In-Service Training Program

Management of Urinary Incontinence
OBJECTIVES

1. Define urinary incontinence.
2. Describe two bladder changes associated with aging that affect urinary incontinence.
3. Name and explain three types of urinary incontinence.
4. List and explain four interventions to help manage urinary incontinence.
INTRODUCTION

Urinary incontinence (UI) is involuntary loss or leakage of urine. More than 13 million people in the United States experience incontinence. At least half of the 1.5 million Americans residing in nursing homes are incontinent.


INTRODUCTION

Urinary incontinence is:

- Often temporary
- Treatable and sometimes curable at all ages
- Not inevitable with age
INTRODUCTION

No matter how tactfully UI is handled, a resident suffering from it may experience:

- Shame
- Embarrassment
- Depression
- Social isolation
INTRODUCTION

Because UI can be difficult to manage, it may become the dominant factor in the decision to seek nursing home admission.
INTRODUCTION

Treating UI is a team effort.

- The goal is to help residents achieve optimal continence.
- Care planning involves the coordinated efforts of physicians, nurses, nursing assistants, activity coordinators, therapists, social workers and family members.
INTRODUCTION

Effective management of UI focuses on:

- Assessment of the resident’s bladder and toileting habits
- Identification of risk factors and reversible medical conditions that may be contributing to UI
- Discussion of UI treatment options
INTRODUCTION

- Implementation of a plan of management (care plan) consistent with the resident’s condition, goals and wishes
- Treatment of reversible conditions
The Centers for Medicare and Medicaid reviews one specific urinary incontinence regulation during the long-term care survey process. This regulation [F-Tag 315 §483.25(d)(1) and §483.25(d)(2)] reads as follows:

**Urinary Incontinence**

Based on the resident’s comprehensive assessment, the facility must ensure that—

F315(1) A resident who enters the facility without an indwelling catheter is not catheterized unless the resident’s clinical condition demonstrates that catheterization was necessary; and

A resident who is incontinent of bladder receives appropriate treatment and services to prevent urinary tract infections and to restore as much normal bladder function as possible.

(Please refer to the handouts section for more information regarding regulation, including guidelines and definitions).
OVERVIEW OF URINARY INCONTINENCE

In this section we will review the following:

- Basic anatomy
- Clinical terms related to urinary incontinence
- Urinary incontinence and the older person
- Types of incontinence
OVERVIEW OF URINARY INCONTINENCE

Basic Anatomy

- The body stores urine (i.e., water and wastes removed by the kidneys) in the bladder.
- The bladder is a large involuntary muscular reservoir with a capacity to hold 500ml to 1000 ml of urine.
- The bladder connects to the urethra, the tube through which urine leaves the body.
OVERVIEW OF URINARY INCONTINENCE

- During urination, muscles in the wall of the bladder contract forcing urine out of the bladder and into the urethra.
- At the same time, sphincter muscles surrounding the urethra relax, letting urine pass out of the body.
- Incontinence will occur if bladder muscles suddenly contract or muscles surrounding the urethra suddenly relax.
OVERVIEW OF URINARY INCONTINENCE

Clinical Terms Related to Urinary Incontinence
Please see the handout provided to learn more about clinical terms related to evaluation and treatment of UI and catheter use.
Urinary Incontinence and the Older Person

Age-related changes affect some organs involved in urination. The bladder tends to shrink and decrease in elasticity. These changes reduce bladder capacity and contribute to frequent urination.
OVERVIEW OF URINARY INCONTINENCE

There is a higher incidence of UI in the elderly when aging is combined with chronic diseases and disabilities.

As people age, multiple diseases and conditions can contribute to incontinence, including:

- Diabetes
- Cerebrovascular accidents (CVAs)
OVERVIEW OF URINARY INCONTINENCE

- Parkinson’s disease
- Alzheimer’s Disease and Related Disorders (ADRD)
- Kidney disease
- Multiple sclerosis (MS)
OVERVIEW OF URINARY INCONTINENCE

- Constipation or fecal impaction
- Immobility
- Enlarged prostate
- Medications
OVERVIEW OF URINARY INCONTINENCE

Urinary incontinence may increase the risk for falls, fractures, vaginal infections, perineal rashes and skin irritation, and may contribute to skin breakdown or pressure ulcers.
OVERVIEW OF URINARY INCONTINENCE

Women experience incontinence twice as often as men. This is attributed to:

- Pregnancy and childbirth
- Menopause
- The structure of the female urinary tract
OVERVIEW OF URINARY INCONTINENCE

In older women, the urethra and pelvic muscles weaken and atrophy due to the loss of estrogen and other factors. As a result, the bladder can prolapse contributing to urinary urgency, frequency and incontinence.
OVERVIEW OF URINARY INCONTINENCE

In older men, the prostate enlarges causing pressure on the urethra that results in symptoms of urgency, increased frequency of urination and decreased flow of urine.
OVERVIEW OF URINARY INCONTINENCE

Types of Incontinence
Please see the table in the handout provided to learn more about the different types of urinary incontinence.
ASSESSMENT

A resident should be evaluated at admission and whenever there is a change in condition, physical ability or urinary tract function. The evaluation should include identification of individuals with reversible and irreversible causes of incontinence.
If the resident has urinary incontinence that has already been investigated, documented, and determined to be irreversible or not significantly improvable (e.g., bladder tumors or spinal cord disease), additional studies may be of limited value unless there is advancement in available treatment.
ASSESSMENT

When completing the comprehensive assessment, it is important that staff consider the following:

- Prior history of UI: onset, duration, associated symptoms, previous treatment and management, interventions, and the occurrence of persistent or recurrent UTIs
- Voiding patterns
ASSESSMENT

- Medication review, particularly of those that might affect continence (e.g., sedative/hypnotics, diuretics, and narcotics)
- Patterns of fluid intake
- Use of urinary tract stimulants or irritants (e.g., caffeine)
- Pelvic and rectal examinations to identify physical features that may directly affect UI
ASSESSMENT

- Functional and cognitive capabilities
- Type and frequency of physical assistance needed by the resident to access the bathroom
- Pertinent diagnoses, such as congestive heart failure, stroke, diabetes mellitus, obesity, and neurological disorders
ASSESSMENT

- Identification and/or potential of developing complications such as skin irritation or breakdown.
- Tests or studies indicated to identify the type(s) of UI.
- Environmental factors and assistive devices that may restrict or facilitate a resident’s ability to access the toilet.
INTERVENTIONS

In order to promote the highest practical level of functioning and help prevent or minimize a decline or lack of improvement in degree of continence, facilities should provide treatment and services that address potentially modifiable factors such as:

- Managing pain and/or providing adaptive equipment to improve function for residents suffering from arthritis, contractures, neurological impairments, etc.;
INTERVENTIONS

- Removing or improving environmental impediments that affect the resident’s level of continence (e.g., improved lighting, use of a bedside commode or reducing the distance to the toilet);
- Treating underlying conditions that have a potentially negative impact on the degree of continence (e.g., delirium causing urinary incontinence related to acute confusion);
INTERVENTIONS

- Possibly adjusting medications affecting continence (e.g., medication cessation, dose reduction, selection of an alternate medication, change in time of administration); and

- Implementing a fluid and/or bowel management program to meet the assessed needs.
INTerventions

Options for managing urinary incontinence in nursing home residents include primarily behavioral programs and medication therapy. Other measures and supportive devices may include:

- Intermittent catheterization
- Pelvic organ support devices (pessaries)
INTERVENTIONS

- The use of incontinence products, garments and an external collection system for men and women
- Environmental accommodations and/or modifications
INTERVENTIONS

Resident Choice

➢ The resident (or the resident’s legal representative) has the right to exercise his or her right to make informed choices about care and treatment or to refuse treatment.

➢ The facility must discuss the resident’s condition, treatment options, expected outcomes, and the consequences of refusing treatment with the resident or legal representative.
INTERVENTIONS

- If the resident refuses specific treatments, the facility must offer relevant alternatives.
- Facility staff and practitioners are responsible for documenting valid reasons why such interventions were not appropriate or feasible.
INTERVENTIONS

Advance Directives

- If a resident has a valid advance directive, the care plan must reflect the resident’s wishes as expressed in the directive and in accordance with state law.

- The presence of an advance directive does not absolve the facility from giving supportive care.
INTERVENTIONS

Behavioral Programs

Behavioral programs involve efforts to modify the resident’s behavior and/or environment. The comprehensive assessment helps identify the essential skills the resident must possess to be successful with specific interventions being attempted.
INTERVENTIONS

These skills include the resident’s ability to:

- Comprehend and follow through on education and instructions
- Identify urinary urge sensation
- Learn to inhibit or control the urge to void until reaching a toilet
- Contract the pelvic floor muscle (Kegel exercises) to lessen urgency and/or urinary leakage
- Respond to prompts to void
INTERVENTIONS

Behavioral Programs for Cognitively Intact Residents

Programs that require the resident’s cooperation and motivation for learning and practice to occur include the following:

*Bladder Rehabilitation/Bladder Training*

- This behavioral technique requires the resident to resist or inhibit the sensation of urgency, delay voiding and urinate according to a timetable rather than the urge to void.
INTERVENTIONS

- The goal is to increase the intervals between voidings. Successful bladder retraining usually takes at least several weeks.
- Residents, who are assessed with urge or mixed incontinence and are cognitively intact may be candidates for bladder retraining.
INTERVENTIONS

Bladder training generally consists of education, scheduled voiding with a systematic delay of voiding, and positive reinforcement. The resident who may be appropriate for bladder rehabilitation (retraining) usually:

- Is fairly independent in activities of daily living (ADLs)
- Experiences occasional UI
INTERVENTIONS

- Is aware of the need to urinate
- Wears incontinence products, at least occasionally, for episodic urine leakage
- Wishes to maintain his/her highest level of continence and decrease urine leakage
INTERVENTIONS

Pelvic Floor Muscle Rehabilitation
This behavioral technique is also called Kegel or pelvic floor muscle exercise (PFME). The exercise is performed to strengthen the voluntary periurethral and perivaginal muscles that contribute to the closing force of the urethra and the support of the pelvic organs.
INTERVENTIONS

These exercises are helpful in managing urge and stress incontinence. The resident who may be appropriate for PFME is usually able and willing to participate, with implementation of instructions and monitoring provided by the facility.
INTERVENTIONS

Behavioral Programs for Cognitively Impaired Resident

Programs that are dependent on staff involvement and assistance include the following:

*Prompted Voiding*

Prompted voiding has three components:

1. Regular monitoring with encouragement to report continence status
2. Prompting to toilet on a scheduled basis
3. Praise and positive feedback when the resident is continent and attempts to toilet
INTERVENTIONS

This technique has been shown to reduce UI episodes up to 40 percent for elderly nursing home residents, regardless of their type of UI or cognitive deficit (provided that they at least are able to say their name or reliably point to one or two objects).
INTERVENTIONS

The focus is on teaching the incontinent resident to recognize bladder fullness or the need to void, ask for help, or respond when prompted to toilet.
INTERVENTIONS

Habit Training/Scheduled Voiding
This behavior technique calls for scheduled toileting at regular intervals on a planned basis to match the resident’s voiding habits.
INTERVENTIONS

There is no systematic effort to encourage the resident to delay voiding and resist urges. Intervals are based on the resident’s usual voiding schedule or pattern. Residents who cannot self-toilet may be candidates.
INTERVENTIONS

Intermittent Catheterization

Sterile insertion and removal of a catheter through the urethra every three to six hours for bladder drainage may be appropriate for the management of acute or chronic urinary retention.
INTERVENTIONS

Intermittent catheterization can often manage overflow incontinence effectively. Residents, who have new-onset incontinence from a transient, hypotonic/atonic bladder (usually seen following indwelling catheterization) may benefit from intermittent bladder catheterization until bladder tone returns (e.g., up to approximately seven days).
INTERVENTIONS

Medication Therapy
Medications can be used to treat specific types of incontinence including stress incontinence and those categories associated with an overactive bladder such as urge incontinence, urinary urgency, frequency, and nocturia.
INTERVENTIONS

The use of medication therapy to treat UI may not be appropriate for some residents because of adverse interactions such as anticholinergics with other medications or other co-morbid conditions like heart disease.
INTERVENTIONS

The risk and benefits of pharmacological therapies should be discussed with the resident and/or the responsible party so that an informed decision can be made.
INTERVENTIONS

Pessary

A pessary is an intravaginal device used to treat pelvic muscle relaxation or prolapse of pelvic organs. A stiff ring is inserted into the vagina where it presses against the wall of the vagina and the nearby urethra. The pressure helps reposition the urethra, leading to less stress leakage.
INTERVENTIONS

Women whose urine retention or UI is exacerbated by bladder or uterine prolapse may benefit from placement of a pessary. If a pessary is used, it is important to develop a plan of care for ongoing management for the prevention of and monitoring for complications.
INTERVENTIONS

Absorbant Products, Toileting Devices, and External Collection Devices

Absorbent products can be a useful way to manage incontinence. Products include perineal pads or panty liners for slight leakage, undergarments and protective underwear for moderate-to-heavy leakage, and guards and drip-collection pouches for heavy leakage.
Advantages of using absorbent products to manage incontinence include the ability to contain urine (some products wick the urine away from the skin), provide protection for clothing, and preserve the resident’s dignity and comfort.
INTERVENTIONS

The potential disadvantages of absorbent products are the impact on the resident’s dignity, cost, the association with skin breakdown and irritation, and the amount of time needed to check and change them.  

INTERVENTIONS

Residents using these products should be checked (and changed, as needed) on a schedule based upon the resident’s voiding pattern, accepted standards of practice, and manufacturer’s recommendations.
INTERVENTIONS

Skin-Related Complications
Skin problems associated with incontinence and moisture can range from irritation to increased risk of skin breakdown. Moisture may make the skin more susceptible to damage from friction and shear during repositioning.
INTERVENTIONS

One form of early skin breakdown is maceration or the softening of tissue by soaking. Macerated skin has a white appearance and a very soft, sometimes “soggy” texture.
One key to preventing skin breakdown is to keep the perineal skin clean and dry. Research has shown that a soap and water regimen alone may be less effective in preventing skin breakdown compared with moisture barriers and no-rinse incontinence cleansers.  

INTERVENTIONS

Recent research has shown that moisture barriers and no-rinse incontinence cleansers are effective in preventing skin breakdown. Moisturizers help preserve the moisture in the skin by either sealing in existing moisture or adding moisture to the skin. Moisturizers should be used sparingly on already macerated or excessively moist skin.
CATHETERIZATION

Indwelling catheters should be used primarily for short-term decompression of acute urinary retention. The facility is responsible for the assessment of the resident at risk for urinary catheterization and/or the ongoing assessment of the resident who currently has a catheter.
CATHETERIZATION

The interdisciplinary comprehensive assessment should address the following:

- Factors that predispose the resident to the development of UI and the use of an indwelling catheter

- Detection of reversible causes of UI and identification of individuals with UI caused by conditions that may not be reversible, such as bladder tumors and spinal cord diseases
CATHETERIZATION

- Underlying factors supporting the medical justification for the initiation and continuing need for catheter use
- Factors that can be modified or reversed (or rationale for why those factors should not be modified)
- Risks and benefits of an indwelling (suprapubic or urethral) catheter
CATHETERIZATION

- Complications associated with the use of an indwelling catheter, such as symptoms of blockage, catheter expulsion, pain, discomfort, and bleeding
- Development of a plan for removal, if medically possible
CATHETERIZATION

Once the comprehensive assessment is completed, it should be followed by implementation of appropriate individualized interventions. The interventions need to be monitored for effectiveness.
Indwelling Catheter Use

Appropriate indications for continuing use of an indwelling catheter beyond 14 days may include the following:

- Urinary retention that cannot be treated or corrected medically or surgically, for which alternative therapy is not feasible, and is characterized by:
  - Documented post-void residual (PVR) volumes in a range over 200ml
  - Inability to manage the retention/incontinence with intermittent catheterization
  - Persistent overflow incontinence, symptomatic infections, and/or renal dysfunction
CATHETERIZATION

- Contamination of Stage III or IV pressure ulcer(s) with urine, which has impeded healing, despite appropriate personal care for the incontinence

- Terminal illness or severe impairment which makes positioning or clothing changes uncomfortable or is associated with intractable pain
CATHETERIZATION

Catheter-Related Complications
An indwelling catheter may be associated with significant complications including bacteremia, febrile episodes, bladder stones, fistula formation, erosion of the urethra, epididymitis, chronic renal inflammation, and pyelonephritis.
CATHETERIZATION

In addition, indwelling catheters are prone to blockage. Risk factors for catheter blockage include alkaline urine, poor urine flow, proteinuria, and pre-existing bladder stones.
CATHETERIZATION

In the absence of evidence indicating blockage, catheters need not be changed routinely as long as monitoring is adequate. Based on the resident’s assessment, the catheter may need to be changed more or less often than every 30 days.
CATHETERIZATION

Some residents with indwelling catheters experience persistent leakage around the catheter. Factors that may contribute to leakage include:

- Irritation by a large balloon or by catheter materials
- Excessive catheter diameter
- Fecal impaction, and
- Improper catheter positioning
CATHETERIZATION

Because leakage around the catheter is frequently caused by bladder spasms, leakage should generally not be treated by using increasingly larger catheter sizes unless medically justified.
CATHETERIZATION

Current standards indicate that catheterization should be accomplished with the narrowest, softest tube that will serve the purpose of draining the bladder.
CATHETERIZATION

Additional care practices related to catheterization include the following:

- Educating the resident or responsible party on the risks and benefits of catheter use
- Recognizing and assessing for complications and their causes, and maintaining a record of any catheter-related problems
- Attempting to remove the catheter as soon as possible when no indications exist for its continuing use
CATHETERIZATION

- Monitoring for excessive post-void residual after removing a catheter that was inserted for obstruction or overflow incontinence
- Keeping the catheter anchored to prevent excessive tension on the catheter which can lead to urethral tears or dislodging of the catheter
- Securing the catheter to facilitate flow of urine
CATHETERIZATION

Research has shown that catheterization is an important, potentially modifiable, risk factor for urinary tract infection (UTI). By the 30th day of catheterization, bacteriuria is nearly universal.
CATHETERIZATION

The potential for complications can be reduced by employing the following preventive measures:

- Identifying specific clinical indications for the use of an indwelling catheter
- Assessing whether other treatments and services would appropriately address those conditions
Determining whether the resident is at risk for other possible complications that would result from the continuing use of the catheter, e.g., obstruction resulting from catheter encrustation, urethral erosion, bladder spasms, hematuria, and leakage around the catheter.
URINARY TRACT INFECTIONS

In this section, we will discuss the following:
- Catheter-related bacteriuria and UTI/urosepsis
- Clinical evidence that may suggest a UTI
- Indications to treat a UTI
- Follow-up of a UTI
URINARY TRACT INFECTIONS

Catheter-Related Bacteriuria and Uti/Urosepsis

Most individuals with indwelling catheters for more than seven days have bacteriuria. Bacteriuria alone in a catheterized individual should not be treated with antibiotics.
URINARY TRACT INFECTIONS

A long-term indwelling catheter (longer than two to four weeks) increases the chances of having a symptomatic UTI and urosepsis. For a suspected UTI in a catheterized individual, remove the current catheter, insert a new one and then obtain a urine sample via the newly inserted catheter.
URINARY TRACT INFECTIONS

Only symptomatic UTIs should be treated. Symptomatic UTIs are based on the following criteria (see also CFR 483.25(d) Interpretive Guidelines for clinical evidence that may suggest UTI):

- Fever (increase of temperature greater than two degrees F, or rectal temperature greater than 99.5 degrees F, or single measurement of temperature over 100 degrees F)
URINARY TRACT INFECTIONS

- New or increased burning pain on urination, frequency, or urgency
- New flank or suprapubic pain or tenderness
- Change in character of urine (e.g., bloody urine, foul smell, or amount of sediment), or as reported by the laboratory (new pyuria or microscopic hematuria) and/or
- Worsening of mental or functional status (e.g., confusion, decreased appetite, unexplained falls, incontinence of recent onset, lethargy, decreased activity)
URINARY TRACT INFECTIONS

Residents with a catheter should have at least two of the following signs and symptoms:

- Fever or chills
- New flank pain or suprapubic pain or tenderness
- Change in character of urine (e.g., bloody urine, foul smell, or amount of sediment) or as reported by the laboratory (new pyuria or microscopic hematuria)
URINARY TRACT INFECTIONS

- Worsening of mental or functional status
- Local findings such as obstruction, leakage, or mucosal trauma (hematuria) may also be present
Follow-Up of a UTI

Recurrent symptomatic UTIs in a catheterized or noncatheterized individual should lead the facility to check whether perineal hygiene is performed consistently to remove fecal soiling in accordance with accepted practices.
Recurrent UTIs in a catheterized individual should lead the facility to look for possible impairment of free urine flow through the catheter, to re-evaluate the techniques being used for perineal hygiene and catheter care, and to reconsider the relative risks and benefits of continuing the use of an indwelling catheter.
URINARY TRACT INFECTIONS

Because many factors exist that predispose individuals to bacteriuria, the facility should demonstrate that they:

- Employ standard infection control practices in managing catheters and associated drainage systems
- Strive to keep the resident and catheter clean of feces to minimize bacterial migration into the urethra and bladder (e.g., cleaning fecal material away from the urinary meatus)
URINARY TRACT INFECTIONS

➤ Take measures to maintain free urine flow through any indwelling catheter

➤ Assess for fluid need and implement a fluid-management program (using alternative approaches as needed) based on those assessed needs
SUMMARY

Urinary incontinence is a symptom of an underlying condition. UI is often temporary and treatable and is not inevitable with age. As we age, the bladder tends to shrink and decrease in elasticity which reduces bladder capacity and contributes to frequent urination.
SUMMARY
However, once the cause of UI is determined, several treatment options and management strategies are available to help the resident achieve the highest level of function.