Encourage the stroke survivor to sit leaning forward during urination, with the feet flat on the floor or on a stool
- If the stroke survivor uses a urinal, keep it where it can be easily seen and reached - try placing one urinal on each side of the bed.
- Bedpan: Make sure the head of the bed is raised as upright as possible to allow the survivor to sit as normally as possible when using a bedpan.

Constipation Strategies

- Gravity and increased abdominal pressure promote more complete bladder and bowel emptying than using a bedpan.

Adapted from **Heart & Stroke
Tips and Tools for Everyday
Living 2010**



More Incontinence Strategies

- Encourage independence and self-care:
 - Suggest Adaptable clothing
 - Communicate – Work out ways so your resident can tell you what he or she needs
 - Use Adaptive devices – commode, grab bars, urinals, bed pans, call bells
 - Give Privacy

Adapted from Central South Regional Stroke Program. 2007. **Continence and Stroke.**

Other Incontinence Strategies

- Use Dementia Care strategies, Responsive Behaviour strategies, PIECES
 - Use Environmental prompts. ie. signs
- Delay incontinent product use until after everything else has been tried.

Adapted from Central South Regional Stroke Program. 2007. **Continence and Stroke.**

Hygiene & Incontinence Strategies

Give good hygiene & skin care:

- Wipe from *front to back* after voiding
- Change underwear daily or more often if soiled
- Always provide thorough peri-care after urinary or fecal incontinence.
- Wear gloves for peri-care, remove the gloves, wash your hands, and wash the hands of the stroke survivor

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Hygiene & Incontinence Strategies

- Do not use deodorant sprays, powder, or perfumes on perineal skin

Continence products

- Use the right sized continence products. Do not double up liners and products or use over-sized products.
- Watch for leaking, tightness, skin irritation, or rash.
- Report redness, irritation, or skin breakdown to registered staff.

Adapted from Heart & Stroke Tips and Tools for Everyday Living 2010

Key Incontinence Strategies

- Do an individualized resident assessment and set goals. (Thomas LH, Barrett J, Cross S, French B, Leathley M, Sutton C, Watkins C. Prevention and treatment of urinary incontinence after stroke in adults. *Cochrane Database of Systematic Reviews* 2005, Issue 3.)
- Use a type of Scheduled toileting, like promoted voiding. (Ostaszkiewicz J, Johnston L, Roe B. Timed voiding for the management of urinary incontinence in adults. *Cochrane Database of Systematic Reviews* 2004, Issue 1.)
- Ensure Adequate fluid intake – 1500ml/day (MOHLTC standard)

Adapted from Central South Regional Stroke Program. 2007. **Continence and Stroke.**

Case Study – Mabel

- Mabel is a 77 year old woman, recently widowed, with no family support locally.



- She was admitted to your long term care home 1 month ago.
- She had a left hemisphere stroke 3 months ago.
- Prior to her stroke she was living independently in her own home with some support from CCAC.



- Mabel has mild expressive aphasia (difficulty getting her words out).
- She also has weakness in her right arm, hand and leg
- Mabel is able to walk short distances with a walker but mainly uses a wheelchair throughout the day. She is able to transfer to a chair with help from one person.
- She requires assistance with eating and dressing.



- She has occasional urinary incontinence.
- In the past week Mabel has started to cry for no apparent reason.
- She appears to be having memory difficulties.
- Mabel has occasional outbursts of shouting at staff and other residents.



Case Study-Activity

- What is Mabel's goal related to continence?
- Identify at least 2 reasons why she is occasionally incontinent
- What can you do to help Mabel achieve her goal



Activity

Resources

- RNAO Promoting Continence Using Prompted Voiding: A PDA Guide.
<http://www.rnao.org/pda/void> - Condensed version of the Continence BPG. Excellent summary in English and French.
- RNAO BPG – Promoting Continence Using Prompted Voiding.
http://www.rnao.org/Page.asp?PageID=1212&SiteNodeID=155&BL_ExpandID = Best Practice Guideline.
- Anna and Harry Borun Center for Gerontological Research. Incontinence Management Training Module.
http://www.geronet.med.ucla.edu/centers/borun/modules/Incontinence_management/about.htm . A clearly written, self-learning package that breaks the process into steps-assessment, responsiveness, maintenance and audits. Includes voiding records, monitoring forms, MDS subscales, etc. Highly recommended.
- Ouslander JG, Schnelle JF, Uman G, Fingold S, Nigam JG, Tuico E, & Bates-Jensen B. Predictors of successful prompted voiding among incontinent nursing home residents. *J Am Med Assoc*, 1995b; 273(17):1366-1370. Good discussion of factors to consider if a resident will benefit from prompted voiding.

Resources

- Folden, SL et al. 2002. Rehabilitation Nursing Foundation (RNF) Practice Guidelines for the Management of Constipation in Adults. RNF Glenview, Ill. <http://www.rehabnurse.org/about/research.html>.
- Hinrichs, M & Huseboe, J. 2001. Management of Constipation. University of Iowa Gerontological Nursing Interventions Research Centre, Iowa City, Iowa.
- Joanna Briggs Institute for Evidence Based Nursing and Midwifery. 1999. Management of Constipation in Older Adults. Adelaide, Australia. http://www.joannabriggs.edu.au/pdf/BPISEng_3_1.pdf.
- Registered Nurses Association of Ontario. 2005. Prevention of Constipation in the Older Adult Population, Nursing Best Practice Guideline. Toronto, Ontario. <http://www.rnao.org>.
- Thomas LH, Cross S, Barrett J, French B, Leathley M, Sutton CJ, Watkins C. Treatment of urinary incontinence after stroke in adults (Review) The Cochrane Collaboration. 2009, Issue 1