

Prompted Voiding for Persons with Urinary Incontinence

THE UNIVERSITY OF IOWA COLLEGE OF NURSING
Barbara and Richard Csomay Center for Gerontological Excellence



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The primary mission of the Barbara and Richard Csomay Center for Gerontological Excellence (CCGE) at the University of Iowa College of Nursing is the advancement of innovative research based services and products that focus on enhancing healthy aging. The Evidence-Based Practice Guideline program is based on the belief that nurses who are prepared for using the best evidence-based gerontological practices make a critical difference in the quality of life of older persons. To this end, the CCGE at the University of Iowa develops and maintains EBP Guidelines as a means to promote “*best practices*” among nurses and others who provide day-to-day care to older adults.

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Grading Scheme

This guideline was developed from a literature review and synthesis of current evidence on Prompted Voiding for Persons with Urinary Incontinence. Research findings and other evidence, such as guidelines and standards from professional organizations, case reports and expert opinion were critiqued, analyzed, and used as supporting evidence.

The practice recommendations were assigned an evidence grade based upon the type and strength of evidence from research and other literature.

Scheme for Grading the Strength & Consistency of Evidence in the Guideline

- A1 = Evidence from well-designed meta-analysis or well-done systematic review with results that consistently support a specific action (e.g., assessment, intervention, or treatment)
- A2 = Evidence from one or more randomized controlled trials with consistent results
- B1 = Evidence from high quality Evidence-Based practice guideline
- B2 = Evidence from one or more quasi experimental studies with consistent results
- C1 = Evidence from observational studies with consistent results (e.g., correlational, descriptive studies)
- C2 = Inconsistent evidence from observational studies or controlled trials
- D = Evidence from expert opinion, multiple case reports, or national consensus reports

Introduction

Urinary incontinence (UI) is the involuntary loss of urine. The National Association for Continence estimates on the basis of multiple studies and expert opinion that 25 million adult Americans experience transient or chronic UI (National Association for Continence, 2012). UI is one of the most common conditions among residents of extended care settings; post-acute and long-term care (LTC) facilities. UI is seen in at least 55% of nursing home residents and is the second leading cause of institutionalization of the elderly (AMDA, 2015). Urinary incontinence has been shown to be an independent risk factor for unplanned hospitalization of home care individuals (Rönneikkö et al., 2017). The prevalence of UI increases with age, with women more affected than men. It is also more prevalent in those with cognitive impairment. In a small sample (n=100) of frail older patients with dementia or cognitive impairment, 36% had UI noted upon discharge from an acute care setting (Furlanetto & Emond, 2016). UI is found in women and men with neurological diseases, e.g. Parkinson's disease, stroke, multiple sclerosis (Dey, 1997; NIH, 2007).

Purpose

The purpose of this evidence-based guideline is to provide information for implementing a treatment program of prompted voiding (PV) for individuals who have UI. PV is a toileting program that combines scheduled voiding with "prompting" from a caregiver. In this guideline, a caregiver may be formal (extended care professional and allied health) or informal (family member, companion). PV is appropriate for older adults with urgency, stress, mixed, or functional UI. This includes both cognitively intact and impaired individuals. Nurses, physicians, other providers, support staff and administrators who are leading and facilitating evidenced-based practice changes for UI will find the guideline valuable for the development of assessment, procedures, protocols, education, policies, and documentation tools associated with PV.

In the LTC setting, UI is very common and is often not a high priority of care; especially in individuals with cognitive impairment. Frail and older individuals are at the highest risk for developing UI (Coyne, et al., 2013). UI may be a marker of an impaired general health condition and an indirect cause of death (e.g. secondary to a fall). UI has been associated with a 24% increased risk of all-cause mortality with a graded relationship across UI severity levels (Damián, Pastor-Barriuso, García López, & de Pedro-Cuesta, 2017). Urinary incontinence has been identified one of three geriatric syndromes in older adults who transition from ICU to an

inpatient acute care unit (Tang, Tang, Hu, & Chen, 2016). In a population-based sample of older homeless adults (n=350, aged 50 and older), 48% screened positive for UI (Brown et al., 2016). Proper assessment and identification of UI is imperative to quality care improvement in UI (Jenkins & Fultz, 2005; Jirovec & Wells, 1990; Ouslander & Johnson, 2004; Resnick, 1990; Skelly & Flint, 1995).

The goals of this guideline are to provide the evidence for PV in reducing the frequency and severity of UI episodes, increasing self-initiated requests to toilet, and preventing the complications associated with UI of older adults in their homes, in acute and extended care facilities (e.g. post-acute and nursing homes).

Types of Urinary Incontinence (UI)

UI may present as any of the following types (Abrams et al., 2002; Herdman & Kamitsuru, 2014):

- ***Urgency incontinence*** - involuntary passage of urine occurring after a sudden and strong sense of urgency to void.
- ***Stress incontinence*** - sudden leakage of urine with activities or any effort that increases intra-abdominal pressure.
- ***Mixed incontinence*** - involuntary urine leakage associated with urgency and also with exertion, effort, sneezing, or coughing.
- ***Functional incontinence*** - inability of a usually continent person to reach toilet in time to avoid unintentional loss of urine.
- ***Overflow incontinence*** - involuntary loss of urine associated with over-distention of the bladder.
- ***Transient incontinence*** - UI duration of less than six months as the result of reversible causes; often of recent or even sudden onset, not present one day but then present the next day.

Risk Factors for Urinary Incontinence (UI)

There are known risk factors for developing transient and chronic UI as listed here and in more detail in [Appendix A.1](#).

- Advanced age
- Female gender
- Cognitive impairment
- Genitourinary system conditions, especially urinary tract infections (UTIs)
- Chronic or acute health conditions including diabetes, stroke, arthritis or neurologic diseases
- Bowel disorders such as constipation/fecal impaction
- Mental health conditions and the medication used to treat mental health conditions
- Environmental barriers
- Functional factors (mobility status, ability to transfer, and ability to manage clothing)
- Lifestyle-associated factors

EVIDENCE TO SUPPORT IDENTIFYING INDIVIDUALS WITH URINARY INCONTINENCE

Research has shown that when properly assessed and treated, UI can be corrected in 30% of nursing home residents and suitably controlled and managed in the remainder (Fantl et al., AHCPR, 1996, p.1). Thus, given the complex nature of the process of urination, detailed and accurate assessment of the older adult is essential to achieve positive outcomes. It is recommended that all adults with UI should undergo a basic evaluation that includes a history and physical examination; dipstick urinalysis, and measurement of post-void residual volume (PVR) in those at risk for incomplete bladder emptying.

Recommendations for Practice

RECOMMENDATION 1. OBTAIN A HISTORY AND PHYSICAL EXAMINATION

Maintenance of urinary continence and improvement of established UI are treatment priorities and indicators of quality care (Xu, Kane, Shippee, & Lewis, 2016; Horn et al., 2010; Rantz, Popejoy, Zwygart-Stauffacher, Wipke-Tevis, & Grando, 1999). Interventions based upon assessment of the type and severity of UI as well as, the individual's unique response to the condition can lead to improvements in the physical condition and quality of life (QoL) of incontinent persons. Efforts to maintain continence through PV are most successful when used in persons with **urgency, mixed** or **functional** UI (Fink, Taylor, Tacklind, & Rutks, 2008; Eustice, Roe, & Paterson, 2000; Fantl et al., 1996; Penn, Lekan-Rutledge, Joers, Stolley, & Amhof, 1996; Williams & Gaylord, 1990) [*Evidence Grade = A1*].

A comprehensive nursing assessment of UI is required. The noninvasive or minimally invasive assessment tests should be performed by a registered nurse (RN). Assistive personnel may collect data regarding the timing and amount of UI episodes. However, some areas of the comprehensive nursing assessment of UI, such as those of an invasive nature that may or may not incorporate tests to determine bladder emptying, require special training and may require consultation from a continence nursing specialist, advanced practice registered nurse (e.g. geriatric nurse practitioner), or physician. Urodynamic tests are rarely indicated in this population (See [Appendix A.2](#) & [Appendix A.3](#)).

Assessment

Baseline physical examination to determine possible causes of the UI should focus upon the following:

- Abdominal examination
- Genitourinary/genitalia examination
- Neurological examination
- Functional ability assessment
- Cognitive ability assessment
- Environmental barrier assessment
- Diagnostic testing

The individual's type, frequency, and severity of UI should be determined by collecting the following baseline data:

- Incontinence and lower urinary tract symptoms history
- Health history to include medical, surgical, and bowel history
- Review of medications
- Psychosocial responses to urinary incontinence
- Bladder Diary – Should include voiding times, incontinence episodes, presence of urgency, triggers, fluid intake (see link in [Appendix A.4](#))

Determining Type of Urinary Incontinence

Stress UI (Do Not Use PV)

- a. Leakage with effort (e.g. with a cough, sneeze; when lifting, changing position; during physical activity)
- b. UI in small amounts (drops, spurts)
- c. No urgency, frequency, nocturia
- d. No UI at night

Urgency UI

- a. Strong, uncontrolled urge prior to UI
- b. Mod/large volume of urine loss (gush)
- c. Frequency of urination
- d. Nocturia > 2 times
- e. Nocturnal enuresis

Overflow UI (Do Not Use PV)

- a. Difficulty starting urine stream
- b. Weak or intermittent stream (dribbles)
- c. Post-void dribbling
- d. Prolonged voiding
- e. Feeling of fullness after voiding
- f. Voiding small amounts often

Functional UI

- a. Mobility or manual dexterity impairments
- b. Lack of toilet or toilet substitute
- c. Use of restraints
- d. Sedative, hypnotic, CNS depressant, diuretic, anticholinergic, alpha-adrenergic antagonist
- e. Depression, delirium, dementia
- f. Pain associated with toileting activities

If the patient has both stress and urgency UI symptoms, they would be classified as mixed UI. Clinicians should determine possible causes of transient UI and refer to a primary health care provider for treatment, as indicated (See [Appendix A.1](#)).

Evidence to Support the Need for a History and Physical Examination

The history and assessment of UI is an essential step before starting the PV protocol. After this is completed, one should be able to identify any reversible causes of UI, any medical or surgical history that would directly cause UI and be able to identify if the individual would be appropriate to trial PV.

While a thorough examination is always recommended, two critical steps in the history and assessment that must not be overlooked are the assessment of adequate and proper fluid intake and ensuring that existing constipation and fecal impaction are addressed.

Inadequate fluid intake and dehydration are common in LTC residents (Gaspar, 2011), especially, those with cognitive impairment, and in newly admitted frail older hospitalized patients (McCrow, Morton, Travers, Harve, & Eeles, 2016). Dehydration can put individuals at risk for constipation, pressure ulcers, UTIs, pneumonia, and mental status changes. Dehydration may actually increase the risk of UI and its severity in frail older adults because of its significant association with constipation and delirium, both known risk factors for UI (Voyer, Richard, Doucet, Cyr, & Carmichael, 2011; Rose, Thimme, Halfar, Nehen, Rübben, 2013).

There is also substantial evidence to support the diuretic and irritative effects of caffeine and alcohol. Individuals who report higher caffeine intake have a higher prevalence of UI (Gleason et al., 2013; Jura, Townsend, Curhan, Resnick, & Grodstein, 2011). Studies have shown that cutting down on or eliminating the irritants caffeine and alcohol, can lead to the incontinent individual experiencing less urgency and frequency (Bryant, Dowell, & Fiarbrother, 2002).

In addition, there is strong evidence that constipation directly affects UI. Chronic constipation can precipitate urinary retention and overflow UI and should be included in the differential diagnosis for frail older adults with new or worsened UI (Newman, Burgio, Markland & Goode, 2014). The abdominal and digital rectal examination are useful to uncover constipation and/or a fecal impaction that an individual may not be able to detect or communicate to the caregiver due to dementia (DuBeau, Ouslander & Palmer, 2007). Initiation of a bowel regimen to treat chronic constipation can also be useful with potential improvement in urinary symptoms. Fecal impaction must be removed, if present, during the assessment phase and constipation should be addressed and prevented in the future (Registered Nurses' Association of Ontario, 2002; Wyman, 2008) [*Evidence Grade = A1*].

Assessment of the genitalia is especially important because of skin changes that can occur with UI. The presence of incontinence associated dermatitis (IAD) should be documented and treated. IAD is defined as a skin inflammation manifested as redness with or without blistering, erosion, or loss of the skin barrier function that occurs when urine and/or stool comes into contact with perineal or perigenital skin. Prevalence of IAD in hospitalized patients is 27% (Gray, 2007) and 43% in skilled nursing facilities (Gray, 2007). In women, assessment for pelvic organ prolapse should be performed.

It is important to note the use of respectful communication, no matter what the older person's physical or cognitive capabilities. Using elderspeak, such as "that's a good girl" is not acceptable communication. For more information on praising and supporting persons using PV, please refer to [Appendix B](#).

Identifying Barriers to Prompted Voiding

Barriers and obstacles to a PV toileting program are present in most settings. Assisting with toileting is commonly identified by caregivers, especially family caregivers as a frequent and physically demanding task (Czuba, Sommerich, & Lavender, 2012; Darragh et al., 2015; King, Holliday, & Andrews, 2016; Owen & Staehler, 2003). Cognitive and/or functional impairment causing memory loss and/or immobility are primary risk factors for UI, but not good predictors of a person's potential responsiveness to a PVP. A cognitive assessment is important to determine the person's ability to understand instructions, motivation and affect (Hägglund, 2010). If the person can recognize a sensation of bladder fullness and an urge to void, then a PV may be more successful. In cognitively impaired individuals, observing body language for cues about the need to use the toilet such as fidgeting, nervousness, pacing, or increased anxiety can assist the caregiver in determining the voiding times (Newman & Wein, 2009).

In older adults, impaired mobility, balance and physical function are associated with UI due to difficulties with reaching the toilet in time or impairment in ADL performance (e.g., not having the manual dexterity to manage clothing) (Newman & Wein, 2009; Wang, Chang, Eberly, Virnig, & Kane, 2010; Schumpf et al., 2017). An individual's fear of falling during toileting affects their independence in this activity of daily living (Ko et al., 2012). Common chronic conditions such as osteoarthritis and joint pain can limit mobility (Gilmour & Park, 2006) and thus contribute to difficulty in using the toilet. In addition, conditions such as a stroke can also limit physical mobility. Chen, Liu, Chang, Shen, & Van Nguyen (2010) found that of 138 in-hospital falls, 38%

of the falls occurred when patients tried to get to or from the toilet. Similarly, Tzeng (2010) concluded that 45% of falls in the acute care setting were related to toileting. Toilet-assisted technology, such as a standing lift, can be used to transfer the individual between beds, wheelchairs, or commodes.

Optimal voiding behavior, posture, and position are important to ensure complete bladder emptying. If at all possible, women should sit upright on a bathroom toilet seat or a bedside commode, rather than on a bedpan. Some women do not sit fully on the toilet seat, particularly in public restrooms, and instead 'hover' over the toilet. This contracts the pelvic floor muscles and can inhibit adequate bladder evacuation (Wang & Palmer, 2010). Feet should be flat on the floor so the person can relax during voiding and easily move from sitting to standing. Men will usually void either standing or sitting and in men with decreased mobility, consider the use of a urinal.

Environmental factors such as difficulty reaching the toilet and availability of toileting equipment can affect the success of a PVP. For example, a bedside commode or urinal can be placed by the bed for ease of toileting overnight, and clothing can be chosen or altered for ease of use. Additionally, poor lighting, obstacles on the way to the toilet, and a low toilet without hand rails can make getting to the toilet difficult and create safety issues. Making sure the toilet is easy to use and of the right height is important. Raised toilet seats and grab bars can be used for this purpose. Capezuti and colleagues (2008) noted that toilet height for 45.2% of nursing home residents was actually higher than the optimal height, defined as 100% to 120% of the resident's lower leg length, which could consequently increase risk of falls and difficulty in toileting.

Once the assessment is completed, care plan recommendations should be determine (see [Appendix A.5](#)).

RECOMMENDATION 2. INITIATE PROMPTED VOIDING (PV)

Prompted voiding is a behavioral intervention that involves prompts to toilet with contingent social approval (Wagg et al., 2017). It is designed to increase patient requests for toileting and self-initiated toileting with resultant decrease in UI episodes. It has been used in the treatment of UI in persons with physical or cognitive deficits.

The steps of PV are described in Table 1 below. This method is based upon timely reminders to toilet and positive reinforcement from caregivers to maintain continence. The intervention has been used successfully to treat UI in acute and LTC facilities, (Eustice, Roe, & Paterson, 2000; Roe, Ostaszewicz, Milne & Wallace 2007) as well as in home care settings (Engberg, Sereika, McDowell, Weber, & Brodak, 2002) [*Evidence Grade = A1*]. In addition, some studies have shown a decrease in the amount of incontinent voids and an increase in the amount of continent voids during the PV intervention. Prompted voiding has also shown a decrease in the frequency of pressure injury (new term for pressure ulcers) and UTIs have been realized using an every 2-hour timed toileting schedule to improve continence.

Three primary behaviors that the caregiver uses each time PV is initiated:

- I. Monitoring: involves asking incontinent individuals, at regular intervals that are established based on individual's bladder diary, if they need to use the toilet
- II. Prompting: an antecedent to toileting assistance from the caregiver. Prompting includes reminding the person to use the toilet as well as, encouraging maintenance of bladder control between PV sessions
- III. Praising: is the consequence to the individual's success with maintaining bladder control. Praising, or feedback, is the positive reinforcing of dryness and appropriate toileting.

TABLE 1: THE STEPS OF PROMPTED VOIDING TECHNIQUES AND ASSOCIATED CAREGIVER BEHAVIORS

Prompted Voiding Technique	Caregiver Behavior
<ul style="list-style-type: none"> Approach person at scheduled PV times (15 minutes before or after assignment is acceptable). 	Monitor
<ul style="list-style-type: none"> Greet individual. 	Prompt
<ul style="list-style-type: none"> Wait 5 seconds for individual to self-initiate request (SIR) to toilet. 	Prompt
<ul style="list-style-type: none"> Ask person if he or she is dry or wet (has had a bladder accident). 	Prompt
<ul style="list-style-type: none"> Physically check person to determine continence status. 	Monitor
<ul style="list-style-type: none"> Give social feedback. Praise, if dry. No comment, if wet. 	Praise
<ul style="list-style-type: none"> Prompt individual to toilet (regardless of continence status). 	Prompt
<ul style="list-style-type: none"> Offer person assistance with toileting. 	Prompt
<ul style="list-style-type: none"> Give social feedback. Praise desired toileting behavior. 	Praise
<ul style="list-style-type: none"> Inform individual of the time of next scheduled PV session. 	Prompt
<ul style="list-style-type: none"> Encourage individual to hold urine in bladder until next scheduled PV session. 	Prompt
<ul style="list-style-type: none"> Encourage SIRs to toilet, as needed. 	Prompt
<ul style="list-style-type: none"> Record results of PV session on UI monitoring form. 	Monitor

Benefits of Prompted Voiding

PV may lead to:

- Increased dryness or urinary continence [*Evidence Grade = A1*].
- Decrease in amount of incontinent voids [*Evidence Grade = A1*].
- Increase in amount of continent voids [*Evidence Grade = A1*].
- Decrease in incontinence-associated dermatitis and subsequent pressure injury [*Evidence Grade = B1*].
- Decrease in UTIs [*Evidence Grade = C1*].

Advantages of PV:

- Ideal for formal and non-formal caregivers because it does not need a prescription
- Effective in acute care, home, long-term care, and other settings [*Evidence Grade = A2*].
- Easy to learn, however it takes consistency and dedication of formal and informal caregiver [*Evidence Grade = A1*].

Evidence to Support the Benefits of Prompted Voiding

There are no known health risks associated with the use of behavioral techniques for the treatment of UI. PV, like most behavioral techniques, can be used in situations where pharmacological or surgical interventions are contraindicated. Behavioral modification techniques are the least invasive treatments for UI. (Eustice, Roe, & Paterson, 2000; Burgio et al., 1994; Burgio, Engel, McCormick, Hawkins, & Scheve, 1988; Hu et al., 1989; Kaltreider, Hu, Igou, Yu, & Craighead, 1990; Palmer, Bennett, Marks, McCormick, & Engles, 1994; Schnelle et al., 1983) [*Evidence Grade = A1*].

PV is effective in the short-term treatment of daytime UI in nursing home residents and home care clients when caregivers comply with the protocol (Wagg et al., 2017) [*Evidence Grade = A1*]. The main requirement of PV is the consistent availability of a caregiver to provide the voiding prompts to incontinent individuals.

PV can be used with persons who have physical or mental impairments or little ability to determine how to best meet their treatment needs. PV is ineffective and should not be used in persons who need the assistance of more than one-person to transfer, cannot follow a one-step command, have less than a 66% appropriate toileting rate after a 3-day trial (Wagg et al., 2017). [*Evidence Grade = A1*].

The PV intervention is ideal for caregivers as it needs no prescription by a primary care provider. PV is within the scope of nursing practice. UI prevention and care is part of the daily practice of nurses in many settings. The intervention is easy to learn, but requires personal dedication and consistent application of the PV guideline on the part of caregivers in order to maintain high levels of UI (Adkins & Mathews, 1997; Burgio & Burgio, 1986; Colling, Ouslander, Hadley, Eisch, & Campbell, 1992; Colling, Owen, McCreedy, & Newman, 2003; Engel et al., 1990; Fantl et al., 1996; Hu et al., 1989; McCormick, Cella, Scheve, & Engel, 1990; Schnelle, 1990) [*Evidence Grade = A2*].

Although the technique of PV has been researched extensively and found to be effective in the treatment of UI, the actual step-by-step procedure has not been examined (Burgio et al., 1994; Burgio et al., 1990; Burgio et al., 1988; Campbell, Knight, Benson, & Colling, 1991; Colling et al., 1992; Creason et al., 1989; Engel et al., 1990; Engberg et al., 2002; Eustice et al., 2000; Hawkins, Burgio, Langford, & Engel, 1992; Kaltreider et al., 1990; Petrilli, Traughber, & Schnelle, 1988; Schnelle et al., 1983) [*Evidence Grade = A1*]. Therefore, clinicians using this guideline are encouraged to work with the PV technique to determine which steps are necessary for each individual with UI.

Individuals Likely to Benefit from Prompted Voiding

The following factors increase the likelihood of individuals responding to the PV intervention:

- Normal bladder capacity > 200 cc and < 450 cc [*Evidence Grade = A1*].
- More cognitively intact [*Evidence Grade = A1*].
- Recognizes need to void [*Evidence Grade = A2*].
- Higher number of SIRs to toilet [*Evidence Grade = B2*].
- Higher completion of assigned PV sessions by formal and informal caregiver [*Evidence Grade = C1*].
- Baseline incontinence < 4 times in a 12-hour period [*Evidence Grade = A2*].
- Wet percentage < 20% during first 3 days of PV [*Evidence Grade = C1*].
- Appropriate toileting > 66% during first 3 days of PV [*Evidence Grade C1*].
- At least 50% of voids into toileting receptacle during first day of PV [*Evidence Grade = A2*].
- Able to void successfully when given toileting assistance [*Evidence Grade = A2*].
- Able to ambulate independently [*Evidence Grade = A1*].
- Usual voided volume > 150 cc [*Evidence Grade = A2*].
- Post-void residual < 200 cc [*Evidence Grade = A1*].
- The best predictor of success is the response to a therapeutic trial of PV [*Evidence Grade = A1*].

Factors associated with an individual's non-responsiveness to PV include:

- Decreased cognition [*Evidence Grade = A1*].
- Unable to successfully initiate toileting on first day of treatment [*Evidence Grade = A2*].
- Advanced age [*Evidence Grade = C1*].
- It is important to note that there is no difference in the responsiveness to the intervention based on cognitive ability alone or upon functional ability alone. [*Evidence Grade = A2*].
- Elevated post-void residuals of > 200cc [*Evidence Grade = A1*].
- High frequency (> 40%) of "dry runs", individual indicated the need to toilet but did not void any urine into appropriate toileting receptacle (person does not respond to a prompt to void) [*Evidence Grade = A2*].

NOTE: Potential non-responsiveness does NOT mean that you should not attempt a PV 3-day trial on the individual.

Evidence to Support Individuals Likely to Benefit from Prompted Voiding

Recommendations about individuals likely to benefit from PV are supported by evidence from properly designed and implemented controlled trial, and properly designed and implemented clinical series and guidelines (Burgio et al., 1994; Colling et al., 1992; Creason et al., 1989; Jirovec, 1991; Kaltreider et al., 1990; Ouslander et al., 1995a; Schnelle, 1990) [*Evidence Grade = B1*].

Most trials of PV have not determined subjects' type of incontinence. The studies that diagnosed type of UI have shown PV to be effective in reducing UI in persons with urgency, mixed, and functional incontinence. People who responded poorly to PV were those with elevated post-void residuals (e.g. > 200 ccs) and/or low maximum voided volumes (bladder capacity < 100 ccs), which are characteristics of overflow UI and/or overactive bladder (Ouslander et al, 1995a). In addition, it was reported that nighttime PV was not effective even though persons with incontinence responded well to daytime PV training (Ouslander, Al-Samarrai, & Schnelle, 2001). It is important to note that there was no difference in the responsiveness to the intervention based on cognitive ability alone or upon functional ability. These persons should not be discounted for the intervention (Ouslander et al., 1995b). In fact, a Cochrane review by Eustice et al., (2000) found that PV can be effective in persons with and without cognitive impairment.

Combining PV toileting with other activities of daily living, as part of a multi-component intervention may be an option in ambulatory older adults with UI (Sackley et al., 2008). Ouslander and colleagues (2005) employed a “designated” versus “integrated” nursing assistant role to combine restorative care including a walking program, exercise therapy, and continence care. Specifically, the Functional Incidental Training (FIT) intervention, combined PV with functionally oriented low-intensity endurance and strength-training exercises. Improved physical function and UI in nursing facility residents was seen. Schnelle and colleagues (1995) reported on a multi-component program that combined PV with physical activity and fluid management which improved UI, frequency of bowel movements and percent of bowel movements in toilet. *[Evidence Grade = C1]*.

The best predictor of an individual’s response to PV is the individual’s success to a therapeutic trial of PV. Many people responsive to PV show a clinically significant increase in appropriate toileting behavior and continence levels during a 3-day trial, although maximal response to the treatment may not be realized until several weeks of PV. While it is important to consider this predictor, clinicians should not rely on this solely when deciding whether to try a PV trial. For more information about conducting a therapeutic trial of PV please refer to [Appendix C.1](#).

RECOMMENDATION 3. INDIVIDUALIZED TOILETING SCHEDULE

Researchers recommend individualizing the PV schedule to meet the toileting needs of persons with UI *[Evidence Grade = A2]*.

- The identification of individual voiding patterns can promote the highest level of continence for the incontinent person while minimizing the caregiver time required for completion of the intervention.
- Individuals unable to maintain urinary continence with at least an every 2 to 3-hour toileting schedule after a thorough trial (4 to 7 weeks) of PV are not likely to respond to further use of PV *[Evidence Grade = A2]*.
- The completion of a bladder record, voiding diary or other type of monitoring system can help patients, family members, and health care professionals identify individual voiding patterns and patterns of UI *[Evidence Grade = A1]* (See [Appendix C.2](#)).
- Once regular voiding patterns have been identified, caregivers need to be made aware of this pattern.

- Caregiver adherence to the PV schedule involves toileting the incontinent person within 30 minutes of the scheduled session and immediately upon seeking a request to toilet. This is essential to achieve maximal continence levels.
- Once initiated, determining successful completion to a PV toileting program must be conducted. (See [Appendix C.3](#)).

Evidence to Support Individualized Toileting Schedule

The identification of individual voiding patterns can promote the highest level of continence while minimizing caregiver time required for completion of the intervention. Rather than attempting to find the toileting schedule that best meets the needs of the individual, facilities may attempt to toilet everyone on an every 2-hour schedule. However, some people respond best to an every 3 or 4 hour toileting schedule. Persons who responded to PV early in the intervention are able to decrease toileting sessions from every 2 to 3 to even 4 or more hours. This longer time period between scheduled PV sessions would free-up nursing home staff or other caregiver for the completion of other nursing interventions (Burgio et al., 1994).

Individuals unable to maintain urinary continence with at least an every 2-hour toileting schedule after a trial of 4 to 7 weeks of PV are not likely to respond to continuing the PVP [*Evidence Grade = A2*]. If the individual needs to be toileted more frequently than every 2 hours in order to maintain continence, they should not continue using PV. A scheduled toileting plan augmented with incontinence aids (e.g. urinal, bedside commode) and further evaluation for causes of and treatment for UI is then recommended.

The completion of a bladder record, voiding diary, or other type of monitoring system can help patients, family members, and health care professionals identify individual patterns of UI (Jeyasselan, Roe, & Oldham, 2000; van Melick, Gisolf, Eckhardt, van Venrooji, & Boon, 2001; Yap, Cromwell, Brown, Emberton, van der Meulen 2007) (See [Appendix C.2](#)). Colling and colleagues (1992) used an electronic data logger to record exact times of voiding. Eighty-five percent of the nursing home subjects were found to have regular voiding patterns over the 3-day data collection period. This study was replicated in caregiver-dependent community-dwelling older adults (N=43 [experimental group]; N=35 [control group] (Colling et al., 2003). Combining PV and data from the electronic logger yielded a 75% improvement of continence status in the experimental subjects. Another study using a paper monitoring system and an hourly checking schedule was able to identify individual voiding patterns in a significant number of older adult female nursing home residents within 2 weeks of initiating the monitoring system [*Evidence Grade = A1*].

Once regular voiding patterns have been identified, caregivers need to be made aware of this pattern and determine if person is aware of the need to void (presence of urge sensation). In the LTC setting, posting individual toileting schedules in convenient locations and having meetings with staff to discuss an individual's response to PV has helped some facilities maintain high levels of continence for extended periods of time. Staff adherence to the PV schedule, toileting person with incontinence within 30 minutes of the scheduled session and immediately upon seeking a request to toilet, is essential to achieve maximal continence levels.

Portable ultrasound scanners (e.g. bladder scan) are used in most clinical settings (e.g. acute care, rehab facilities) to determine urine volume in the bladder pre and post-void (Newman, Gaines, & Snare, 2005). Ouslander and colleagues (1994) used a portable ultrasound scanner to determine the accuracy of PVR volumes in nursing home residents. Accuracy of the scanner ranged from 90 – 95% for volumes of 50 to 100 ccs to a rate of 69% for volumes > 200 ccs. Knowledge about bladder volume at any given time may help eliminate unnecessary toileting and allows for accurate assessment of the resident's hydration state. Two non-randomized studies evaluated the feasibility and effect of an ultrasound-assisted PVP for management of UI in hospitalized Japanese older adults (Iwatsubo, Suzuki, Igawa, & Homma, 2014) and nursing home residents (Suzuki et al., 2016). In a 4-week period evaluating ultrasound-assisted PV in 88 hospitalized older adult patients, there were statistically significant pretest-posttest improvements in incontinence absorbent pad use (62.5% decreased their use and 26.3% no longer required use, with 37.% unchanged) and reduction in caregiver stress (Iwatsubo et al, 2014). In a 12-week study involving 77 nursing home residents, incontinence absorbent pad cost was decreased in 51.9% of participants, overall costs decreased by 11.8%, and QoL for care workers in subscales of role emotional and mental health were significantly improved (Suzuki et al., 2016). [*Evidence Grade = C1*].

RECOMMENDATION 4. SELF-INITIATED REQUESTS (SIR) FOR TOILETING

One outcome of PV is SIRs for toileting, which are any attempts by the person who is incontinent to notify caregivers of the need to toilet. PV treatment is thought to increase an individual's awareness of the need to void, which in turn will hopefully increase the number of daily SIRs. SIRs for toileting can be successful if the individual is able to delay voiding and cooperate with toileting, or have awareness of urge sensation when there is a need to void.

Behaviors associated with SIR include:

- Verbal toileting requests
- Use of a call light
- Attempts to toilet self without caregiver assistance [*Evidence Grade = C2*].

Evidence to Support Self-Initiated Requests (SIR)

Research findings about SIR are mixed. Some researchers have reported an increase in SIR during PV treatment ranging from 2.0 to 2.8 SIR per patient per day. However, other researchers have reported either a decrease or no change in the number of daily SIR. Studies of LTC residents that reported a decrease or no change in SIR suggest that PV may promote resident dependence upon nursing home staff for maintenance of urinary continence (Burgio et al., 1988; Burgio et al., 1994; Folstein, Folstein, & McHugh, 1975; Hu et al., 1989; Kalteider et al., 1990; McCormick, Burgio, Engel, Scheve, & Leahy, 1992; Ouslander et al., 1995a; Schnelle et al., 1983).

Individual SIR responses may be related to cognition level. Kaltreider and colleagues (1990) note that the women in their study who had the greatest increases in the number of SIR had Mini-Mental Status Examination scores of > 10 (scale range 0-30) and lived at the LTC facility less than one year.

Due to the evidence regarding changes in SIR when using PV is contradictory, it is recommended that guideline users measure the changes in SIR during initial assessment of response to PV. However, SIR should not be relied upon as an indicator of an individual's ability to maintain continence with PV. In addition, SIR is not an expected outcome of PV for persons with moderate to severe cognitive impairment and/o severe immobility [*Evidence Grade = C2*].

RECOMMENDATIONS 5. USING NIC TO ENHANCE THE NURSING CARE OF PERSONS WHO BENEFIT FROM PROMPTED VOIDING

The Nursing Interventions Classification (NIC) provides an additional resource for identifying treatments for the care of persons experiencing urinary incontinence (UI). Evidence-based practice guidelines are strengthened when standardized nursing interventions (Bulechek, Butcher, Dochterman, & Wagner, 2013) and nursing outcomes (Moorhead, Johnson, Maas, & Swanson, 2013) are included. According to Bulechek, Butcher, Dochterman, & Wagner (2013), the Nursing Interventions Classification (NIC) is a comprehensive standardized classification of 554 interventions that nurses perform. A nursing intervention is defined as any treatment, based upon clinical judgment and knowledge that a nurse performs to enhance patient/client outcomes. NIC includes both independent and collaborative interventions that nurses do in providing direct or indirect care of patients, families, and communities. NIC is specially designed to be used in all settings including critical care and ambulatory care, including long-term, home and hospice care and includes interventions across all specialties, including gerontological nursing. Each NIC intervention is coded to facilitate computer use and includes a label, definition, and a list of activities the provider can select to individualize care that is appropriate for achieving specific desired patient outcomes. NIC includes an intervention specific to this guideline, **0840 Promoted Voiding**. The complete NIC intervention with all associated activities is included in [Appendix D](#) provides a means to guide and document care.

RECOMMENDATIONS 6. SOCIAL FEEDBACK FOR TOILETING BEHAVIOR

Most PV guidelines have incorporated social feedback into the treatment plan. Social feedback is based upon behavioral modification theory; it is used to encourage the person with UI to continue using the program. Feedback can be either positive or corrective.

Positive feedback: using adult language and terminology, involves praising incontinent individuals for:

- Successful toileting behavior including staying dry between scheduled trips to the toilet,
- Self-initiating requests to toilet,
- Responding positively to prompts to void,
- Accurate reporting of continence status.

Corrective feedback:

- Should be informational, not judgmental or punitive
- Should be used minimally,
- Should be at an adult level,
- Should include things like--correction of inaccurate reporting of continence status; repeating prompts to toilet at least twice; reminders to hold urine until next scheduled toileting; reminders to contact caregiver for toileting assistance; and cleaning of an UI episode without verbal comment to the incontinent individual.

In addition to praise for toileting performance, special attention from the caregiver, such as engaging in conversation unrelated to toileting behavior, offering fluids, or assisting with additional personal grooming, may encourage the person with UI to continue using the PV program. For more information about social feedback for persons using PV, please refer to [Appendix B](#).

Evidence to Support Social Feedback for Toileting Behavior

Some early studies examined the relationship between social feedback and improvements in continence status. The studies could not determine if subjects responded with improved toileting behaviors because of the social rewards related to successful toileting behaviors or because their environment was more supportive of toileting behaviors. Either way, continence experts seem to agree that socializing the individual to appropriate toileting behaviors is necessary for the success of the PV intervention (Azrin & Foxx, 1971; Burgio et al., 1990; Burgio et al., 1988; Campbell et al., 1991; Colling et al., 1992; Engel et al., 1990; Hawkins et al., 1993; Kaltreider et al., 1990; Petrilli et al., 1988; Schnelle et al., 1983) [*Evidence Grade = D*].

RECOMMENDATION 7. PREPARING TO TRAIN FORMAL AND INFORMAL CAREGIVERS

A successful PV program requires a staff trained in its:

1. Implementation
2. Adherence to the designated schedule
3. Documentation and monitoring of toileting
4. Follow-up

Staff and caregiver management is a key factor for PV treatment success. Due to the physical and/or cognitive decline of persons needing PV treatment, consistent completion of the guideline by professional or family caregivers is essential for continence maintenance [*Evidence Grade = A2*]. Higher rates of urinary continence in persons with UI are noted when caregivers have completed the majority of toileting prompts (Palmer et al., 1994).

Before getting started:

- 1) Obtain administrative support
- 2) Address perceived barriers to completion of the PV program
- 3) Develop a multidisciplinary team
- 4) Designate opinion leaders, change champions and experts from management and/or a strong nursing leader to implement the PV program.
- 5) Allow extra time at the beginning to identify the appropriate patients and to support caregivers in the education and training process.

In the nursing home setting, common perceived barriers to completion of prescribed PV include:

- Inadequate staff communication and support
- Lack of incentives for staff
- Insufficient monitoring to assure the program is being carried out as prescribed
- Inadequate numbers of staff
- Failure to identify residents who will most likely benefit from PV
- Failure to complete regular reassessments of individuals using PV to determine effectiveness
- Inadequate initial education for all involved staff
- Lack of ongoing in-services about the program

Evidence to Support Implementing the Prompted Voiding Protocol

Barriers to the use of current evidence and implementation of evidence-based practices for quality of care are formidable (Penz & Bassendowski, 2006). Although nursing staff in the LTC setting have an important role in incontinence management, their lack of evidence-based knowledge of how to provide UI care is a significant barrier. Park and colleagues (2015) have shown that attitudes and continuing education of nurses are significantly correlated with continence care practices; however, nurses are insufficiently prepared with respect to incontinence management and their knowledge about caring for people with UI is incomplete (Cheater, 2009; Saxer, de Bie, Dassen, & Halfens, 2008, Saxer, de Bie, Dassen, & Halfens, 2009).

A lack of adequate infrastructure to build staff support and provide UI education makes implementing an UI program difficult. These barriers need to be addressed before starting a PV program (Resnick et al., 2006)

Of the barriers listed above, assuring enough staff to make it possible to implement the PV intervention is the most challenging (Lekan-Rutledge, Palmer and Belyea, 1998). This perceived barrier may be addressed by limiting the number of individuals started on the intervention at one time and through continuing education to discuss workload tradeoffs of toileting versus time to change wet clothing, beds or incontinence products.

A multidisciplinary approach is the best way to holistically address the needs of individuals with UI and will promote the success of the PV program. Members of this team may include the following: nurses (registered nurses [RN], licensed practical nurses [LPN], certified nursing assistants [CNA]) and nurse managers, support staff, providers, physical therapy, occupational therapy, clinical pharmacist, dieticians, and social workers. Nurses, nurse managers and support staff would be the team members who implement the team to the actual PV procedures and enforces policies.

Providers are an important part of the assessment and history and medication management. Physical therapy can help promote mobility and strength to get to the toilet and assist with transfers. Occupational therapist could assess the personal ability to perform ADLs; such as, managing clothing and use of toileting adds. Clinical pharmacist would play a key role in medication review and management. Dieticians could advise dietary intake of fluid, caffeine and fiber. Social workers would be helpful in family involvement as well as, financial planning of supplies and services if necessary (Registered Nurses' Association of Ontario, 2002).

Nurse educators have been shown to be very effective in the implementation process of evidenced based care in the LTC facility (Goldman et al., 2004). Whether or not a nurse educator is available, the use of opinion leaders, change champions, and experts can help facilitate translation and adoption of new care practices at the point of care by providing local knowledge regarding beliefs about current care and usual care practices, and introducing effective approaches for embedding new care practices.

Opinion leaders are individuals within a social group who are trusted and respected among their peers and viewed as influential. Change champions may or may not be closely integrated in the local social group but have positive relationships. These individuals have expertise and are highly enthusiastic about a new care practice, know of its potential impact on quality of care, and are committed to steering the implementation of this new care practice. Opinion leaders and change champions can use persuasive approaches to convince staff that new care practices are more advantageous than current practices, thus reducing anxiety and uncertainty about the consequences of new care practices (Titler & Hsiao-Chen Tang, 2004). They also can use interactive teaching strategies with direct care staff to demonstrate the new care practice and problem solve how it would work in that setting. Barriers and facilitators to the new care practice can be discussed through these interactions, leading to more effective approaches and more highly engaged and supportive staff.

RECOMMENDATION 8. EDUCATION AND TRAINING STRATEGIES

Education programming should be designed to inform all persons of their roles and responsibilities for the successful implementation of the PV guideline.

- 1) Stress the importance of using a guideline and how it must be adapted to the individual setting
- 2) Be interactive, easy to understand and relevant to the work role and patient care
- 3) Use adult learning principles
- 4) Before initiating the protocol, address and correct stereotypes

(See [Appendix E.1](#) & [Appendix E.2](#)).

Evidence to Support Education and Training Strategies for PV Implementation

Caregiver education is one mechanism for translating evidence into practice; however, there is limited rigorous research on the long term effectiveness of such strategies (Aylward, Stolee, Keat, & Johncox, 2003; Stolee et al, 2005; Weiner, 2003). While education may increase knowledge, there is little evidence that knowledge alone adequately prepares staff to implement new care practices and most of the research has been in residents with UI in nursing homes (Titler & Hsiao-Ten Chang, 2004; Aylward et al., 2003; Jones et al., 2004). Minimal training requirements of CNAs and LPNs contrasts with the increasing acuity level and medical complexity of older adults in LTC facilities. Yet, there is no research on exactly what new types and amounts of education are needed to produce improvements in care (Weiner, 2003). Additionally, limited availability of RN expertise in this setting further exacerbates difficulties in the acquisition, synthesis, translation and implementation of new evidence-based practices.

Since evidence-based protocols and guidelines usually do not have specific implementation procedures that apply to all care settings, a degree of translation and adaptation needs to occur. Clinical practice guideline interpretation and implementation must take into consideration what the 'best' information is for the patient population being served, context of care, and resources for implementation.

In a qualitative study on the interrelationships between knowledge gained through continuing education programs and the work setting, Daley (1997) discerned that information presented to nurses in continuing education programs does not transfer directly into changing practice. New knowledge is assimilated into previous knowledge and experience leading to integration of this new knowledge in a way that empowers nurses to have confidence to implement new care strategies. The author posits that continuing education and staff development is more than designing education programs, so that it must include processes that facilitate adoption of information into clinical practice and build self-efficacy to enable implementation of new care practices. The role of the educator therefore is as a facilitator to the learning process, not just a content expert or developer of specific programs.

There is evidence that using interactive and informative staff education in combination with other practice-reinforcing strategies is more effective than informative education alone (Bero et al., 1998; Schneider & Eisenberg, 1998; Jones et al., 2004; Stolee et al., 2005; Titler & Hsiao-Ten Chang, 2004) [*Evidence Grade = A1*]. Targeted staff education on a specific group may be more successful. Kohler and colleagues (2016) conducted a 4-hour educational session for nurses and CNAs led by an expert in incontinence and dementia care. Sessions included dementia education (e.g. dementia symptoms, interaction with people with dementia and challenging behavior) and incontinence education (e.g. risk factors, assessment, treatment options, optimal care, anatomy, physiology, incontinence types, prevalence and psychosocial consequences), comprising presentations, group work and discussions. This study indicated that the education session has a considerable positive impact on the QoL in residents with UI and dementia. Interactive teaching strategies have gained prominence as a teaching method to enhance knowledge and skill development, retention, and application in practice. Traditional didactic educational methods distinguished by the lecture format often dominate teaching approaches.

Research on teaching strategies that are interactive suggest that learners' cognitive gains, skill performance and critical thinking are improved (Ridley, 2007), however the quality and quantity of research in this area is limited. Interactive teaching strategies are characterized as learner-centered and use adult learning principles, including techniques such as cooperative learning groups, experiential learning, role play and games, and problem-based learning and case studies (Ridley, 2007; Jones et al., 2004). There is a need for emphasis on training and mentoring of unlicensed caregivers that provide the majority of care (Jones et al., 2004). Training should be interactive, easy-to-understand and relevant to the work role and patient care. Training should also guard against and address against stereotypes such as; incontinence is a normal part of aging, incontinence is untreatable and cannot be improved, toileting is an ineffective intervention, incontinence does not have adverse psychological consequences, and older persons don't mind wearing incontinence pads. Experiential learning techniques and learning-by-doing techniques to teach evidence-based practices like PV, has greater likelihood of changing attitudes and beliefs that constitute a custodial care, illness-oriented perspective.

Educational initiatives are influenced by the variables within organizations that affect clinical and operational routines, management practices, and how individuals provide care. Organizational and system factors should also be taken into consideration in design continuing education programs. For example, workforce issues such as increased resident acuity and staff's beliefs about incontinence and resistance to change, management support, resources

such as funding and space, and teaching-learning strategies that address different levels of staff are important (Stolee et al., 2005). Training should explain how to implement the new care practice with individual residents, what adaptations might be needed to make the practice work for individual residents, and to clearly describe the expected quality of care outcomes for that resident in concrete terms that relate to the resident's desired QoL. Methods focusing on intensive classroom instruction supported by on-the-job, "learning by doing" practical application need to be evaluated in the LTC setting with regard to long term impact on resident care outcomes and staff skill competency and satisfaction.

RECOMMENDATION 9. MONITORING THE PROMPTED VOIDING PROGRAM (PVP)

Management systems must be in place if PV is to be maintained in a LTC environment. There is a need for ongoing job feedback to maintain quality staff performance of the PV protocol. Evidence-based guidelines and implementation strategies that are selective to nursing and nursing support staff exclusively will have limited success (Cheater, 2009; Pinkowski, 1996). An approach that combines educational strategies to build knowledge and skill with organizational strategies that focus on the context of care are essential to creating a culture of learning and of clinical practice improvement. Factors that reinforce new behaviors associated with evidence-based practices include quality-monitoring tools such as:

- Proper documentation and documentation review
- Audits – self and supervisory
- Performance feedback – written and verbal
- Collaborative relationships across facilities
- Use of advanced practice RNs (e.g. nurse practitioners) for clinical care who are also involved in staff education and quality improvement
- Web-based resources (such as the Borun Center for implementing a prompted voiding program, http://www.geronet.med.ucla.edu/centers/borun/modules/Incontinence_management/about.htm).

Techniques used to maintain and increase staff compliance with assigned toileting include [Evidence Grade = A2]:

- Determining standard of care
- Self-monitoring completion of PV assignments
- Weekly reliability checks of self-monitoring by another individual
- Giving verbal feedback on performance of staff as a whole
- Giving verbal and written feedback individual performance

The standard of care should include:

- Completion rate of 60% to 80% of assigned PV [Evidence Grade = A2]
- Identification of type of UI (CMS guidelines)
- Assessment for PVR urine and UTI (CMS guidelines)
- A specific plan of care to address the UI (CMS guidelines)
- A standard of permissible wetness rates, usually 25-50% [Evidence Grade = D]
- A formalized policy. (Refer to [Appendix E.3](#))

Evidence to Support Monitoring the Prompted Voiding Program in Nursing Homes

Education is crucially important but alone has limitations. In a review of education in LTC, the majority of initiatives focused primarily on information dissemination without attending to organizational or system support to facilitate adoption of new care practices (Aylward et al, 2003). Factors that reinforce new behaviors associated with evidence-based practices include quality monitoring tools such as audits and performance feedback. Other enabling factors include the following: the use of advanced practice registered nurses (e.g. nurse practitioners) for clinical care as well as staff education and quality improvement, videoconferencing to access experts, web based resources (such as the Borun Center for implementing a prompted voiding program), networking, and working with other facilities in learning collaboratives (Rahman, Schnelle, Applebaum, Lindabury, & Simmons, 2012; Rahman, Schnelle, Yamashita, Patry, & Prasauskas, 2010; Stolee et al., 2005).

Several approaches to staff management for implementing and sustaining PV have been tested in nursing homes. One applicable approach, by Burgio and colleagues (1994), employed and tested a Behavioral Supervision Model. Burgio's model focuses on change in staff performance which ultimately affects level of continence of residents by consistently carrying out the prescribed PV interventions for each resident. Individual feedback from supervisory staff was found to be more effective than group feedback to CNA about their compliance with prescribed interventions (Engel et al., 1990). Self-monitoring to increase employees' feelings of self-efficacy is also part of this program, followed up with written formal documentation of staff performance for each employee's personnel record. In their study, PV compliance rates with implementation of the intervention increased by 10% on each of the three study units when the Behavioral Supervision Model was used, with one unit reaching a 90% compliance rate. This method builds upon supervisory and leadership roles already in place in most nursing homes to assist staff to meet the expectations for consistently implementing the PV intervention [*Evidence Grade = B2*].

Lekan-Rutledge (2000) suggested a model for implementation of PV in LTC settings using Rogers' (1995) model of diffusion of innovation. According to this model, the rate of adaptation is determined by five categories; perceived attributes, type of innovation, communication channels, nature of the social system, and extent of the change-agent's promotion efforts. Lekan-Rutledge implemented this model for designing nursing policy and nursing procedure of PV program in a LTC facility and the result showed the program was successfully adopted.

Documentation

Documenting the resident's continence status is imperative in the PV program to verify resident outcomes and staff performance; however, there are formidable barriers to collecting, documenting and using this data. The burden of paperwork is further complicated if CNAs are expected to maintain bladder records for individual residents. Additionally, even when records are kept, easy approaches for synthesizing and analyzing data is a problem for many facilities, since it is not uncommon for staff to not have wide access to computers. Innovations in documentation systems offer a solution that can enhance quality monitoring for incontinence programs and other care systems.

One innovation, CareTracker by Resource Systems (<http://www.resourcesystem.com/>) is a documentation system that provides an easy-to-use method for nursing staff to record their care tasks and resident outcomes, while significantly reducing or eliminating paperwork. The system utilizes wall mounted touch screens with graphic icons representing care tasks to

replace paper forms. An important feature of the program is the ability to conduct quality of care audits by generating analyses of resident outcomes associated with care tasks such as toileting or feeding. These reports can be graphed in a variety of formats and printed for staff. The reports can be used effectively to not only evaluate resident outcomes and further individualize care, but also to provide a feedback mechanism to CNAs about their care outcomes. Audit reports also can stimulate dialogue and problem solving about resident care issues and implementation problems. The simplicity of the system allows for systematic quality monitoring of the PV program, an element crucial to success and sustainability. CareTracker also has capability for integrating facility-developed audit questions and generating reports [Evidence Grade = D].

Audits and feedback

Audits and feedback are important components in keeping the PV protocol and continual process (Pinkowski, 1996). There are numerous ways in which feedback and audits are preformed (Ivers et al., 2012) found this method of review showed small but significant improvements.

Self-monitoring of completion of PV assignments by caregivers (usually research assistants or nursing assistants) is one strategy used in many studies (Burgio et al., 1990; Engel et al., 1990; Hawkins et al., 1992; Hu et al., 1989; Schnelle et al., 1983). This represents the minimal level of staff management employed to assure compliance with the guideline. The staff completing the PV assignment monitors the completion and data on the incontinence monitoring forms.

In order to monitor the reliability of the self-monitoring reports and PV technique used by caregivers, a weekly performance check by supervisory personnel can be used. This requires the supervisory staff to witness a defined number of patient-staff interactions to determine that the technique is being followed as prescribed and that self-monitoring forms are being completed properly (Burgio et al., 1990; Engel et al., 1990; Hawkins et al., 1992; Schnelle et al., 1983).

Verbal feedback on group performance yields high levels of compliance with PV when completed early in the implementation of treatment (Burgio et al., 1990; Engel et al., 1990; Hawkins et al., 1992; Schnelle, Newman & Fogarty, 1990). During the first five months of group feedback, Burgio and colleagues (1988) reported an average completion rate of 82.8% of all assigned PV sessions. This rate dropped to between 45% and 60% of completed assignments during the sixth month post-intervention. The research then tested individual feedback of

performance and the completion rate when back up to 80% after one month. Individual performance feedback of employee performance that combined visual representations (bar graphs) of employee performance (completed PV) and resident incontinence rates with supervisor verbal feedback were used. Although there were no significant decreases in dry checks during the month when completed assignments dropped, the researchers felt immediate action was needed in order to maintain high patient continence levels (average dry checks between 63% and 72%) (Burgio et al., 1990; Engel et al., 1990). In conclusion, feedback of staff/family caregiver performance is recommended as part of the PV intervention. Particularly with persons who are cognitively or functionally compromised, the long-term intervention of PV must be done consistently to continue to produce a positive impact of urinary incontinence.

Formal letters of praise or reprimand signed by supervisory personnel given biweekly to assistive personnel increase employee compliance more than verbal feedback on individual performance levels. The highest rates of employee compliance were achieved when summary letters of employee performance signed by supervisory and administrative personnel were given to assistive personnel and also placed into employee records every six months (Engel et al., 1990; Hawkins et al., 1992).

Compliance

Staff compliance with PV treatment schedules has been shown in research studies to maintain improved continence rates for at least three to six months after initiation of treatment (Burgio, et al., 1994; Burgio et al., 1990; Burgio et al., 1988; Schnelle et al., 1983; Schnelle et al., 1993).

Standard of Care

It is recommended that facilities and/ or caregivers using PV determine the standard of care for completion of assigned treatments. (See [Appendix E.4](#)) Noncompliance by staff with PV schedules makes sustained continence or significant improvement of UI impossible to attain. It is recommended that a completion rate of at least 60% to 80% of all assigned PV be achieved. As completion of assigned PV falls below this level, there is a corresponding increase in the number of UI episodes (Ouslander et al., 1995; a. Palmer et al., 1994; Schnelle, 1998) [*Evidence Grade = A2*].

One way to check compliance is through weekly wet checks. Once a week, randomly select a portion of patients for wet checks. This can be used as a general representation of how a particular organization is doing and can identify employees that may need additional education or noncompliance discipline (Ouslander et al., 1995). See [Appendix G.3](#) for a Prompted Voiding Quality Monitoring Program.

In 2005, CMS added new guidelines for the assessment and treatment of UI in nursing homes. The guidelines combine the former tags F315 and F316 into one revised tag, F315. The revised tag contains interpretive guidelines, a new investigative guideline, and compliance and noncompliance criteria for residents with UI, UTI, or urinary catheters (Newman, 2006).

Key recommendations of the guidelines specific to UI are: identification of type of UI, assessment for residual urine and UTI, and a specific plan of care to address the incontinence. The CMS guideline states, “Each resident who is incontinent of urine is identified, assessed, and provided appropriate treatment and services to achieve or maintain as much normal urinary function as possible.” The standard of care should incorporate these recommendations, along with the standard for percent of time an intervention must be completed, and when it is appropriate to discontinue the intervention. It is also important to set a standard for permissible wetness rates, usually 25-50% (Ouslander et al., 1995b; www.cms.gov). This standard should be a formal policy of the organization. A standard of care and formal policy sets the tone to direct continence care for facilities ([Appendix E.4](#)).

RECOMMENDATION 10. EVALUATION OF PROCESS FACTORS AND PATIENT OUTCOMES

In order to evaluate the use of the PV protocol and determine if UI has been managed effectively, both process and outcome factors shall be evaluated for each user of the PV protocol.

Process Factors

Process factors are those factors related to the staff’s knowledge and confidence in implementing the protocol. The Prompted Voiding for Persons with Urinary Incontinence Knowledge Assessment Test (See [Appendix E.2](#)) should be assessed as part of the initial training session for use of this protocol. For example, the test may be used as a pre-test and post-test to assess learning.

An example of a process monitor, the Evaluation Process Monitors (See [Appendix F, Form A & Form B](#)) may be used to determine the staff's understanding of the PV protocol and to assess the support for carrying out the protocol. Nurses are asked to complete this form one month following the use of this protocol.

Outcome Factors

Recommendations for outcome factors from properly designed and implemented controlled trials (A), properly designed and implemented clinical series (B), and expert opinion (C). Continence outcomes identified to be responsive to PV treatment in research studies include (Adkins & Mathews, 1997; Blaivas, 1998; Burgio et al., 1994; Burgio et al., 1988; Colling et al., 1992; Creason et al., 1989; Engel et al., 1990; Hu et al., 1989; Moorhead, Johnson, Maas, & Swanson, 2013; Kaltreider et al., 1990):

- Increase in daily average number of dry checks/ non-wet episodes [*Evidence Grade = A*]
- Increase in average volume of continent voids [*Evidence Grade = B*]
- Decrease in average volume of incontinent voids [*Evidence Grade = B*]
- Identification of individual patterns of UI [*Evidence Grade = A*]
- Recognizes urge to void [*Evidence Grade = A*]

Presently, outcome measures for the treatment of UI have not been validated in clinical trials. Blaivas (1998) in a review of incontinence practice standards recommends the number and volume of UI episodes as primary outcome variables. Secondary outcome measures include patient satisfaction, QoL, bladder symptoms, PVR urine, and other urodynamic measures [*Evidence Grade = C*]. Palmer and colleagues (1994) recommend dryness level, staff compliance level and number of wet episodes as indicators of PV success [*Evidence Grade = C*].

The Use of the Prompted Voiding Outcomes Monitor and NOC to Measure the Effectiveness of Nursing Interventions

Monitoring of long-term outcomes of the PV intervention can be accomplished using either the Prompted Voiding Protocol Outcomes Monitor or the Nursing Outcomes Classification (NOC) Urinary Continence indicators selected and individualized for the patient (See [Appendix G.1](#) & [G.2](#)). The Prompted Voiding Protocol Outcomes Monitor is recommended for use on a weekly basis as long as an individual is using the protocol. The Nursing Outcomes Classification (NOC) is a standardized classification of 490 research-based patient/client outcomes developed to evaluate the effects of nursing interventions. An outcome is a measurable individual, family, or community state, behavior or perception that is measured along a continuum and is responsive to nursing interventions (Moorhead et al., 2013). The outcomes are developed for use in all settings and can be used across the care continuum to follow patient outcomes through an illness episode or over an extended period of time. The Nursing Outcomes Classification (NOC) can be used to monitor patient response to nursing interventions, including the PV intervention. NOC monitoring is recommended at weekly intervals for 2 weeks, biweekly for 6 weeks, monthly for 4 months and on a quarterly basis for as long as the PV protocol is the most appropriate intervention for UI treatment.

Supplemental Treatment to UI in Combination with PV

Pharmacologic therapy may be prescribed in combination with a PV program. Continence outcomes have been shown to be improved with a combination of drug and behavioral therapy; particularly in the cognitively intact patient who is on a toileting program (Ouslander, Maloney, Grasela, Rogers, & Walawander, 2001). If pharmacologic therapy is elected, consideration of side effects (e.g. dry mouth, constipation, dry eyes, increased blood pressure) is a critical part of therapy; especially in the older adult individual with or at risk of cognitive impairment (e.g. side effect of cognition) (Zarowitz et al., 2015).

Absorbent incontinence products absorb and contain urine to facilitate social continence. Absorbent pads and garments remain the mainstay for protection against urinary leakage. If possible, use absorbent incontinence products only if necessary in combination with PV so that patients do not become reliant on the product and are encouraged to adhere to the PV procedure.

Hand-held containers and devices, often referred to as “portable toilet substitutes,” can be used by the resident to collect urine. There are two general categories; one includes commode seats or bedside commodes, and the other are hand held devices (e.g. bedpan, urinal). Teaching the resident to use a toileting device may be considered as part of a PV program.

Conclusion

PV is indicated for persons with urgency, stress, mixed or functional UI. PV involves three primary caregiver tasks: monitoring the individual’s continence status, prompting the individual to void prior to urine loss, and praising appropriate toileting behaviors. PV can be used to improve urinary continence in persons with and without physical and cognitive impairments. Many individuals residing in LTC facilities may not achieve total continence. Regardless, a substantial improvement in UI can be realized using the PV intervention. An average decrease of 1 to 2 incontinent episodes per patient per day can be expected. Over one year, 365 to 730 incontinent episodes could be prevented by using PV at least 12 hours a day.

While PV is easily taught and implemented, PV is labor intensive and treatment success requires extensive and continuous staff management techniques. Therefore, staff energies are best used when the intervention is focused on the most responsive incontinent people: those who can maintain high levels of urinary continence on an every 2 to 4 hour PV schedule. Nursing assessment of UI is essential for appropriate prescription of the PV intervention. Individual voiding patterns, when monitored over a 3- to 7-day period, can be recognized in most people with UI. Once the voiding pattern has been determined, an individualized PV schedule can be developed for the treatment of UI. The people most likely to respond consistently to PV have the following characteristics:

- 1) Baseline incontinence less than 4 times in 12 hours,
- 2) Able to recognize the need to void,
- 3) Voids at least 50% of the time into a toileting receptacle, and
- 4) Able to maintain urinary continence levels of < 1 wet episode per 12 hours with PV.

However, the most important predictor of an individual’s responsiveness to PV is success with a therapeutic trial of the intervention. Regardless of the duration or severity of an individual’s UI symptoms, a therapeutic trial of PV is indicated for all persons who do not exhibit symptoms of overflow, reflex or total UI.

Appendix A

ASSESSMENT TOOLS

This Appendix presents instruments that can be used to guide registered nurses (RNs) in all practice settings through a complete urinary incontinence (UI) assessment of older adults. The purpose of nursing assessment of UI is to differentiate between individuals who may respond readily to behavioral interventions and those needing a more comprehensive evaluation from a continence specialist. Treatment decisions must be made after a focused assessment of the factors contributing to UI and an accurate diagnosis of the type of UI. Appendix A includes the following:

Appendix A.1: Urinary Incontinence Risk Factor Checklist

Appendix A.2: Urinary Incontinence Assessment Factors Checklist

Appendix A.3: Assessment of Urinary Incontinence

Appendix A.4: Bladder & Bowel Record

Appendix A.5: Summary & Recommendations from UI Assessment

The **UI Risk Factor Checklist** can be used to assist in determining if the person with UI exhibits factors contributing to transient UI. Persons with transient UI often show a dramatic improvement in UI symptoms after only a few days of the appropriate treatment for the factor contributing to the urine loss. Risk factors for the development of transient UI are distinguished by an asterisk (*) following the condition. The presence of risk factors for transient UI in an individual who is incontinent should be followed by modification of those risk factors by RNs and/or referral to appropriate health care providers.

The **Urinary Incontinence Assessment Factors Checklist** and the **Assessment of UI** can be used to guide advanced practice providers (e.g. geriatric nurse practitioners) and RNs in an assessment of UI. Advantages of the UI Assessment Factors Checklist are the description of the method for conducting each physical examination and the possible indications of abnormal laboratory test results. The advantage of the Assessment of UI form is the detailed Incontinence Symptom Profile that can be used by RNs to diagnose the type of UI.

The **Bladder and Bowel Record** is an example of an instrument that should be collected for at 3 days to determine the individuals' voiding and defecation pattern, presence of urge sensation, amount of leakage by assessing absorbent pad saturation and bowel movements.

The **Summary and Recommendations from UI Assessment** can be used to summarize the findings of the UI assessment and the 3-day bladder record.

Appendix A.1

URINARY INCONTINENCE RISK FACTOR CHECKLIST

Aging-Related Changes to Urinary System

- Decreased bladder capacity (symptom of frequency)
- Decreased ability to postpone voiding (symptom of urgency UI)
- Decreased urine flow rate
- Decreased urethral length, compliance, and pressure in females (symptom of stress UI)
- Overactive bladder
- Increase in post-void residual volumes
- Increase in nighttime fluid diuresis

Genitourinary Conditions

- Intrinsic sphincter deficiency
- Detrusor instability
- Detrusor overactivity
- Underactive bladder
- Urinary tract infection *
- Genitourinary syndrome of menopause (e.g atrophic urethritis or vaginitis) *
- Enlarged prostate in males
- Pelvic organ prolapse in females *

Chronic Health State Factors

- Obesity
- Chronic pain
- Cardiovascular conditions
- Congestive heart failure *
- Orthostatic hypotension *
- Peripheral edema *

Endocrine Conditions

- Diabetes mellitus
- Hyperglycemia *
- Diabetes insipidus *
- Hypercalcemia *
- Estrogen depletion in females *

Neurological Conditions

- Spinal cord injury
- Cerebrovascular accident
- Multiple sclerosis
- Parkinson's disease *

Orthopedic Conditions

- Arthritis *
- Recent fracture *

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al., 1996

Mental Health Related Factors

- _____ Depression *
- _____ Dementia/cognitive impairment
- _____ Delirium *
- _____ Psychological unwillingness to toilet

Lifestyle Factors

- _____ Alcohol and/or Caffeine intake *
- _____ Smoking
- _____ Recent long term care admission *

Iatrogenic (Treatment-Induced) Factors

- _____ Prostate surgery in males
- _____ Pelvic reconstructive surgery in females
- _____ Stool impaction *

Medications

- _____ Diuretic *
- _____ Anticholinergic agent *
- _____ CNS depressant
- _____ Narcotic analgesic
- _____ Sedative/hypnotic agent *
- _____ Alpha-adrenergic agent *
- _____ Beta-adrenergic agonist
- _____ Calcium channel blocker *

Fluid Intake

- _____ Excess *

Restricted Mobility

- _____ Bedrest, bedrails *
- _____ Skeletal traction *
- _____ Fall alarms, specialty chairs that prohibit egress) *

Environmental Barrier Factors

- _____ Distance to toilet *
- _____ Poor lighting *
- _____ Environmental clutter *
- _____ Complicated clothing *
- _____ Unable to locate toilet *
- _____ Unable to get assistance to toilet *

Functional Status Factors

- _____ Transfers > assist of 1
- _____ Decreased manual dexterity
- _____ Poor eyesight *
- _____ Communication Alteration
 - _____ Speech problems
 - _____ Hearing problems
 - _____ Speaks and/or understands different language than caregivers

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al., 1996

Appendix A.2

URINARY INCONTINENCE ASSESSMENT FACTORS CHECKLIST

Incontinence History

- ___ Presence of UI risk factors
- ___ Onset & duration of UI
- ___ Triggers for UI
- ___ Frequency and timing of UI
- ___ Volume of UI episodes
 - ___ Small
 - ___ Medium
 - ___ Large
 - ___ Dribbling
- ___ Precipitants of UI
 - ___ Coughing/sneezing/laughing/exercising
 - ___ Changing position
 - ___ Unaware of leakage
 - ___ Other _____
- ___ Timing of UI
 - ___ Related to medication intake
 - ___ Related to fluid intake
- ___ Other lower urinary tract symptoms
 - ___ Nocturia
 - ___ Urgency
 - ___ Hesitancy
 - ___ Pain/burning
 - ___ Straining
 - ___ Foul smell to urine

- ___ Previous treatment of UI
 - ___ Surgery _____
 - ___ Medication _____
 - ___ Other _____
- ___ Use absorbent pads or devices
 - ___ Number & Type _____
- ___ Lifestyle factors
 - ___ Tobacco/smoking
 - ___ Obesity
 - ___ Fluid intake _____cc/day
 - ___ Caffeine/alcohol intake
- ___ Completion of a Bladder and Bowel Record for a minimum of 3 days or use of an electronic data logger to record times of UI episodes

Health History

- ___ Medical & surgical
- ___ Genitourinary
- ___ Obstetrical & gynecological
- ___ Neurological
- ___ Metabolic
- ___ Musculoskeletal

Review of Medications

- _____ Medication affecting urinary tract system
- _____ Medication affecting cognition or level of consciousness
- _____ Medication affecting functional ability

Psychosocial Responses to UI

- _____ Effect of incontinence upon person's life
- _____ Changes in lifestyle associated with UI
- _____ Response of significant others
- _____ Most bothersome symptoms

Baseline physical examination to determine possible causes of the urinary incontinence

Genitourinary/Genitalia Examination

- _____ Inspection of external genitalia for signs of inflammation, infection, rash or atrophy
- _____ Direct observation of pelvic organ prolapse during a cough or bearing down (Valsalva maneuver)
- _____ Direct observation of urine loss when bladder is full during a cough or bearing down stress test
- _____ Palpation of pelvic muscle strength (scale 0 = no palpable contraction to 5 = strong contraction) in females using gloved, lubricated finger placed in vagina
- _____ Palpation of anal sphincter strength using gloved, lubricated finger placed in rectum

Abdominal Examination

- _____ Auscultation of bowel sounds
- _____ Palpation of abdominal masses and/or bladder distention
- _____ Presence of fecal impaction during digital rectal examination

Neurological Examination

- _____ Assessment of gait, speed, balance, leg strength
- _____ Assessment of perineal sensation

Diagnostic Testing

- _____ Direct observation of urine stream characteristics (listen for hesitancy, weak or intermittent stream, prolonged voiding of > 30 to 60 seconds)
- _____ Urine specimen testing with esterase dipstick
 - _____ White blood cells (may indicate UTI)
 - _____ Nitrites (may indicate UTI)
 - _____ Red blood cells (may indicate UTI or irritation)
 - _____ Protein (may indicate kidney disease)
- _____ Urine specific gravity (indicator of hydration status)
- _____ Post-void residual by ultrasound bladder scanner (preferred) or bladder catheterization (if > 200 cc, may indicate bladder emptying problem)

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al.,

Cognitive Ability Assessment

- _____ Able to recognize own name
- _____ Able to recognize urge sensation, need to void
- _____ Able to carry out toileting instructions
- _____ Motivation for improving continence

Functional Ability Assessment

- _____ Ability to walk
- _____ Ability to transfer, disrobe
- _____ Ability to maintain balance while standing
- _____ Ability to safely use assistive devices for ambulation (cane, walker, crutches)
- _____ Ability to manipulate clothing (manual dexterity)
- _____ Ability to use toilet or toilet substitute (commode, urinal, bedpan)
- _____ Ability to clean self with toilet paper (able to grab toilet paper, reach perineum to wipe)
- _____ Ability to obtain toileting assistance from caregiver (make voiding needs known)
- _____ Vision sufficient to find toilet and carry out toileting activities

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al., 1996

- _____ Acute confusional state/delirium
- _____ Infection, such as symptomatic UTI
- _____ Inflammation, such as atrophic vaginitis, urethritis or other genitourinary inflammation
- _____ Medications
- _____ Psychological causes, such as depression
- _____ Excessive urine production, such as endocrine dysfunction, expanded volume states, or conditions causing low albumin states
- _____ Restricted mobility
- _____ Fecal impaction

Environmental Barrier Assessment

- _____ Availability of caregiver
- _____ Furniture placement and style
- _____ Presence of environmental clutter
- _____ Access to toileting facilities or toilet substitute
- _____ Distance to toilet
- _____ Height of toilet
- _____ Grab bars adjacent to toilet
- _____ Space for transferring to toilet
- _____ Adequacy of lighting
- _____ Clothing fit and ease of removal

Determine possible causes of transient UI and refer to primary health care provider, as indicated

Appendix A.3

ASSESSMENT OF URINARY INCONTINENCE

1. Admission Information Regarding Urinary Continence Status

____ Currently Continent of bladder/urine

No further assessment necessary at this time.

Monitor for RISK FACTORS for UI: (Check all that apply at Admission)

____ None

____ Impaired mobility

____ Dependent transfer (2 person assist)

____ Cognitive impairment

____ Neurological disorders (e.g. multiple sclerosis, diabetes)

____ Other: _____

____ Currently Continent of bladder/urine

Signs & symptoms of urinary incontinence (UI): (Check all that apply and complete rest of this form)

____ Urine leakage on way to bathroom

____ Clothes or incontinence product wet

____ Urgency – unable to suppress

____ Daytime frequency (>8 times during waking hours)

____ Gets up at night to urinate

____ Nighttime UI

____ Difficulty during urination

____ Post void dribbling

2. Determine the history of UI to include: Onset, Duration, Precipitant, Previous Treatment

Onset: New Within 1 year
 Post Diagnosis Post surgery
 Post-acute care setting
 Other: _____

Duration: New (last 6 months) Several years
 Within 1 year Not sure
 Post surgery

Precipitant/Causation: Surgery Injury
 New medication: _____

 Hospital Not sure
 Foley catheter in hospital

Previous Treatment: None Surgery
 Medication: _____

 Pessary Not sure

Product Type Used: (Check all products used)

Tissue, cloth and/or paper towels
 # each Day: _____

Underwear-like pull-ups
 # each Day: _____



Panty liners and/or Maxipads
 # each Day: _____



Adult briefs-diapers
 # each Day: _____



Pads, such as Serenity or Poise
 # each Day: _____



3. Potentially Reversible Causes of Urinary Incontinence (UI) (Check all that apply)

Conditions:

- Genitourinary menopausal syndrome
- Delirium
- Dehydration
- Fecal impaction (positive exam)
- Polypharmacy
- Urinary tract infection (within 30 days)
- Urinary retention (history)

Environment:

- Impaired mobility/ambulation
- Decreased manual dexterity
- Decreased vision
- Use of restraints
- Restrictive clothing
- Distance to toilet

Intake:

- Inadequate fluid intake (<30cc/kg body weight/day)

4. Contributing Diagnosis/Medical Conditions (Check all that apply)

- Alzheimer's disease/dementia
- Amyotrophic lateral sclerosis
- Arthritis/degenerative joint disease/osteoporosis
- Calculi/stones
- Bladder
- Kidney
- Cancer Site: _____

- CHF/Edema
- CVA/stroke
- Delirium
- Diabetes
- Falls
- Fecal impaction/constipation
- Multiple sclerosis
- Pain with movement
- Parkinson's Disease

- Prostatitis/BPH
- Spinal cord injury
- Urinary tract infection (history)
- Other: _____

5. Medication that May be Contributing to Bladder Dysfunction (Check all that apply)

- Alpha-adrenergic blockers (e.g., Minipres, Cardura, Hytrin) Narcotic analgesics, opiates (e.g., Morphine, Dilaudid)
- Diuretics (e.g., HCTZ, Lasix) Sedatives/hypnotics (e.g., Halcion)
- Antianxiety (e.g., Valium, Ativan, Xanax)

6. Further Assessment

a. Physical examination performed and recorded

Abnormalities noted: _____ (e.g. enlarged prostate, bladder or other pelvic prolapse, perineal rash)

Yes No

b. Post void result (PVR) - findings of between 150 and 200 mLs bear repeat measurement, PVR > 200 mL is abnormal

mLs (initial measurement) mLs (repeat measurement)

Individuals at risk for ↑ PVR include those with history of urinary retention seen in residents with neurologic disease such as stroke, spinal cord injury, and men with history of prostate disorders

7. Incontinence Symptom Profile (Check all that apply)

Stress Urinary Incontinence:

- Leakage with cough, sneeze, physical activity
- UI in small amounts (drops, spurts)
- Does not void during night nor UI at night
- Incontinence without sensation of urine loss

Urgency Urinary Incontinence:

- Urine loss on way to toilet room Voids > 2 times at night
- Frequency of urination (day and night) Nighttime UI
- Moderate to large amount of urine leakage (gush)
- Strong, urge prior to incontinence

7. Incontinence Symptom Profile (Check all that apply) (Continued)

_____ *Mixed Incontinence* (Symptoms of both stress and urgency)

Overflow Urinary Incontinence:

- _____ Difficulty starting urine stream
- _____ Weak or intermittent stream (dribbles)
- _____ Post-void dribbling
- _____ Prolonged voiding
- _____ Feeling of fullness after voiding
- _____ Voiding small amounts often
- _____ PVR > 200 mLs on 2 separate measurements

Functional Urinary Incontinence:

- _____ Mobility/manual dexterity impairments
- _____ Difficulty or inability to access toilet or toilet substitute
- _____ Use of restraints
- _____ Medication (sedative, hypnotic, CNS depressant, diuretic, anticholinergic, alpha-adrenergic antagonist)
- _____ Pain with movement

8. Summary and Program Placement Decision: (Check all that apply)

Based on the above assessment, the individual is most likely experiencing the following type of incontinence:

- _____ Stress _____ Urgency _____ Mixed (Urgency & Stress) _____ Overflow _____ Functional

Rationale (if appropriate): _____

Additional Notes (include analysis of the 3-day voiding monitoring)

Signature: _____

Date: _____

Appendix A.4

BLADDER & BOWEL RECORD

Name: _____

Date: _____

Time	Conscious Void (✓)	Aware of Urge to Void (circle one)	Saturation of pad if Incontinent (circle one)	Pad Changed (✓)	Activity When Incontinence Occurred	BM (✓)
6:00 am		Y N	S M L			
7:00 am		Y N	S M L			
8:00 am		Y N	S M L			
9:00 am		Y N	S M L			
10:00 am		Y N	S M L			
11:00 am		Y N	S M L			
12:00 pm		Y N	S M L			
1:00 pm		Y N	S M L			
2:00 pm		Y N	S M L			
3:00 pm		Y N	S M L			
4:00 pm		Y N	S M L			
5:00 pm		Y N	S M L			

Time	Conscious Void (✓)	Aware of Urge to Void (circle one)	Saturation of pad if Incontinent (circle one)	Pad Changed (✓)	Activity When Incontinence Occurred	BM (✓)
6:00 pm		Y N	S M L			
7:00 pm		Y N	S M L			
8:00 pm		Y N	S M L			
9:00 pm		Y N	S M L			
10:00 pm		Y N	S M L			
11:00 pm		Y N	S M L			
12:00 am		Y N	S M L			
1:00 am		Y N	S M L			
2:00 am		Y N	S M L			
3:00 am		Y N	S M L			
4:00 am		Y N	S M L			
5:00 am		Y N	S M L			

*Saturation of Incontinent Pad: S = Slightly Wet M= Wets Most of Pad L=Outside of Clothing Wet

Complete 3-Day Bladder and Bowel Record, then summarize the findings. The Summary should include a description of voiding and defecation habits/pattern, frequency of incontinent episodes, and how the resident communicates a need for toileting (i.e. gestures, special words or terms, behavior or mood change).

Appendix A.5

SUMMARY & RECOMMENDATIONS FROM UI ASSESSMENT

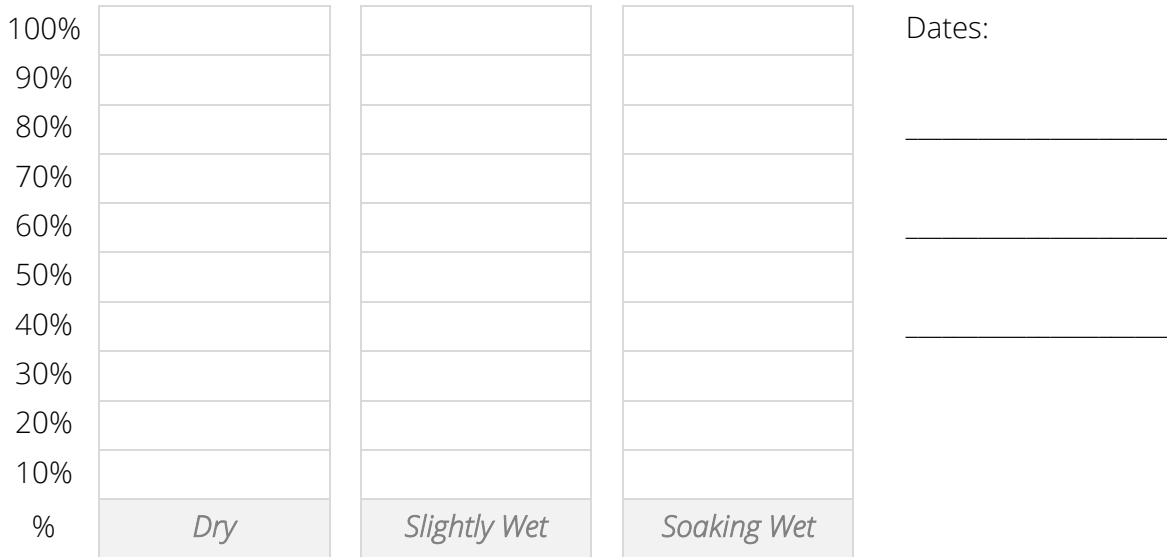
Medical/Nursing Assessment Report

Name: _____

Date: _____

Initial Assessment	Findings	Recommendations
Identification of Reversible Factors	<input type="checkbox"/> No reversible factors identified <input type="checkbox"/> Reversible factors, specify: _____ _____	<input type="checkbox"/> Treatment: _____ _____ _____
PVR Urine via bladder scanner (preferable) or catheterization	<input type="checkbox"/> < 150 mL <input type="checkbox"/> >151 mL: _____mL <input type="checkbox"/> Negative	<input type="checkbox"/> Repeat PVR
Urinalysis-urine dipstick	<input type="checkbox"/> Positive-leukocyte, nitrite, or blood <input type="checkbox"/> Unable to obtain	<input type="checkbox"/> Urine Culture
Rectal Exam for fecal impaction	<input type="checkbox"/> Negative <input type="checkbox"/> Positive	<input type="checkbox"/> Treatment of impaction and further evaluation of bowel function. <input type="checkbox"/> Treatment: _____ _____ _____
Skin Rash	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ _____ _____

3-Day Toileting Assessment



Total # Checks during 3 days: (A) _____ # Slightly Wet: (B) _____

Wetness Rate: (C) _____ [(C) = (B) / (A)] # Soaking Wet: (D) _____

Wetness Rate: (E) _____ [(E) = (D) / (A)] **Total Wetness Rate:** (T) _____ [(T) = (C) + (E)]

Dry Episodes: _____ # Refusals: _____

Dryness Rate: _____ # Dry Runs: _____

Care Plan Recommendations

- | | | |
|------------------------------|------------------------------|------------------------------------|
| _____ Prompted Voiding | _____ Skin Care | _____ Intermittent catheterization |
| _____ Scheduled Toileting | _____ Bedside commode/urinal | _____ Indwelling catheterization |
| _____ Check/change procedure | _____ External male catheter | _____ Further MD/NP evaluation |
| | _____ Medication | _____ Other: _____ |
| | | _____ |

Appendix B

COMMUNICATION TECHNIQUES

Approach person at prescribed time.

- Reinforces desired toileting behavior.
- Establishes trusting relationship.

Greet individual by name, introduce self, and state purpose of interaction.

- Hello, Mr. Roberts. I am Ms. Richards, your nurse. I am here to help you get to the restroom.

Provide information.

- It's 2:00—the time we agreed to meet so I could help you.
- I am here to help you keep yourself clean by using the toilet more frequently.

Provide visual cues in the environment to promote desired toileting behavior.

- Use a picture of toilet on bathroom door rather than abstract symbols.
- Leave restroom door ajar when not in use.
- Use clocks with large numbers near bathrooms to remind people of toileting schedules.
- Post toileting schedules near restrooms, bedroom, and nurse stations to remind caregiver of the need to maintain assigned PV schedules.

Determine person's awareness of continence status.

- Can you tell me if you feel wet or dry right now?

Determine how the person informs others of the need to toilet.

- Your call light is on—do you need to use the toilet?

Provide for privacy.

- Let's go into the bathroom to check your clothing.
- I will wait outside the restroom while you empty your bladder.

Ask for permission prior to performing continence check.

- Can I help you find out if your clothing is still dry?
- I want to check your underclothes to see if they are wet—is that okay with you?
- Sometimes it's hard to remember or realize if you've urinated—do you mind if I help you check to see if you're still dry?

Prompt Person to use toilet (repeat prompt up to 3 times).

- It's time for you to use the bathroom.
- Your bladder is full—please use the toilet to empty your bladder.

Adapted from Newman & Wein, 2009; Hall & Buckwalter, 1997

Ask if person feels the need to void.

- Encourages the individual to relearn bladder sensations.
- Does your bladder feel full?
- Do you feel pressure in your lower abdomen?

Use familiar language for toileting behavior. Be Consistent with language.

- Do you need to empty your bladder/urinate/pee/pass water/use the toilet/etc.?

Offer toileting assistance.

- Can I help you on to the toilet/bedpan?
- I will leave the urinal with you so you can empty your bladder.
- Can I help you clean up/adjust your clothing?

Give positive feedback at an adult level.

- Yes, you are dry. You're doing a good job with this new plan.
- Thanks for reminding me when to help you in the bathroom.
- You stayed dry all day. It must feel great to be accomplishing your goals.

Refrain from using negative feedback or treating the individual like a child.

- Promotes self-esteem.
- Builds trusting relationship.

Provide frequent reminders about desired behaviors.

- If you feel the urge to go to the toilet, let me know and I will help you.
- Try to hold your urine until our appointment at 4:00.
- I will help you to the toilet at 4:00.
- If you need to use the toilet, please do so. I will help if you need it.

Inform individual of next scheduled PV session.

- I would like you to hold your urine until 4:00.
- That is 2 hours from now. I will help you use the toilet at 4:00.

Provide frequent reminders about desired behaviors.

- If you feel the urge to go to the toilet, let me know and I will help you.
- Try to hold your urine until our appointment at 4:00.
- I will help you to the toilet at 4:00.
- If you need to use the toilet, please do so. I will help if you need it.

Adapted from Newman & Wein, 2009; Hall & Buckwalter, 1997

Appendix C

ADDITIONAL RESOURCES

Appendix C includes the following:

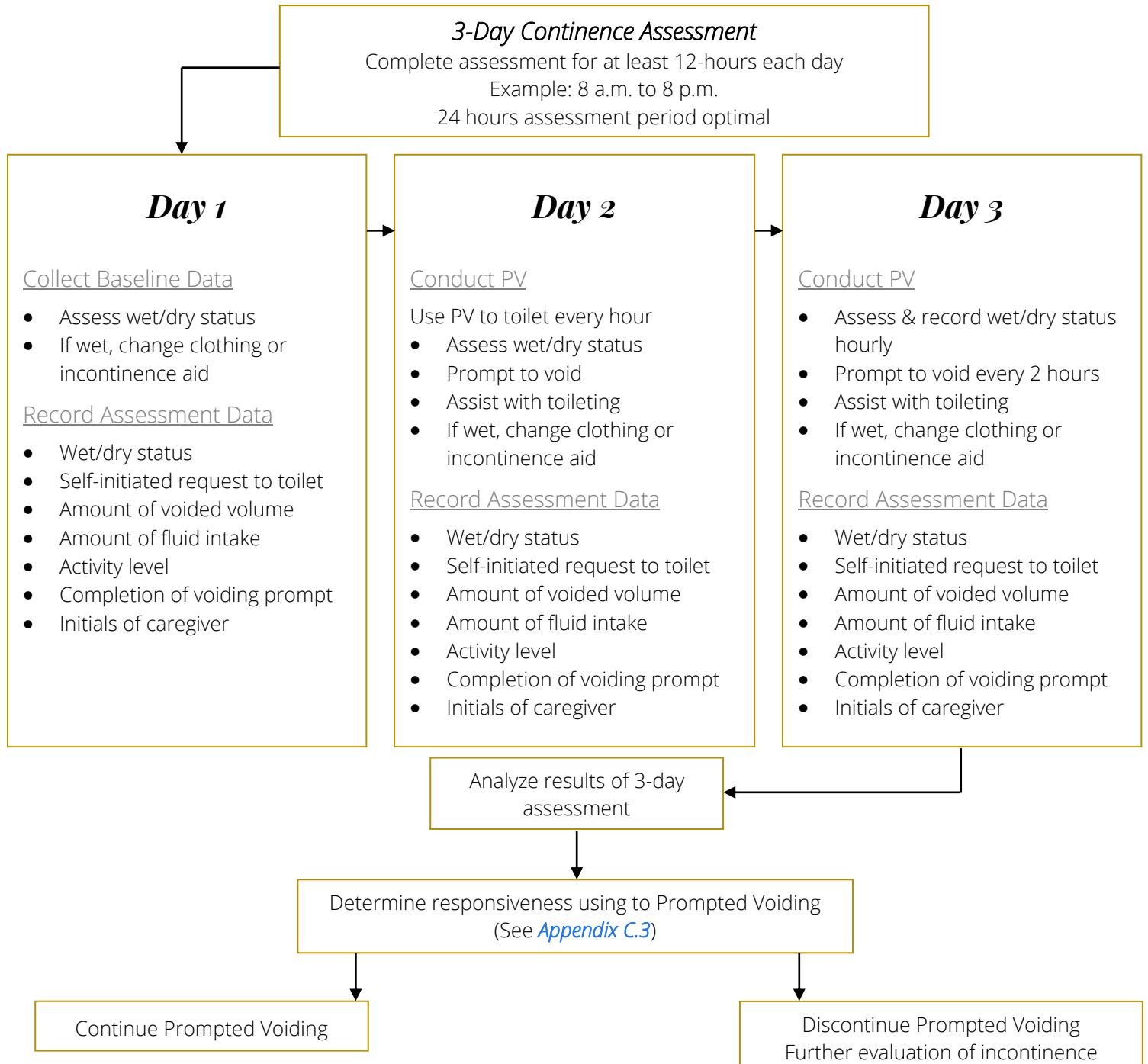
Appendix C.1: Prompted Voiding 3-Day Assessment & Intervention Trial Clinical Pathway

Appendix C.2: 3-Day Prompted Voiding Record

Appendix C.3: Determining Responsiveness to Prompted Voiding

Appendix C.1

PROMPTED VOIDING 3-DAY ASSESSMENT & INTERVENTIONS



Burgio et al.,1994; Colling et al.,1992; Creason et al.,1989; Hu et al., 1989; Jirovec,1991; Kaltreider et al.,1990; Ouslander et al.,1995a; Schnelle, 1990

Appendix C.2

3-DAY PROMPTED VOIDING RECORD

Instructions: The purpose of the 3-Day Prompted Voiding Record is to gather the necessary data to determine whether or not an individual is likely to have success (higher levels of urinary continence) with the PV intervention. While the 3-Day monitor may look daunting, it is easy to complete. Three days of data is collected on one form, making it easier to identify patterns of urinary continence and incontinence. Daily data is collected for the entire 24-hour period in order to identify when toileting prompts will be most appropriate; UI data is documented to the nearest half-hour time period during the day and evening shift and to the nearest hourly time period during the night shift. The following table defines the data to be collected and charted in each box.

3-DAY PROMPTED VOIDING RECORD

Circle: Day 1, Day 2, or Day 3 Name: _____ Room: _____ Unit: _____ Date: _____

Time	Condition at Check	Toileting	Toileting Assistance	Reaction to Prompts			
8:00 am	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates- reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates -neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						
	Staff Member: _____						
10:00 am	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates- reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates -neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						
	Staff Member: _____						
12:00 pm noon	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates- reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates -neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						
	Staff Member: _____						

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Time	Condition at Check	Toileting	Toileting Assistance	Reaction to Prompts
------	--------------------	-----------	----------------------	---------------------

2:00 pm	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates-reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates-neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						

Staff Member: _____

4:00 pm	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates-reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates-neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						

Staff Member: _____

6:00 pm	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates-reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates-neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						

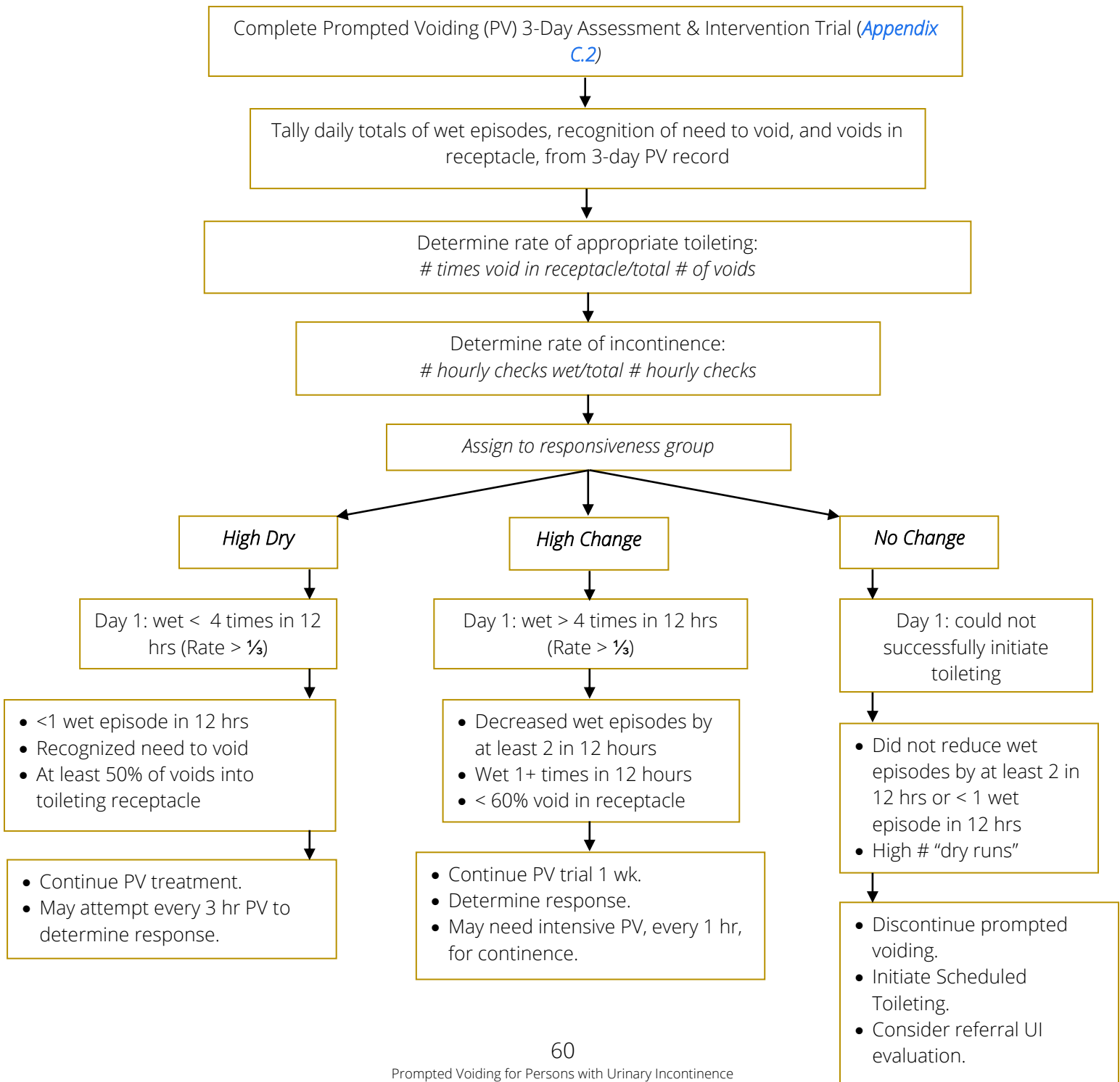
Staff Member: _____

8:00 pm	<input type="checkbox"/> Slightly Wet	<input type="checkbox"/> Refused	<input type="checkbox"/> Urine	<input type="checkbox"/> Independent	<input type="checkbox"/> Help of one	<input type="checkbox"/> Self-initiate	<input type="checkbox"/> Cooperates-reluctant
	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry Run	<input type="checkbox"/> Bowel	<input type="checkbox"/> Standby	<input type="checkbox"/> Help of two	<input type="checkbox"/> Cooperates-neutral	<input type="checkbox"/> Uncooperative
	<input type="checkbox"/> Soaking Wet						

Staff Member: _____

Appendix C.3

DETERMINING RESPONSIVENESS TO PROMPTED VOIDING



Appendix D

NURSING INTERVENTIONS CLASSIFICATION (NIC)

Prompted Voiding 0640

Definition: Promotion of urinary continence through the use of timed verbal toileting reminders and positive social feedback for successful toileting

Activities:

- Determine ability to recognize urge to void
- Keep a continence specification record for 3 days to establish voiding pattern
- Use for patients not exhibiting signs and symptoms of overflow and/or reflex urinary incontinence
- Establish interval of initial prompted voiding schedule, based upon voiding pattern
- Establish beginning and ending time for the prompted voiding schedule if not for 24 hours
- Approach within 15 minutes of prescribed prompted voiding intervals
- Allow time (5 seconds) to self-initiate a request for toileting assistance
- Determine patient awareness of continence status by asking if wet or dry
- Determine accuracy of response by physically checking clothing or linens, as appropriate
- Give positive feedback for accuracy of continence status response and success of maintaining continence between scheduled toileting times
- Prompt (maximum of 3 times) to use toilet or substitute, regardless of continence status
- Offer assistance with toileting, regardless of continence status
- Provide privacy for toileting
- Give positive feedback by praising desired toileting behavior
- Refrain from commenting on incontinence or refusal to toilet
- Inform patient of the time of next toileting session
- Teach patient to consciously hold urine between toileting sessions, if not cognitively impaired
- Teach patient to self-initiate requests to toilet in response to urge to void
- Document outcomes of toileting session in clinical record
- Discuss continence record with staff to provide reinforcement and encourage compliance with prompted voiding schedule on a weekly basis and as needed

3rd edition 2000

Background Readings:

- Colling, J., Ouslander, J., Hadley, B. J., Eisch, J., & Campbell, E. (1992). The effects of patterned urge response toileting (PURT) on urinary incontinence among nursing home residents. *Journal of the American Geriatrics Society, 40*(2), 135-141.
- Kaltreider, D. L., Hu, T. W., Igou, J. F., Yu, L. C., & Craighead, W. E. (1990). Can reminders curb incontinence? *Geriatric Nursing, 11*(1), 17-19.
- Kozier, B., Erb, G., Berman, A., & Snyder, S. (2004). Urinary elimination. In *Fundamentals of nursing: Concepts, processes, and practice*. (7th ed., pp. 1255-1290). Upper Saddle River, NJ: Prentice Hall.
- Lyons, S. S., & Specht, J. K. P. (1999). *Research-based protocol: Prompted voiding for persons with urinary incontinence*. Iowa City, IA: The University of Iowa Gerontological Nursing Interventions Research Center.
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- Specht, J.P., & Maas, M.L. (2001). Urinary incontinence: Functional, iatrogenic, overflow, reflex, stress, total, and urge. In M. Maas, K. Buckwalter, M. Hardy, T. Tripp-Reimer, M. Titler, & J. Specht (Eds.), *Nursing care of older adults: Diagnoses, outcomes & interventions* (pp. 252-278). St. Louis: Mosby.

Permission to use Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) was obtained through Mosby, Elsevier Health Sciences. (<http://www.us.elsevierhealth.com/>).

Appendix E

EDUCATIONAL PROGRAM FOR TEACHING STAFF & ADMINISTRATION ON PROMPTED VOIDING

Educational programming should be designed to inform all persons about their roles and responsibilities for the successful implementation of the PV guideline.

Essential elements of a continence program are education, motivation and follow-up. Continence programs can be established in individual client's homes, acute and long-term care settings, and through outpatient clinics. For more information about establishing a continence program, please contact the AHCP's Alert for Directors of Nursing: Establishing, Implementing & Continuing an Effective Program in a Long-Term Care Facility at <http://www.ahcpr.gov/clinic/uidon.htm>.

Appendix E includes the following:

Appendix E.1: Sample Interactive Educational Modules for Teaching Nursing Assistants about Urinary Incontinence

Appendix E.2: Knowledge Assessment Test

Appendix E.3: Sample Policy for Prompted Voiding

Appendix E.4: Prompted Voiding Standard of Care Sample for Extended Care Facilities

Appendix E.1

SAMPLE INTERACTIVE EDUCATIONAL MODULES FOR TEACHING NURSING ASSISTANTS ABOUT URINARY INCONTINENCE

Time: 9:00 am - 12:00 noon

Title: “You’re In (Urine) Control: Restorative Care for Nursing Home Residents with Urinary Incontinence”

Goal: Upon completion of this workshop, the Nursing Assistant will be able to describe ways to improve care of nursing home residents with urinary incontinence

Objectives:

1. Describe the major organs of the upper lower urinary tract.
2. Define the major causes of UI in residents in nursing homes.
3. Identify 3 things you learn when you record a bladder diary for a resident.
4. Name 6 things you can do to promote healthy bladder habits.
5. Name 2 problems that can occur with UI.
6. Discuss what PV is and how it differs from scheduled toileting and bladder training.
7. Identify the goals of prompted voiding.
8. Define and demonstrate the 5 steps of the PV procedure.
9. Name 3 benefits of PV other than increased dryness.

Developed by Mary Maas, RN, MS & Deborah Lekan-Rutledge, RN, MSN for the Costal AHEC project and shared here with permission. Adaptations by Diane K. Newman, DNP

Lesson Plan

8:30 - 8:40 am

Introductions

- Who are you and where are you from?
- Why are you here?

8:40 - 9:00 am

Name one question you would like answered in this class today ... put on note card. Put note card in box, drawing at the end of the session.

Pretest: 10 minutes

9:00 - 9:30 am

Module 1: How the Bladder Works and Healthy Bladder Habits

The upper and lower urinary tract—where is it and how does it work?

Anatomy lesson: pin the organ on the volunteer patient—have felt wrap around, use stuffed organs with Velcro on back...staff stick organ on volunteer patient and another person defines what the organ does—start at the top:

- Upper
 - Kidneys—make urine
 - Ureters—tubes to drain urine from kidneys to bladder
- Lower
 - Bladder—hold urine
 - Urethra—exit tube
 - Female – short
 - Male – Long
 - Prostate gland—makes fluids for the transport of semen
 - Pelvic floor muscle—hammock-like muscle that holds urethra closed

How the lower urinary tract works: (Physiology)

Normal voiding—bladder fills, holds urine, when it is full, bladder urges are felt. Voiding is voluntary and the bladder holds urine until a person is in a socially approved environment (e.g. bathroom) for voiding.

Incontinence—bladder fills, holds urine BUT urine leaks because the pelvic floor muscles are weak, OR bladder contractions are very strong.

How much urine does the bladder hold?

Use 3 water balloons filled to different volumes, to demonstrate holding ability: (Use yellow helium quality balloons, and a funnel)

#1 – Normal adult bladder-full bladder – 450 mL.

#2 – Normal older adult bladder – full – 250 mL.

#3 – Over-distended bladder – > 500 mLs - older adult is at higher risk for urinary retention due to: in men with enlarged prostate gland, in women with pelvic organ prolapse, following surgery, some medications, any type of urinary catheterization (e.g. indwelling [foley], intermittent, external).

9:30 - 10:00 am

Urinary incontinence: a major problem in LTC

Simulation: have one person in each group put on a disposable adult brief.

How many residents have urinary incontinence in the average nursing home?

Game: 1 out of 10

3-4 out of 10

5-7 out of 10

All nursing home residents have incontinence

Answer: 5-7 out of ten. Discussion focuses on high prevalence of UI, but also the fact that almost half of the residents ARE NOT incontinent. Functional/physical impairment and cognitive impairment are major contributors to UI. Staff assistance provided on a regular basis helps overcome these limitations and can help residents stay drier by having fewer UI episodes, and when UI does occur, the episodes are of smaller amounts.

What is the MAIN reason that nursing home residents are incontinent?

Mobility impairment and dementia.

Some residents do have medical problems that increase the risk for UI but the main problem is mobility and cognitive impairment which means that IF they get help from staff to go to the toilet, they are more likely to be drier or completely dry.

Debrief: ask volunteers who are wearing the adult brief the following:

1. What is it like?
 - a. Hot, bunched, makes you look fat, clothes don't fit right, if wet, squishy, smelly

2. How do you feel?
 - a. Disrespected? b. Like a baby?
 - c. Dirty, smelly? d. Old and worthless?

3. What if you had to wear these all day long and were never offered assistance to go to the toilet? Would you ever feel like you should just give up and accept being wet? Would you willingly stop fighting staff to get help to go to the bathroom? How many times would it take before you learned to accept the experience of wetting on yourself? What feelings would you experience? How might you express these feelings? Would you learn to forget about the physical functioning of the lower part of the body? Many older people learn to separate what goes on in the lower half of the body from what goes on in the upper half.

Debrief and discussion

Comments: Wearing adult briefs made me feel hot, the brief was bunched, bulky, and noisy, made my clothes tight, makes me feel odd about odor.

Pass out small gift bags of “PEE-nuts”, using humor to balance the discussion about UI and excess disability, and to give nursing assistants and other participants a treat to munch on during the break.

10:00 - 10:15 am BREAK

10:15 - 10:45 am *Healthy bladder habits-what can you do to promote good bladder function and prevent UI?*

- a. Increase fluids – to keep urine from irritating bladder and causing odor
 - i. Exercise: urine dilution and odor – use two cups with 1tablespoon of ammonia in each cup, add ¼ cup water to one and 1 cup of water to the other, do sniff test. Lesson: if urine is concentrated, it will have an odor and even if you do good perineal care, the patient will have an odor. Odor in a facility can be markedly improved by hydration. AND this helps with UTI prevention.
 - ii. Concentrated urine means there is less bladder washout.

- b. Avoid caffeine and soft drinks – makes bladder urges strong and difficult to suppress.

- c. Give more fiber – fruits and vegetables – to prevent constipation
 - i. Small group simulation: The role of fluid in promoting soft stools and preventing constipation: Divide into groups. Give each group 2 Ziploc baggies of fiber cereal, about ½ cup each and a bottle of water. Instruct team leader to put ¼ cup of water in one bag, and 1 cup of water in the other. Zip up Ziploc. Note the consistency of the fiber. Discussion: Lack of water/fluids makes stools hard. More fluids make stools soft.

- d. Good skin care – ways to prevent rashes and UTI
 - i. Rashes simulation/group exercise. Discuss the everyday use of ammonia cleaning fluids-we NEVER put our hands in those fluids, and if we do, we use gloves, and the ammonia is diluted. Consider that a main component of urine is ammonia, and when that is on the skin, it can cause serious rashes. How to protect: Pass around sample of barrier ointment, people can apply some on skin. Discuss what it does – waterproof and protect, give vitamins to skin. Prevent maceration or absorption of water into skin. Demonstration: Put barrier ointment on forearm, pour water over forearm, and observe water rolling off and not absorbing into skin.
 - ii. Skin care of residents with incontinence: How to do: gently wipe and pat dry, do not rub. Rationale:
 - 1. When skin is wet, and it is rubbed too hard, it can peel off and skin abrasions can occur. This makes the skin more prone to chemical irritation from the ammonia in urine.
 - 2. Rubbing too hard also dries out the skin. Dry skin loses its protective surface of a moisture barrier which sheds off the urine wetness.
 - iii. UTI prevention
 - 1. Increase fluids, especially water
 - 2. Provide cleansing skin care with barrier ointment, especially after bowel movement
 - 3. Attend to constipation prevention

- e. Toileting: a restorative care function: toileting is important because:
 - i. It is a part of normal adult activity
 - ii. Bladder function can be preserved in older adults longer, even if they have other medical problems

10:45 - 11:00 am

Module 2: Defining Toileting Programs

- a. Habit training: requires the identification of the incontinent person's individual toileting and UI pattern, usually by means of a bladder diary. A toileting schedule is then devised to pre-empt UI episodes. There is no attempt to alter an individual's voiding pattern.
- b. Timed voiding: involves toileting an individual at fixed intervals, such as every 2-3 hours. As this is a passive toileting program, there are no attempts at patient education or reinforcement of behaviors, or to re-establish a voiding pattern. Other terms used to describe timed voiding are scheduled toileting, routine toileting, and fixed toileting.
- c. Bladder training or retraining: involves a progressive voiding schedule in combination with patient education that incorporates teaching of strategies for suppressing urgency and delaying voiding. This intervention is used in individuals who do not have cognitive or physical impairments.

11:00 - 11:45 am

Module 3: Prompted Voiding

1. *What is prompted voiding and how is it different from other toileting programs?*

Demonstration: two ways to approach the resident who needs toileting assistance

- a. swoop, swing and plop
- b. greet and invite

2. *How does prompted voiding work?*

By gaining the resident's attention about their bladder, to help them focus on staying dry between toilettings, and by giving positive feedback to the patient about their bladder status ("Mrs. Smith, you are drier and doing very well on the PV program!")

3. The 5 steps of PV: greet, talk, prompt, assist, remind.
 - a. Demonstration with trainer and volunteer

- b. Generate discussion about prompted techniques, what to do when the resident refuses, if they “don’t have to go right now,” if they become agitated or distressed, if they attempt to void but have a “dry run.”
- c. Small group practice – use PV Skill Worksheet with illustrations of the 5 steps in the procedure. Practice in pairs.
- d. Role Play by 2 volunteers with feedback from the large group. Large group discussion about residents who respond in the following way to the prompt: “Can I assist you to the bathroom now?”
 - 1. “I don’t have to go right now”
 - 2. “Get out of my room!”
 - 3. “I am already wet”

Objective: use best persuasive efforts to encourage resident to accept toileting assistance. AND identify those residents who consistently refuse toileting assistance or become agitated with the prompts, and the attention focused on toileting. Consider giving volunteers a cup of snacks and a gift for their participation.

- 4. Residents most likely to benefit from PV:
 - a. Willing to go to the bathroom when prompted.
 - b. Able to urinate when they are on the toilet.
 - c. Are dry more than they are wet (Based on bladder diary)
 - d. If they are frequently wet, they DO urinate each time they are prompted, and they are only slightly wet.
 - e. Need assistance of 1 person

Goal of PV: increased dryness, not necessarily totally dry.

The bladder diary is important to learn HOW OFTEN the resident is incontinent, and if they are able to urinate when assisted to the toilet.

11:45am - noon

Benefits of PV OTHER THAN increased dryness.

Small group discussion: List all the benefits to the resident who is on a PV program. Group with the most benefits on their list gets a prize.

Benefits: Social interaction, mobility, skin care, increased fluids, bowel regularity, prevention of UTI and skin rashes, fall prevention, self-esteem, respect, dignity.

12:00 – 12:30 pm

Summary

1. Individual evaluation – 5 minutes on paper and brief discussion
 - a. List 3 things you learned today
 - b. Name 1 thing you will do differently for one of your residents with incontinence.
 - c. Name 1 thing about UI that you would like to know more about.
2. Group work and discussion: **UI Crossword Puzzle and Word Search**—work together to complete the games.

Appendix E.2

KNOWLEDGE ASSESSMENT TEST

Instructions: After completing training in prompted voiding treatment using the Evidence-based protocol, each nurse or caregiver who will be using the Prompted Voiding Protocol should assess his/ her own learning. This Knowledge Assessment Test is intended to be used as a learning tool, rather than as a formal performance evaluation. After the learner completes the test, assist him/ her to score the test. The trainer should be available to discuss with the nurse or caregiver the reasons for his/her choices and to reinforce knowledge needed to properly use the prompted voiding technique.

Knowledge Assessment Test Key

1. D
2. C
3. B
4. B
5. B
6. B
7. B
8. D
9. B
10. A
11. C
12. B

KNOWLEDGE ASSESSMENT TEST

1. Which of the following choices is **NOT** one of the steps a caregiver takes when using prompted voiding technique to treat urinary incontinence?
 - A. Prompt
 - B. Monitor
 - C. Praise
 - D. Persuade
2. Expected outcomes for persons treated with prompted voiding include all of the following **EXCEPT**:
 - A. Decreasing the number of incontinent episodes each day
 - B. Recognizing the need to void
 - C. Maintaining continence without reminders from the caregiver
 - D. Increasing the average volume of continent voids
3. If the incontinent individual is dry when checked during prompted voiding, there is no need for the caregiver to remark on it.
 - A. True
 - B. False
4. A person with physical and/or mental impairments is **NOT** likely to improve urinary incontinence by using prompted voiding.
 - A. True
 - B. False
5. Prompted voiding has been shown to reduce the number of episodes of incontinence per person per day by an average of:
 - A. < 0.5 episodes
 - B. 1 to 2 episodes
 - C. 2 to 3 episodes
 - D. > 3 episodes

6. Prompted voiding requires less staff time for completion than does a system changing people after episodes of incontinence.
- A. True
 - B. False
7. Persons with which type of urinary incontinence have been shown to respond poorly to prompted voiding?
- A. Stress
 - B. Overflow
 - C. Mixed
 - D. Urgency
8. The best predictor of a person's response to prompted voiding is:
- A. Ability to ambulate independently
 - B. Baseline incontinence less than 4 times per day
 - C. Ability to recognize need to empty the bladder
 - D. Success at a therapeutic trial of prompted voiding
9. People respond with the fewest episodes of urinary incontinence to an every 1 to 2 hour prompted voiding schedule.
- A. True
 - B. False
10. Which of the following behaviors is **NOT** considered a self-initiated request to toilet?
- A. Positive response to voiding prompt by caregivers
 - B. Attempts to toilet self without caregiver assistance
 - C. Use of the call light to contact caregivers
 - D. Verbal requests to caregivers for toileting assistance

11. A prompted voiding completion rate of at least which of the following ranges is recommended for maintaining continence?
- A. 40 to 60%
 - B. 50 to 60%
 - C. 60 to 80%
12. The most effective management technique for nursing home staff completion of prompted voiding assignments is:
- A. Self-monitoring
 - B. Individual written feedback
 - C. Individual verbal feedback
 - D. Weekly reliability checks

Total Score: _____

Appendix E.3

SAMPLE POLICY FOR PROMPTED VOIDING

Policy: To assist the person to regain or maintain continence to the highest level practical. Prompted voiding (PV) is a method based upon timely reminders to toilet from a formal or informal caregiver. PV can be maintained for appropriate individuals, but consistency is key.

Definition: Prompted voiding is a behavioral intervention used in the treatment of urinary incontinence (UI) in persons with physical or cognitive deficits.

- Procedure:**
1. Obtain a history and physical to gather more information on the person's UI status, investigate presence of lower urinary tract symptoms and voiding habits (where or how patient voids).
 2. A 3-day prompted voiding trial will be completed.
 3. A post-trial interview will be completed.
 4. If appropriate, start the PV schedule (based on resident's preference and analysis of above information). The best candidates would be those with 66% or higher success rate, although each person may be a candidate according to other reasons (mainly desire/motivation to participate).
 5. Place flow sheets or reminder in nurse aides' documentation forms. This will be a constant reminder that the program has started and the importance of timeliness and documentation.
 6. Regular verbal and written feedback will be provided throughout the initial process and as standard procedure.

Appendix E.4

PROMPTED VOIDING STANDARD OF CARE SAMPLE FOR EXTENDED CARE FACILITIES

I. Resident centered care

1. Assessment done on admission for all residents.
 - a. Identify type of UI
 - b. Assess post-void residual urine
 - c. Assess for urinary, cutaneous, and vaginal infection, obvious pelvic organ prolapse in women
 - d. Elicit the resident's (and family if indicated) preferences for continence and continence interventions
 - e. Specify an initial plan of care to address UI if present
2. Analyze and evaluate the resident's response to previous incontinence interventions
3. Facility should collect, analyze and document continence/incontinence rates-monthly audit
4. Evaluate any resident with a urinary catheter for discontinuation and begin a bladder management program to include a toileting program if indicated or appropriate
5. Promote hydration and mobility to aid in maintenance of continence
6. Assess new onset of UI
7. Intervention
 - a. Medication may be combined with a therapeutic trial of a toileting program
 - b. If response to a toileting program is poor, then medication therapy should only be considered if the person is voiding appropriately
 - c. For all residents on medication for UI, assessment of continence status, response to therapy and side effects should be evaluated monthly at initiation and then quarterly
 - d. A toileting schedule is followed at least 60% of the time in order to evaluate its effectiveness.

II. Physical and social environment

The physical and social environment should be conducive to continence

- a. Adequate lighting in bathrooms
- b. Ensure privacy for toileting
- c. Appropriately located grab bars and raised toilet seats
- d. Toilets located near activity and dining rooms
- e. Fluids available and offered to residents on the clinical unit and in activities
- f. Additional cues to identify bathroom are used for persons with dementia, e.g., door is left open, picture sign on the door, light in bathroom is left on

III. Staff

Staff convey a positive attitude about continence promotion in older adults, creating a social context for care

- a. That UI is not inevitable and is treatable and manageable
- b. Staff are knowledgeable about the causes and treatments of UI
- c. Staff is knowledgeable what is normal and abnormal in relation to micturition.
- d. Staff are sensitive to resident preferences for continence care and incorporate them into the plan of care
- e. Staff is observant of nonverbal cues of the need for toileting in residents who are unable to ask for toileting assistance or recognize physiologic and behavioral cues of a full bladder
- f. Staff are mindful and vigilant about changes in continence status
- g. Staff share information about continence promotion and facility continence outcomes with residents and families
- h. Education on continence promotion and assessment and treatment of UI is provided to staff, residents and families at least annually

IV. Organizational context of care

1. Organizational leadership articulates a commitment to continence promotion in programming, policies, procedures, and resource allocation
2. Interdisciplinary team approach to continence care, particularly eliciting involvement of certified nursing assistants
3. Adequate staff to provide the needed toileting assistance

4. Leadership is involved in ongoing evaluation of continence promotion including environmental considerations such as physical space, access to toilets, assistive devices, adaptive equipment, supplies
5. Staff performance evaluation includes extent to which toileting is consistently provided, documented, and reported on assigned residents
6. The continence interventions are evidence-based and staff training is competency-based to assure accurate implementation of interventions
7. Organizational leadership commits to transparency in conveying facility continence programs and outcomes

V. Stopping rules

Wetness rate should consider

- a. Volume of wetness
- b. Whether the resident is voiding when toileted
- c. Older adult's preferences
- d. Prior to discontinuation a referral for further evaluation to investigate other causes of UI
 - i. Medication
 - ii. Co-morbidities
- e. Rule out urinary retention or incomplete bladder emptying with serial portable ultrasound (bladder scans) and if not available, catheterizations.

Appendix F

PROCESS EVALUATION MONITOR

Introduction: The purpose of this monitor is to evaluate perceived understanding and support of each nursing home staff person in carrying out the PV guideline.

Instructions: Following implementation of the PV guideline, please ask each staff person who uses the PV guideline to complete the appropriate process evaluation form on the following schedule:

Week 1, Week 2, Week 4, Week 6, and Week 8

Monthly for the next four (4) months (Month 3, 4, 5, 6)

Quarterly for the remainder of the first year (Months 9, 12)

Once the staff who are using the PV guideline complete this Process Evaluation Monitor, the individual in charge of implementing the PV guideline needs to review the form with the staff member who completes it. Staff members who have higher scores on this monitor are indicating that they are well equipped to implement the guideline, and understand its use and purpose. On the other hand, staff members who have relatively low scores are in need of more training in the use of the guideline.

Form A—RN and LPN Staff Members

For the first fourteen (14) questions, please tally up the responses provided by adding up the numbers circled. For example, if Question 1 is answered '2' and Question 2 is answered '3' and Question 3 is answered '4' the staff member's score for those three questions (2+3+4) equals 9. The total score possible on this monitor is 56, while the lowest score possible is 14.

Form B—CNA and UAP Staff Members

For the first sixteen (16) questions, please tally up the responses provided by adding up the numbers circled. For example, if Question 1 is answered '2' and Question 2 is answered '3' and Question 3 is answered '4' the staff member's score for those three questions (2+3+4) equals 9. The total score possible on this monitor is 64, while the lowest score possible is 16.

Form A and Form B—Short Answer Questions

Both Form A and Form B end with a series of short answer questions. Staff members are asked to provide feedback regarding their feelings about the benefits and barriers of the PV Guideline. In addition, suggestions for improvements in the guideline or examples of guideline successes that may benefit others are welcomed.

PROCESS EVALUATION MONITOR – FORM A

Directions: RNs and LPNs please complete this form by circling the number that best communicates your perception about your use of the PV guideline for persons with UI. Please write in any comments or suggestions you have about the PV guideline at the end of the questionnaire.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I feel knowledgeable to carry out the PV guideline.	1	2	3	4
2. I am better able to assess and diagnose types of UI with the PV guideline.	1	2	3	4
3. I am able to identify persons with UI who will most likely benefit from PV intervention.	1	2	3	4
4. I am able to carry out the essential activities of the PV intervention.	1	2	3	4
5. I feel well prepared to carry out the PV guideline in collaboration with other nursing staff.	1	2	3	4
6. I feel I had enough time to learn about the PV guideline before it was implemented.	1	2	3	4
7. I feel I am able to effectively supervise nursing staff using the PV guideline.	1	2	3	4
8. I feel supported in my efforts to use the PV guideline.	1	2	3	4
9. Implementing the PV guideline enhances the quality of nursing care on the unit.	1	2	3	4
10. We are managing UI better with the use of the PV guideline.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
11. The staff consistently uses PV intervention as prescribed (at least 60% of the time).	1	2	3	4
12. The staff is given feedback about their level of compliance with the PV guideline.	1	2	3	4
13. The PV guideline enables me to meet needs of most persons who have UI.	1	2	3	4
14. In addition to the initial training about the PV guideline, there are continued efforts to help me learn more about PV and UI.	1	2	3	4

15. Please list the things that are most helpful to you in implementing the PV guideline.

16. Please list the things that are barriers or make it difficult to implement the PV guideline.

17. What changes to the PV guideline would you recommend?

PROCESS EVALUATION MONITOR – FORM B

Directions: CNAs and UAPs please complete this form by circling the number that best communicates your perception about your use of the PV guideline for persons with UI. Please write in any comments or suggestions you have about the PV guideline at the end of the questionnaire.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I feel knowledgeable about PV.	1	2	3	4
2. I have the communication skills needed to use the PV intervention.	1	2	3	4
3. I am able to carry out the PV intervention consistently.	1	2	3	4
4. I am able to carry out the essential activities of the PV intervention.	1	2	3	4
5. I feel well prepared to carry out the PV guideline in collaboration with other nursing staff.	1	2	3	4
6. I had enough time to learn about the PV guideline before it was implemented.	1	2	3	4
7. I feel supported in my efforts to use the PV guideline.	1	2	3	4
8. There is enough staff to carry out the PV intervention.	1	2	3	4
9. Using the PV guideline enhances the quality of nursing care on the unit.	1	2	3	4
10. The staff is managing UI better with the use of the PV guideline.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
11. The staff consistently uses the PV intervention as prescribed (at least 60% of the time).	1	2	3	4
12. The staff is given feedback about their level of compliance with the PV guideline.	1	2	3	4
13. The PV guideline enables me to meet needs of most people who have UI.	1	2	3	4
14. The people selected for the PV intervention are the ones who benefit the most.	1	2	3	4
15. The nurses reassess the people using PV regularly to adjust or discontinue the intervention if there is no improvement in UI.	1	2	3	4
16. In addition to the initial training about the PV guideline, there are continued efforts to help me learn more about PV and UI.	1	2	3	4

17. Please list the things that are most helpful to you in implementing the PV guideline.

18. Please list the things that are barriers or make it difficult to implement the PV guideline.

19. What changes to the PV guideline would you recommend?

Appendix G

OUTCOMES MONITOR

Appendix G includes the following:

Appendix G.1: Prompted Voiding Outcomes Monitor

Appendix G.2: Nursing Outcomes Classification (NOC)

Appendix G.3: Prompted Voiding Quality Monitoring Program: Quarterly Report

Appendix G.1

OUTCOMES MONITOR

Instructions: For each person receiving the PV guideline, please complete the chart on the following page. This chart should be completed at least weekly throughout the PV program for each person. For each person receiving the UI management intervention, please keep a record of the changes observed in the health record.

Place the appropriate key criteria next to the four separate outcome indicators for each assessment item. We have provided a total of 8 boxes, which represent the first 8 weeks of treatment with PV. Once the chart has been completed, please make another copy of the blank form and begin numbering the new chart at Week 9.

EXAMPLE

Directions: Please place the appropriate key next to the outcomes for each assessment period.

Criteria Key: Y=Yes/met criteria N=No/criteria not met J=Justified Variation
(Justified Variation e.g. patient not included in the monitor; note *why* patient is not included)

	WEEK	1	2	3	4	5	6	7	8
Outcome Source 1: Patient Interview									
Reports satisfaction ¹ with intervention		Y	Y	Y	Y	Y	Y	Y	Y
Reports decreased UI episodes		N	J	Y	Y	Y	Y	Y	Y

Comments:

Week 1: Patient reports continued wetness during early evening (3 to 5 p.m.)

Week 2: Patient hospitalized for episode of pneumonia.

¹Patient satisfaction can be measured with the following question: "How satisfied are you with the PV program? Are you: not at all satisfied, a little satisfied, somewhat satisfied, very satisfied, or extremely satisfied." For those patients who state very or extremely satisfied, they have met the criteria. For those patients who do not respond positively, try to examine what is leading to their dissatisfaction.

OUTCOMES MONITOR

Directions: Please place the appropriate key next to the outcomes for each assessment period.

Criteria Key: Y=Yes/met criteria N=No/criteria not met J=Justified Variation
 (Justified Variation e.g. patient not included in the monitor; note *why* patient is not included)

WEEK	1	2	3	4	5	6	7	8
Outcome Source 1: Patient Interview								
Reports satisfaction ¹ with intervention								
Reports decreased UI episodes								
Outcome Source 2: Patient Record								
Number of documented UI episodes decreased								
Complications of skin breakdown, odor or UTI are not present								

For those patients who state very or extremely satisfied, they have met the criteria. For those patients who do not respond positively, try to examine what is leading to their dissatisfaction.

Comments:

Appendix G.2

NURSING OUTCOMES CLASSIFICATION (NOC)

Urinary Continence--0502

Definition: Control of elimination of urine from the bladder

OUTCOME TARGET RATING: Maintain at _____ Increase to _____

	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	NA
Outcome Overall Rating:	1	2	3	4	5	NA
Indicators:						
050201 Recognizes urge to void	1	2	3	4	5	NA
050202 Maintains predictable pattern of voiding	1	2	3	4	5	NA
050203 Responds to urge in timely manner	1	2	3	4	5	NA
050204 Voids in appropriate receptacle	1	2	3	4	5	NA
050205 Gets to toilet between urge and passage of urine	1	2	3	4	5	NA
050218 Maintains barrier-free environment for independent toileting	1	2	3	4	5	NA
050206 Voids >150 milliliters each time	1	2	3	4	5	NA
050208 Starts and stops stream	1	2	3	4	5	NA
050209 Empties bladder completely	1	2	3	4	5	NA
050215 Ingests adequate amount of fluid	1	2	3	4	5	NA
050216 Manages clothing independently	1	2	3	4	5	NA

	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	NA
Outcome Overall Rating:	1	2	3	4	5	NA
Indicators:						
050217 Toilets independently	1	2	3	4	5	NA
050219 Identifies medication that interferes with urinary control	1	2	3	4	5	NA
050207 Urine leakage between voidings	1	2	3	4	5	NA
050210 Post void residual >100-200 milliliters	1	2	3	4	5	NA
050211 Urine leakage with increased abdominal pressure (e.g., sneezing, laughing, lifting)	1	2	3	4	5	NA
050212 Wets clothing during day	1	2	3	4	5	NA
050213 Wets clothing or bedding during night	1	2	3	4	5	NA
050214 Urinary tract infection	1	2	3	4	5	NA
Domain-Physiologic Health (II)	Class-Elimination (F)		1st edition 1997, revised 2004			

Outcome Content References:

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Permission to use Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) was obtained through Mosby, Elsevier Health Sciences. (<http://www.us.elsevierhealth.com/>)

Appendix G.3

PROMPTED VOIDING QUALITY MONITORING PROGRAM: QUARTERLY REPORT

Instructions: Select 3 days of toileting records within the last 2 weeks of the month, add up the data for those 3 days and record in the boxes in the chart. Fill in the column % for slightly wet and soaking wet column. Add the slightly wet % and soaking wet % numbers, and then subtract from 100 for the dryness rate.

Prompted Voiding Wetness Rates from Daily PVP Toileting Form

Date: _____

Toiletings and dry runs (A): _____	Slightly wet (B.1): _____	Soaking wet (C.1): _____	Dry episodes (D.1): _____
	Wetness rate (B.2): _____ [B.2 = B.1 / A]	Wetness rate (C.2): _____ [C.2 = C.1 / A]	Wetness rate (D.2): _____ [D.2 = D.1 / A]
Deterioration in function: _____	# Refusals: _____	UTI: _____	Skin rash: _____
Comments: _____			

Date: _____

Toiletings and dry runs (A): _____	Slightly wet (B.1): _____	Soaking wet (C.1): _____	Dry episodes (D.1): _____
	Wetness rate (B.2): _____ [B.2 = B.1 / A]	Wetness rate (C.2): _____ [C.2 = C.1 / A]	Wetness rate (D.2): _____ [D.2 = D.1 / A]
Deterioration in function: _____	# Refusals: _____	UTI: _____	Skin rash: _____
Comments: _____			

Date: _____

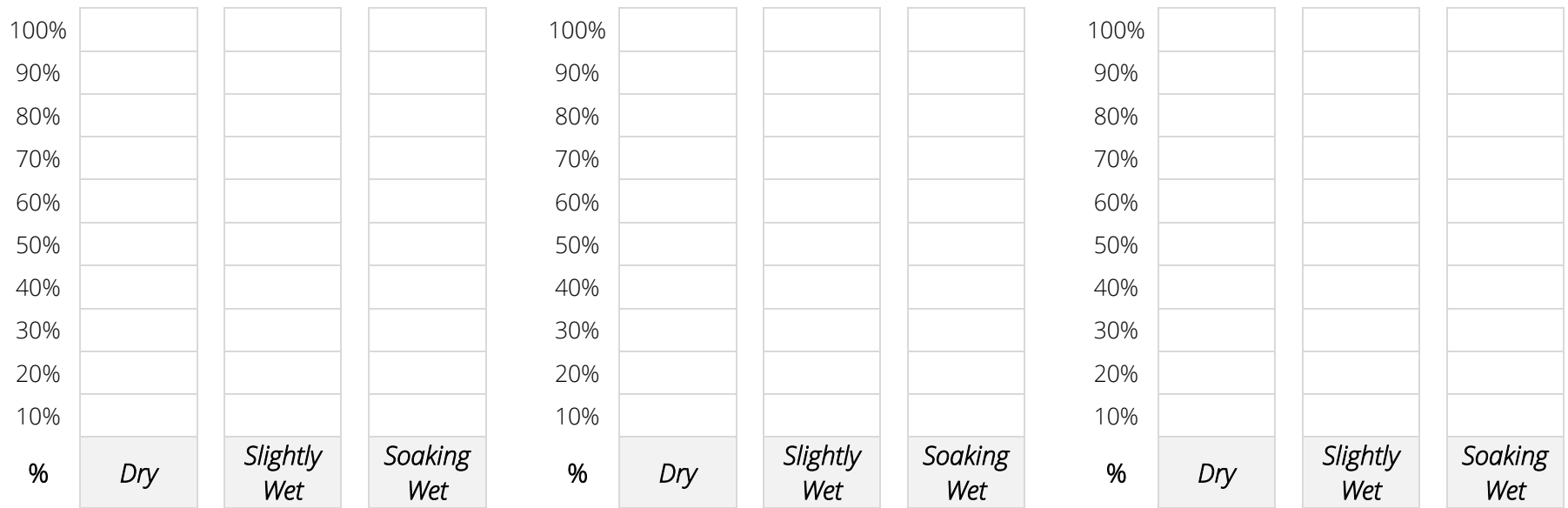
Toiletings and dry runs (A): _____ Slightly wet (B.1): _____ Soaking wet (C.1): _____ Dry episodes (D.1): _____

Wetness rate (B.2): _____ Wetness rate (C.2): _____ Wetness rate (D.2): _____
[B.2 = B.1 / A] [C.2 = C.1 / A] [D.2 = D.1 / A]

Deterioration in function: _____ # Refusals: _____ UTI: _____ Skin rash: _____

Comments: _____

3-Day Toileting Assessment Form



Quality Assurance Monitoring Check Form

Date: _____

<i>Soak Wet</i>	<i>Slightly Wet</i>	<i>Dry</i>

Date: _____

<i>Soak Wet</i>	<i>Slightly Wet</i>	<i>Dry</i>

Date: _____

<i>Soak Wet</i>	<i>Slightly Wet</i>	<i>Dry</i>

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This guideline is one of a number of Evidence-Based guidelines made available by The University of Iowa Barbara & Richard Csomay Center for Gerontological Excellence. If you have any questions regarding this protocol, please contact the authors or the Csomay Center:

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QUICK REFERENCE GUIDE

Prompted Voiding for Persons with Urinary Incontinence

USE THIS GUIDE TO:

- Assess all patients/residents for their risk of urinary incontinence using the MDS (Minimum Data Set) at admission and quarterly in long-term care and other assessment factors (see [Table 2](#)). Assessment data should be used to determine the type of urinary incontinence and if prompted voiding is an appropriate treatment. Overflow and reflex incontinence must be ruled out to use prompted voiding. The information is also used to develop the plan to maintain or regain continence.
- Assess the patient/resident as having the ability to purposefully empty one's bladder, a necessary prerequisite to initiate prompted voiding. In the case of overflow, reflex or total incontinence, prompted voiding is a poorly selected intervention.
- Implement the steps of prompted voiding techniques and associated caregiver behaviors (see [Table 1](#)) as part of a care plan for those identified as being at risk for stress, urge, mixed or functional incontinence. The 3 primary staff behaviors for prompted voiding are monitor, prompt and praise. Monitoring involves asking at regular intervals if help is needed to use the toilet. Prompting includes reminding the person to use the toilet and encourage bladder control between toileting. Praising is positive feedback to encourage dryness and appropriate toileting.
- Conduct a prompted voiding 3-day assessment and intervention trial (see [Figure 1](#)) to evaluate care

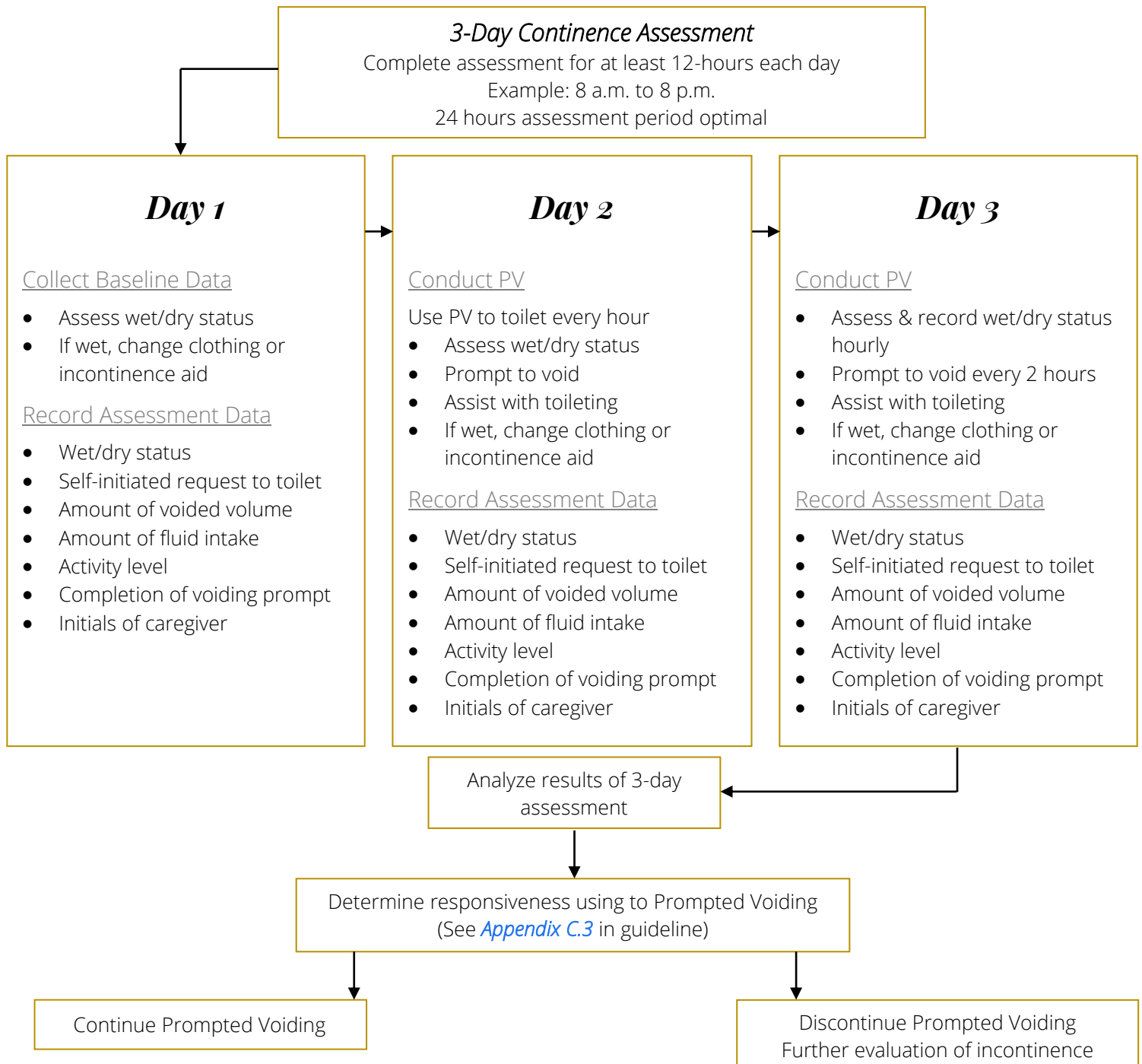
Table 1

THE STEPS OF PROMPTED VOIDING TECHNIQUES AND ASSOCIATED CAREGIVER BEHAVIORS

PROMPTED VOIDING TECHNIQUE	CAREGIVER BEHAVIOR
<ul style="list-style-type: none">Approach person at scheduled PV times (15 minutes before or after assignment is acceptable).	Monitor
<ul style="list-style-type: none">Greet individual.	Prompt
<ul style="list-style-type: none">Wait 5 seconds for individual to self-initiate request (SIR) to toilet.	Prompt
<ul style="list-style-type: none">Ask person if he or she is dry or wet (has had a bladder accident).	Prompt
<ul style="list-style-type: none">Physically check person to determine continence status.	Monitor
<ul style="list-style-type: none">Give social feedback. Praise, if dry. No comment, if wet.	Praise
<ul style="list-style-type: none">Prompt individual to toilet (regardless of continence status).	Prompt
<ul style="list-style-type: none">Offer person assistance with toileting.	Prompt
<ul style="list-style-type: none">Give social feedback. Praise desired toileting behavior.	Praise
<ul style="list-style-type: none">Inform individual of the time of next scheduled PV session.	Prompt
<ul style="list-style-type: none">Encourage individual to hold urine in bladder until next scheduled PV session.	Prompt
<ul style="list-style-type: none">Encourage SIRs to toilet, as needed.	Prompt
<ul style="list-style-type: none">Record results of PV session on UI monitoring form.	Monitor

Figure 1

PROMPTED VOIDING 3-DAY ASSESSMENT & INTERVENTIONS



Burgio et al.,1994; Colling et al.,1992; Creason et al.,1989; Hu et al., 1989; Jirovec,1991; Kaltreider et al.,1990; Ouslander et al.,1995a; Schnelle, 1990

Table 2

URINARY INCONTINENCE ASSESSMENT FACTORS CHECKLIST

Incontinence History

- Presence of UI risk factors
- Onset & duration of UI
- Triggers for UI
- Frequency and timing of UI
- Volume of UI episodes
 - Small
 - Medium
 - Large
 - Dribbling
- Precipitants of UI
 - Coughing/sneezing/laughing/exercising
 - Changing position
 - Unaware of leakage
 - Other _____
- Other lower urinary tract symptoms
 - Nocturia
 - Urgency
 - Hesitancy
 - Pain/burning
 - Straining
 - Foul smell to urine
- Timing of UI
 - Related to medication intake
 - Related to fluid intake
 - Previous treatment of UI
 - Surgery _____
 - Medication _____
 - Other _____
 - Use absorbent pads or devices
 - Number & Type _____
 - Lifestyle factors
 - Tobacco/smoking
 - Obesity
 - Fluid intake _____cc/day
 - Caffeine/alcohol intake
- Completion of a Bladder and Bowel Record for a minimum of 3 days or use of an electronic data logger to record times of UI episodes

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al., 1996

Health History

- _____ Medical & surgical
- _____ Genitourinary
- _____ Obstetrical & gynecological
- _____ Neurological
- _____ Metabolic
- _____ Musculoskeletal

Review of Medications

- _____ Medication affecting urinary tract system
- _____ Medication affecting cognition or level of consciousness
- _____ Medication affecting functional ability

Psychosocial Responses to UI

- _____ Effect of incontinence upon person's life
- _____ Changes in lifestyle associated with UI
- _____ Response of significant others
- _____ Most bothersome symptoms

Baseline physical examination to determine possible causes of the urinary incontinence

Abdominal Examination

- _____ Auscultation of bowel sounds
- _____ Palpation of abdominal masses and/or bladder distention
- _____ Presence of fecal impaction during digital rectal examination

Genitourinary/Genitalia Examination

- _____ Inspection of external genitalia for signs of inflammation, infection, rash or atrophy
- _____ Direct observation of pelvic organ prolapse during a cough or bearing down (Valsalva maneuver)
- _____ Direct observation of urine loss when bladder is full during a cough or bearing down stress test
- _____ Palpation of pelvic muscle strength (scale 0 = no palpable contraction to 5 = strong contraction) in females using gloved, lubricated finger placed in vagina
- _____ Palpation of anal sphincter strength using gloved, lubricated finger placed in rectum

Neurological Examination

- _____ Assessment of gait, speed, balance, leg strength
- _____ Assessment of perineal sensation

Cognitive Ability Assessment

- _____ Able to recognize own name
- _____ Able to recognize urge sensation, need to void
- _____ Able to carry out toileting instructions
- _____ Motivation for improving continence

Adapted from Talley et al., 2016; Newman and Wein, 2009; Lyons & Specht, 2001; Fantl et al., 1996

Diagnostic Testing

- _____ Direct observation of urine stream characteristics (listen for hesitancy, weak or intermittent stream, prolonged voiding of > 30 to 60 seconds)
- _____ Urine specimen testing with esterase dipstick
 - _____ White blood cells (may indicate UTI)
 - _____ Nitrites (may indicate UTI)
 - _____ Red blood cells (may indicate UTI or irritation)
 - _____ Protein (may indicate kidney disease)
- _____ Urine specific gravity (indicator of hydration status)
- _____ Post-void residual by ultrasound bladder scanner (preferred) or bladder catheterization (if > 200 cc, may indicate bladder emptying problem)

Functional Ability Assessment

- _____ Ability to walk
- _____ Ability to transfer, disrobe
- _____ Ability to maintain balance while standing
- _____ Ability to safely use assistive devices for ambulation (cane, walker, crutches)
- _____ Ability to manipulate clothing (manual dexterity)
- _____ Ability to use toilet or toilet substitute (commode, urinal, bedpan)
- _____ Ability to clean self with toilet paper (able to grab toilet paper, reach perineum to wipe)

- _____ Ability to obtain toileting assistance from caregiver (make voiding needs known)
- _____ Vision sufficient to find toilet and carry out toileting activities
- _____ Acute confusional state/delirium
- _____ Infection, such as symptomatic UTI
- _____ Inflammation, such as atrophic vaginitis, urethritis or other genitourinary inflammation
- _____ Medications
- _____ Psychological causes, such as depression
- _____ Excessive urine production, such as endocrine dysfunction, expanded volume states, or conditions causing low albumin states
- _____ Restricted mobility
- _____ Fecal impaction

Environmental Barrier Assessment

- _____ Availability of caregiver
- _____ Furniture placement and style
- _____ Presence of environmental clutter
- _____ Access to toileting facilities or toilet substitute
- _____ Distance to toilet
- _____ Height of toilet
- _____ Grab bars adjacent to toilet
- _____ Space for transferring to toilet
- _____ Adequacy of lighting
- _____ Clothing fit and ease of removal

Determine possible causes of transient UI and refer to primary health care provider, as indicated