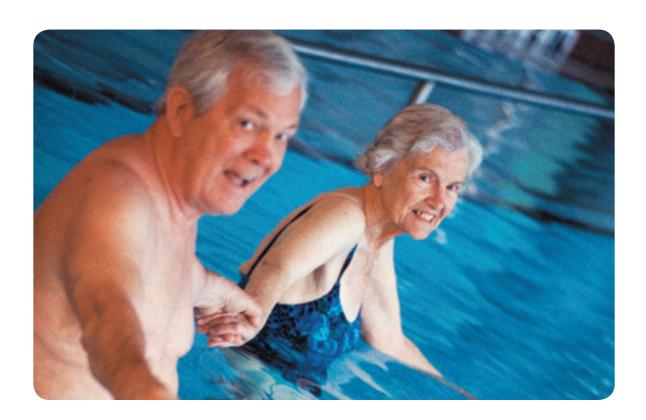
Continence/Constipation Workshop for RNs in Long-Term Care:

A Facilitator's Guide



Supporting Implementation of the RNAO BPGs
Promoting Continence Using Prompted Voiding and
Prevention of Constipation in the Older Adult Population



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- The RNAO *Prevention of Constipation in the Older Adult Population* and the *Promoting Continence Using Prompted Voiding* development panels, who developed the guidelines on which this resource is based.

Disclaimer

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Objectives of the facilitator's package

- 1. To understand the educator's role in the promotion of continence, conservative management of incontinence and the prevention of constipation as it relates to residents living in the long-term care sector.
- 2. To understand the management of urinary incontinence and the prevention of constipation in the long-term care sector.
- 3. To understand nurses' and personal support workers' knowledge, attitudes and beliefs in managing urinary incontinence.
- 4. To utilize information in this manual to plan experiential learning sessions to support the uptake of interventions that will support prompted voiding and the prevention of constipation.

This facilitator's package presents six learning modules, consisting of slides, activities and handouts on the following topics:

- Assessment
- Hydration
- Prompted voiding
- Fibre sources
- Consistent toileting for a bowel movement
- Personal hygiene

There are two accompanying packages; the slide package and the participants' package.

- The participants' package should be photocopied and handed out at the opening of a session.
- Slides can be printed onto transparencies or displayed using the slide show application of Adobe Reader. It is important to familiarize yourself with the content of the slides prior to facilitating a learning session as they contain vital information.

To facilitate this workshop, you will require a number of additional materials:

- Copies of the participants package.
- Copies of the slide presentation, either as an electronic power point presentation or printed onto transparencies.
- Copies of the RNAO BPGs Promoting Continence Using Prompted Voiding and Prevention of Constipation in the Older Adult.
- 4 500ml bottles of water per participant.
- Get up and Go Cookies, for all participants. Recipe can be found on page 17 of the Participant's Package.
- •Dried prunes.
- All-Bran cereal.
- Power pudding.
- SCA TENA cream, Coloplast peri-wash or other products that do not change the pH balance of the perineal area.

The following resources are recommended to supplement this workshop package:

IC5 Multi Hospital Collaborative: Improving continence care in complex continuing care. www.hospitalreport.ca/projects/Ol-projects/IC5.html

Registered Nurses' Association of Ontario. (2006). *Self-Learning Package: Continence Care Education*. Toronto, Canada: Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario. (2007). Self-Learning Package: Prevention of Constipation in the Older Adult. Toronto, Canada: Registered Nurses' Association of Ontario.

Skelly, J., Carr, M., Cassel, B., Robbs, L., Whytock, S. (2006). Promoting Contience Care: A bladder and bowel handbook for care providers. Edited by Paula Eyles. Toronto, Canada.

Participant's Objectives

- 1. To gain understanding of the utilitzation of the voiding record as a tool in the assessment of incontinence.
- 2. To learn how to complete the components of the voiding record.
- 3. To learn how to analyze the voiding record to determine a resident's normal voiding patterns.
- 4. To be able to set up an individualized toileting schedule based on the resident's normal voiding patterns, using a toileting schedule tool.
- 5. To understand the utilization of the bowel record as a tool in the assessment of bowel function and the plan of care.
- 6. To become familiar with the use of the Bristol Stool Chart to monitor the quality of bowel movements.
- 7. To understand the effects of dementia on older persons' toileting abilities.
- 8. To understand the impact of fluid intake on urinary incontinence and bowel function.
- 9. To understand the effect of caffeine on the bladder and bowel.
- 10. To learn how to utilize the prompted voiding intervention.
- 11. To understand the impact of dietary fiber intake on bowel function.
- 12. To realize the importance of consistent toileting for a bowel movement.
- 13. To understand the importance of personal hygiene.
- 14. To become aware of appropriate containment options and specific skin care products available for the specific needs of residents.

Module 1: Assessment



Background Information: Lekan-Rutledge (2000) recommends education and training for care providers to dispel prevailing misconceptions among staff in long-term care facilities, that nothing can be done about incontinence. Muller and Cain (2002) emphasize that effective education is required to develop competency in assessment and management and should involve in-class learning that is supported at the bedside with coaching to reinforce performance and provide recognition and affirmation.



Materials in Participant's Package: Voiding Record & Fluid Volume cue card



Background Information: Long-term care staff may require instruction on the importance of the voiding record, and the correct way to fill it out and interpret the findings to plan for individualized toileting using prompted voiding.

Display SLIDE 1: The Voiding Record

- The voiding record provides a picture of the resident's incontinence and fluid intake, helping to identify any relationship between fluid intake and voiding frequency or urine loss.
- This tool allows staff to record the amount that the resident voids, or the frequency of incontinence in a three day period, as recommended in the RNAO best practice guideline *Promoting Continence Using Prompted Voiding*.
- If obtaining three days of accurate voiding information is a challenge for LTC staff, obtaining two full days can be sufficient.
- Each voiding record corresponds to one day, beginning at 6 a.m. and proceeding in half hour intervals throughout the day.
- It is best to track voiding records for only one resident at a time, and to select days that work best for all staff involved.



Discussion: Procedure for Using the Voiding Record

A urine hat is used to collect and measure a resident's urine output. Long-term care staff record the amount of fluid each time the resident voids and records it in the 'void' column next to the nearest half hour. The type, timing and amount of fluid intake is also documented. If possible, wet episodes are also recorded in the wet column.

After three days, long-term care staff are left with a detailed record of the resident's voiding patterns and type and amount of fluid intake. This completed record will assist the staff in setting up an individualized toileting schedule based on the resident's voiding patterns. It will also help the staff to recognize factors that contribute to urinary incontinence. For example, the amount of fluid intake (i.e. too much, too little, amount of caffeine the resident consumes) and the relationship between these contributing factors and the incontinent episodes.

TIP: It may be useful to develop a cue card of typical amounts of fluid offered at each meal. This will help staff to calculate the amount of fluid taken by the resident.



Discussion: Evaluation and the Voiding Record

Repeating the voiding records after a few weeks of the prompted voiding intervention should demonstrate an increased number of successful voids and decreased number of wet episodes. There should also be an increase in fluid intake evident.



Materials in Participant's Package: Individualized Toileting Schedule

Instruction: Demonstrate to participants how they may set up an individualized toileting schedule, based on the resident's normal voiding patterns, as determined by the voiding record.



Discussion: Minimum Assessment Requirements

It is important to document stool frequency and quality, by recording the stool type number, as assessed using the Bristol Stool Chart.

For residents experiencing constipation or fecal impaction, a more comprehensive monitoring tool is recommended, the Bowel Elimination Record. Completion of a seven day Bowel Elimination Record will give a clear picture of the bowel movements over a one week period, while the Bristol Stool Chart is used to monitor the quality of bowel movements.



Materials in Participant's Package: Bristol Stool Chart, Bowel Elimination Record

Module 2: Hydration



Experiential Learning:

This module will include an experiential learning activity, described below, which will require a number of cases of 500 ml bottles of water (enough for four bottles per session participant).

Participants should be asked to take the number of bottles that they believe contain enough fluid for a 24 hour period. Discuss how many bottles each person selected and why, and remind them that the RNAO guideline recommends daily fluid intake of between 1500-2000 ml per day.



Recommendation 9.0

Ensure an adaquate level of fluid intake (1500-2000 ml per day), and minimize the use of caffinated and alcoholic beverages, where possible.

Level of Evidence Ia

Ask participants to drink three bottles of water (equaling 1500 mls) during the day, unless contraindicated for a medical reason, to allow them to experience how much fluid this is.



Activity: Participants should complete the hydration crossword puzzle independently or as a group.

Display SLIDE 2: Hydration Mini Case Study

Mrs. Smith states that she does not like drinking water. She takes sips of water, only with her medications. She drinks only tea with all her meals, and has soup occasionally. She sometimes has a small cup of ginger ale in the afternoon.

What is your assessment of her fluid intake?

- a) Below minimum adequate
- b) Minimum adequate
- c) Adequate



Discussion of the Case Study: Mrs. Smith's fluid intake is below the minimum adequate amount (less than 2 litres in 24 hours total fluid intake). Note that Mrs. Smith has a high intake of caffeine, which acts as a diuretic. For purposes of hydration, tea is not calculated towards fluid intake, as it draws fluid away from the body.

Display SLIDE 3: Strategies to increase Mrs. Smith's fluid intake:

- Keeping a container of fluid at the bedside
- Availability of flexible straws
- Providing lemon to flavour water
- Keeping water at room temperature, if preferred
- Ensuring fluids at meals are consumed
- Record the fluid by type, amount and time on a menu slip
- Record the total amount of fluid intake for 24 hours

Module 3: Prompted Voiding



Background Info: Ouslander and Schnelle (1995) report that prompted voiding is a simple behavioral intervention which is effective in managing daytime urinary incontinence in one quarter to one third of incontinent long-term care residents. Staff management is an important factor for the success of prompted voiding (Lyons & Pringle Specht, 2000). The nearer to a 100% completion of assigned prompted voiding sessions by the caregiver, the higher the rate of urinary continence in the individual (Palmer et al., 1994).



Discussion:

- Explore with staff their perceived barriers to completion of prompted voiding sessions.
- Discuss with the Director of Nursing the importance of ensuring that there is sufficient staff to make it possible to implement prompted voiding interventions.

It is also important to reinforce techniques that can be used to maintain or increase staff compliance with prompted voiding assignments, such as:

- Establishing a standard of care related to continence care;
- Self-monitoring of completion of prompted voiding sessions;
- Weekly reliability checks of self-monitoring by another person;
- Verbal feedback on group performance; and
- Written feedback on individual performance (Lyons & Pringle Specht, 2000).



Background Info: Johnson, Ouslander, Uman & Schnelle (2001) point out the results of several studies that have documented the difficulty nursing staff encounter in maintaining prompted voiding programs outside of a research setting. It is critical to pay attention to the administrative and personnel barriers in a long-term care setting that may interfere with implementation and effectiveness of toileting programs such as prompted voiding (Johnson et al., 2001).

Schnelle and Leung (2004) report that attempts to implement toileting programs in nursing homes without increasing staff resources have achieved sub-optimal results. These authors also raise awareness to the fact that the inability to translate best practice recommendations related to toileting assistance to long-term care has reduced the motivation of research professionals (and perhaps funding agencies) to address some of the bladder function issues that may be limiting the effectiveness of toileting assistance programs in these environments (Schnell & Leung, 2004).

Prompted voiding has been shown to decrease the number of incontinent episodes per day and increase the number of continent voids (RNAO, 2005). It can be used with persons who have physical or mental impairments or little ability to determine how best to meet their needs. The identification of individual voiding patterns (individualized toileting) rather than routine toileting (e.g. q2H) can promote the highest level of success with toileting. It aims to improve bladder control for residents with or without dementia using verbal prompts and positive reinforcement.

Long-term care staff would benefit from understanding an assessment that would allow them to identify those residents who would most benefit from the prompted voiding intervention. Doing so may improve staff perceptions of effectiveness and help motivate them to provide individualized, scheduled voiding (Remsburg et al., 1999).

Display SLIDE 4: Prompted Voiding

The goal of prompted voiding is to reduce the frequency of wetness in selected residents who have demonstrated successful voids at least 66% of the time when offered toileting assistance. The best predictor of a person's response to prompted voiding is his or her success during a trial of prompted voiding (Lyons & Pringle Specht, 1999).

Display SLIDE 5: Requirements for Toileting:

- The resident is aware of the urge to void, of passing urine and of being wet.
- The resident is able to get to the bathroom relatively independently.
- The resident is able to suppress the urge to void until he/she is toileted.
- The resident is able to successfully void.

Display SLIDE 6: Responsiveness to prompted voiding

The following factors can impact on an individual's responsiveness to prompted voiding:

- Recognizing the need to void.
- High number of self-initiated requests to toilet.
- Ability to void successfully when given toileting assistance.
- Ability to ambulate independently.
- Cognitively intact.
- Completion of assigned prompted voiding sessions by care provider.



Discussion: Emphasize the importance of the identification of individual voiding patterns, (individualized toileting) rather than routine toileting (i.e. every 2 hours) to promote the highest level of success with toileting.

There are three primary behaviors that the caregiver uses each time prompted voiding is initiated:

- Monitoring
- Prompting
- Praising



Experiential Learning

Participants will now divide into pairs, to engage in a role playing activity. One participant will take the role of long-term care staff, one will take the role of resident. The role play should be guided by the role-play script found in the patient's package, and participants may also consult the RNAO BPG *Promoting Continence Using Prompted Voiding*, pages 41-43 for further detail.

Role-Play Script

Approaching the Resident about Prompted Voiding

- 1. Contact the resident following the individualized toileting schedule (based on their normal voiding patterns). (PROMPT)
- 2. Focus their attention on voiding by asking them whether they are wet or dry. (MONITOR)
- 3. Check them for wetness, record on voiding record and give feedback on whether they are correct or incorrect. (MONITOR)
- 4. Whether wet or dry, ask the resident if they would like to use the toilet, bedpan or urinal. (PROMPT)

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If "Yes"
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- a) Assist them. (PROMPT)
- b) Record the results on the voiding record. (MONITOR)
- c) Give them positive reinforcement by spending an extra minute or two talking with them. (PRAISE) If "No"
- a) Prompt and encourage them to toilet two more times. (PROMPT)

If resident continues to say no, tell them when you will be back and request that they try to delay voiding until then.

- 5. Offer the resident a drink of fluid before leaving. (HYDRATION)
- 6. If the resident spontaneously requests toilet assistance, provide it and record the results on the voiding record. Give them positive reinforcement by spending an extra minute or two talking with them. (PRAISE) Offer the resident a drink of fluid before leaving. (HYDRATION)



Activity: Participants should now complete the prompted voiding crossword and word search, found in the participant's package, independently, or as a group, upon completion of this module.

Module 4: Abilities

Display SLIDE 7: Impact of cognitive impairment on ability to be continent

Ability to be continent is influenced by the following:

- ability to follow and understand prompts or cues
- ability to interact with others
- ability to complete self care tasks
- social awareness

Display SLIDE 8: Impact of cognitive impairment on ability to be continent	
Ability	Impact on Continence
Interpretation • recognition • recall	identifying the urge to voidremembering how to respondlocating the toilet
Interaction • comprehension • expression	understanding remindersasking for assistance
Self-Care • voluntary and purposeful movement • spatial orientation	 removing clothing sitting on the toilet
Social • attention deficits • conversation	remembering how to respondmotivation to be continent

Display SLIDE 9: Abilities Mini Case Study

Mr. Brown is aware of the need to pass urine, but he cannot find the toilet, or he has forgotten that the toilet is the socially appropriate place to pass urine. Staff observe him passing urine in strange places, like the garbage pail and behind the door in his room. His situation demonstrates significant excess disability (Dawson et al., 1986) related to his capacity to successfully void in a toilet with staff interventions. He has retained his ability to respond to his name and he is able to follow one-step instructions. He is able to feed and dress himself.

Do you think the Mr. Brown will respond to the prompted voiding intervention?

- a) Yes, Mr. Brown would likely respond well to prompted voiding
- b) No, Mr. Brown would not likely respond well to prompted voiding

Discussion: Mr. Brown would likely respond well to prompted voiding. Prompted voiding can be used with persons who have physical or mental impairments or little ability to determine how best to meet their needs.

Activity: Participants should complete the abilities crossword upon completion of this module.





Module 5: Constipation

Display SLIDE 10: Constipation

The main manifestation of constipation is that of fecal loading which means that the rectum may be filled with a large quantity of soft or hard stool.

Factors contributing to constipation include:

- low fluid intake
- low dietary fibre intake
- prolonged use of laxatives
- ignoring urge to defecate
- sedentary lifestyle, low physical activity
- polypharmacy

Display SLIDE 11: Fibre

Fibre: increases weight and bulk of stool, which in turn increases colonic movement producing softer and easier to pass stools.

The RNAO BPG *Prevention of Constipation in the Older Adult Population* recommends that individuals gradually increase fibre to 25-30 grams per day, with consistent fluid intake of 1500 mls or more. A rapid increase in fibre intake leads to abdominal bloating, cramping and flatulence.



Experiential Learning

Provide session participants with a variety of foods that help to increase fibre intake. These should include:

- Get Up and Go Cookies (recipe is included in the participant package)
- Dried prunes
- All Bran cereal
- Power pudding (for example, fruitrite)

Participants should sample each of the foods, and then discuss other food options that are fibre-rich. They can compare their responses to the list of dietary fibres for selected foods, found in the *Prevention of Constipation in the Older Adult Population guideline*.



Web Activity:

Visit: www.dhhs.tas.gov.au/healthyliving/nutrtion/documents/quick-fibre-quiz.pdf www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/quiz-fibre?open



For quizzes on sources of fibre.

Activity: Participants should now complete the fibre crossword puzzle and the constipation word search found in the participant package.

Display SLIDE 12

Ignoring the urge to defecate causes stool to build up in the rectum. It is important that residents are able to respond promptly to the urge to defecate.

Long-term care staff should provide consistent time for defecation, taking into consideration the individual's behaviour patterns and making use of gastro-colic reflex. This reflex is the strongest 10-20 minutes after eating, but may respond for 30-40 minutes.

TIP: Positioning the resident in a simulated squat position decreases the anal rectal angle, and having the legs bent towards the abdomen raises abdominal pressure.

Display SLIDE 13: Toilet Transfers require:

Sitting balance: ability for resident to sit upright, with minimal risk of falling off commode.

Sitting tolerance: ability to sit on the commode for about 15 minutes without becoming exhausted.

Muscle tone: too much or too little muscle tone may cause the resident to fall off the commode.

Range of motion: resident must have enough movement in the joints to assume a sitting position.

Display SLIDE 14: Cognitive Status

Insight: resident should have the cognitive capacity to understand why they are on a commode.

Judgment: resident should be able to recognize that they should not try to get off the commode without help.

Display SLIDE 15: Toilet Transfers and Sitting Balance

Residents can be referred to an occupational therapist for assessment to determine appropriateness for commode use, including:

- Transfer status
- Ceiling lift vs. physical assistance
- Number of people needed to assist with toileting
- Commode or toilet equipment needed for safety
- Tips on transferring individual residents

Display SLIDE 16: Constipation Mini Case Study

Ms. Purdy is an 83 year-old resident recently admitted to a long-term care facility. She has recent onset constipation and has now been placed on a bowel routine consisting of laxatives and suppositories. She was experiencing easy to pass stools at home. She is frustrated about not toileting as she has been used to at home. She is worried about privacy as she now shares a room with another resident. She feels rushed and experiences embarrassment due to a lack of privacy. She is not able to relax and take the time necessary to have a bowel movement.

Ms. Purdy is also a bit depressed about adjusting to her new living arrangements. She is not eating or drinking much, except for tea with every meal. She likes prunes and bran cereal, but has not had these on her tray. She is also not getting outside for walks as before.

Display SLIDE 17: Constipation Mini Case Study (continued)

Which of the following factors could be contributing to Ms. Purdy's constipation:

- Low fluid intake
- Caffeine intake
- Low fibre intake
- Decreased physical exercise
- Emotional distress
- Lack of privacy.



Discussion: All of these factors are likely contributing to Ms. Purdy's constipation. Discuss with participants how to address each of these issues, using the following as discussion points:

Display SLIDE 18: Suggestions to address Mrs. Smith's constipation

- Increase fluid intake
- Decrease caffeine intake
- Slowly add fibre items once fluid intake is at least 1.5 litres in 24 hours
- Involve the resident in recreation program to increase activity
- Provide privacy
- Provide consistent toileting following a triggering meal (breakfast or lunch)
- Give a warm drink during toileting
- Recognize her adjustment to the change in her environment and provide emotional support

Module 6: Personal Hygiene



Items for demonstration:

- Samples of products that do not change the pH balance of the perineal area (examples: SCA TENA cream, Coloplast peri-wash)
- Video on perineal care

Display SLIDE 19: Hygiene

- It is important to emphasize that residents not use soap.
- Residents should use a product that does not change the pH of the perineal area.
- Residents should cleanse from front to back.
- Should pay particular attention to perineal care following a bowel movement.

Display SLIDE 20: Personal Hygiene Mini Case Study

Ms. Birkshire has experienced multiple symptomatic urinary track infections since her admission to the Nursing Home. She has been using soap to wash and has a hard time cleaning front to back after having a bowel movement.

- What product would you suggest she use for personal hygiene?
- How will you assist her with personal hygiene ensuring that this care is provided, especially following a bowel movement?



Discussion: Participants should examine the hygiene samples provided, and discuss each item's usefullness in the case of Ms. Birkshire, and other long-term care residents.

Bibliography

Battistella, M. & Alibhai, S. (2004). Evaluation and treatment of constipation. *Geriatrics & Aging, 5*(10), 23-27.

Brown, M. & Everett, I. (1990). Gentler bowel fitness with fiber. *Geriatric Nursing*, 11(1), 26-27.

Bryant, C.M., Dowell, C.J. & Fairbrother, G. (2002). Caffeine reduction education to improve urinary symptoms. *British Journal of Nursing*, *11*(8), 560-565.

Cheskin, L.J., Kamal, N., Crowell, M.D., Schuster, M.M. & Whitehead, W.E. (1995). Mechanisms of constipation in older persons and effects of fiber compared with placebo. *Journal of the American Geriatric Society, 43*(6), 666-669.

Collette, C., Leclerc, G., Tu, Le Mai. (2003). Effectiveness of a geriatric urinary incontinence educational program for nursing staff. *Nursing Leadership*, *16*(4), 99-109.

Connor, P.A., Kooker, B.M. (1996). Nurses' knowledge, attitudes, and practices in managing urinary incontinence in the acute care setting. *MEDSURG Nursing*, *5*(2).

Engberg, S., Sereika, S.M., McDowell, B. Joan, Weber, E. & Brodak, I. (2002). Effectiveness of prompted voiding in treating urinary incontinence in cognitively impaired homebound older adults. *Journal of Wound, Ostomy and Continence Nursing*, 29(5), 252-265.

Eustice, S., Roe, B. & Paterson, J. Prompted voiding for the management of urinary incontinence in adults (Cochrane Review). In: *The Cochrane Library*, Issue 3, 2004. Chichester, UK: John Wiley & Sons, Ltd.

Dawson P., Wells, D.L., Reid, D., Sidani, S. (1998). An abilities assessment instrument for elderly persons with cognitive impairment: psychometric properties and clinical utility. *Journal of Nursing Measures*, 6(1),35-54.

Dawson, P., Kline, K., Crinklaw Wiancko, D., Wells, D. (1986). Nurses must learn to distinguish between excess and actual disability to prolong the patient's competence. *Geriatric Nursing*, Nov./Dec.

Donald, I.P., Smith, R.G., Cruikshank, J.G., Elton, R.A. & Stoddart, M.E. (1985). A study of constipation of the elderly living at home. *Gerontology*, *31*(2), 112-118.

DuBeau, C.E. (1995). Urinary incontinence and dementia: The peril of guilt by association. *The Journal of the American Geriatrics Society, 43*(3).

Everhart, J.E., Go, V.L., Johannes, R.S., Fitzsimmons, S.C., Roth, H.P. & White, L.R. (1989). A longitudinal survey of self-reported bowel habits in the United States. *Digestive Diseases and Sciences*, *34*(8), 1153-62.

Folen, S., Backer, J.H., Maynard, F., Stevens, K., Gilbride, J.A., Pires, M., & Jones, K. (2002). *Practice guidelines for the management of constipation in adults*. Rehabilitation Nursing Foundation. [Online]. Available: http://www.rehabnurse.org/profresources/BowelGuidefor WEB.pdf

Frantz, R.A., Xakellis, G.C., Harvey, P.C., & Lewis, A.R. (2003). Implementing an incontinence management protocol in long-term care. Clinical outcomes and costs. *Journal of Gerontological Nursing*, 29(8), 46-53.

Getliffe, K. & Dolman, M. (2003). *Promoting Continence: A clinical research resource*. Chapter 7: Down, down and away! An overview of adult constipation and fecal incontinence. Page 195.

Gibson, C.J., Opalka, P.C., Moore, C.A., Brady, R.S., & Mion, L.C. (1995). Effectiveness of bran supplement on the bowel management of elderly rehabilitation patients. *Journal of Gerontological Nursing*, *21*(10), 21-30, 54-55.

Gray, M., Ratliff, C. & Donovan, A. (2002). Protecting perineal skin integrity. *Nursing Management*, 61-63,

Hinrichs, M. & Huseboe, J. (1998). *Evidenced-based protocol: Management of constipation.* The University of Iowa Gerontological Nursing Interventions Research Dissemination Core.

Hodgkinson, B., Evans, D., & Wood, J. Maintaining Oral Hydration in Older People. *The Joanna Briggs Institute for Evidenced Based nursing and Midwifery*, 2001. Systematic Review No. 12.

Johnson, T.M., Ouslander, J.G., Uman, G.C. & Schnelle, J.F. (2001). Urinary incontinence treatment preferences in long-term care. *Journal of the American Geriatric Society, 49*, 710-718.

Karam, S.E., & Nies, D. M. (1994). Student/staff collaboration: A pilot bowel management program. *Journal of Gerontological Nursing*, *3*(6), 402-404.

Lekan-Rutledge, D. (2000). Diffusion of innovation: A model of implementation of prompted voiding in long-term care setting. *Journal of Gerontological Nursing*, 26(4), 25-33.

Lyons, S.S. & Pringle Specht, J.K. (1999). *Prompted voiding for persons with urinary incontinence: Research-based protocol.*University of lowa Gerontological Nursing Interventions Research Centre, Research Dissemination Core.

McCormick, K.A., Burgio, L.D., Engel, B.T., Scheve, A. & Leahy, E. (1992). *Journal of Gerontological Nursing*, 3-9.

McGilton, K.S., Rivera, T.M. & Dawson, P. (2003). Can we help persons with dementia find their way in a new environment? *Aging & Mental Health, 7*(5), 363 – 371.

Mentes, J.C. (2004). *Evidence-based protocol: Hydration management*. The University of Iowa Gerontological Nursing Interventions Research Dissemination Core.

Mueller, C. & Cain, H. (2002). Comprehensive management of urinary incontinence through quality improvement efforts. *Geriatric Nursing*, *23*(2), 82-87.

Ouslander, J.G., Schnelle, J.F. (1995). Incontinence in the nursing home. *Internal Medicine*, *122*(6).

Ouslander, J.G., Al-Samarrai, N., Schnelle, J.F. (2001). Prompted voiding for nighttime incontinence in nursing homes: Is it effective? *Journal of the American Geriatric Society, 49*, 706-709.

Palmer, M.H. (1996). *Urinary Continence Assessment and Promotion*. Chapter 7, p133. Aspen Publishers, Inc.

Palmer, M.H. (1995). Nurses' knowledge and beliefs about continence interventions in long-term care. *Journal of Advanced Nursing*, *21*, 1065-1072.

Palmer, M., Bennett, R., Marks, J., McCormick, K., & Engel, B. (1994). UI: a program that works. *Journal of Long-Term Care*, 22(2), 19-25.

Palmer, M.H. (1994). Level 1: Basic Assessment and Management of urinary incontinence in nursing homes. *Nurse Practitioner Forum*, *5*,(3), Pg 153.

Peet, S.M., Castleden, C.M., McGrother, C.W., Duffin, H.M. (1996). The management of urinary incontinence in residential and nursing homes for older people. *Age and Aging*, *25*, 139-143.

Peet, S.M., Castleden, C.M., McGrother, C.W. (1995). Prevalence of urinary and fecal incontinence in hospitals and residential and nursing homes for older people. *British Medical Journal*, 311.

Penn, C., Lekan-Rutledge, D., Marner Joers, A., Stolley, J., Vickrey Amhof, N. (1996). Assessment of urinary incontinence. *Journal of Gerontological Nursing*.

Pringle-Specht, J.K., Salsbury Lyons, S. & Maas, Meridean, L. (2002). Patterns and treatments of urinary incontinence on special care units. *Journal of Gerontological Nursing*, *28*(5), 13-21.

Registered Nurses' Association of Ontario. (2002). Toolkit: Implementation of clinicalpractice guidelines. Toronto, Canada: Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (2005). *Promoting Continence Using Prompted Voiding.* (Revised). Toronto, Canada: Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario (2005). *Prevention of Constipation in the Older Adult Population*. (Revised). Toronto, Canada: Registered Nurses' Association of Ontario.

Registered Nurses' Association of Ontario. (2006). Self-Learning Package: Continence Care Education. Toronto, Canada: Registered Nurses' Association of Ontario.

Remsburg, R.E., Palmer, M.H., Langford, A.M. & Mendelson, G.F. (1999). Staff compliance with and ratings of effectiveness of a prompted voiding program in a long-term care facility. *Journal of Wound, Ostomy and Continence Nursing*, 261-269,

Salsbury Lyons, S., and Pringle Specht, J.K. (2000). Prompted voiding protocol for individuals with urinary incontinence. *Journal of Gerontological Nursing*, 5-13.

Sandler, R.S., Jordan, M.C. & Sheldon, B.J. (1990). Demographic and dietary determinants of constipation in the U.S. population. *American Journal of Public Health, 80*, 85-189.

Schnelle, J.F. and Leung, F.W. (2004). Urinary and fecal incontinence in nursing homes. *Gastroenterology, 126*, S41-S47.

Serocki Pinkowski, P. (1996). Prompted voiding in the long term care facility. Wound, Ostomy and Continence Nurses, 23.

Skelly, J.M., Flint, A.J. (1995). Urinary incontinence associated with dementia. *Journal of the American Geriatrics Society, 43*(3).

Vinsnes, A.G., Harkless, J., Bohm, J. & Hunskaar, S. (2001). Healthcare personnel's attitudes towards patients with urinary incontinence. *Journal of Clinical Nursing*, *10*, 455-462.

Wells, D.L., Dawson, P. (2002). A Framework for Developing Nursing Knowledge About the Effects of Dementia on Older Persons' Abilities. *Journal of Applied Gerontology, 21*, (1), 90-102.

Wells, D.L., Dawson, P.G., Sidani, S., Craig, D., Pringle, DM. (2000). Effects of an abilities-focused program of morning care on residents who have dementia and on caregivers. *Journal of the American Geriatrics Society, 48*(4).

Wilson, L. (2003). Continence and older people: The importance of functional assessment. *Nursing Older People*, *15*(4), 22-28.