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Urinary Incontinence and Indwelling Catheters:

CMS Guidance for Long-Term Care

Read this article and answer the questions on page 56 for 1 CE contact hour.

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Urinary incontinence (UI) has a major impact in long-term care facilities. It is the second-leading reason for placement of older adults into institutionalized care,[1] and it is the primary reason why many elderly persons are not accepted into assisted living facilities.[2,3] In long-term care facilities, it has been estimated that about 50% of the residents are urinary incontinent and that many who are continent at admission tend to become incontinent over time.[4] In 1 study of 430 newly admitted nursing home residents, 22% of women who were continent at admission were incontinent after 1 year.[5] The conversion rate in men was even higher (56%). The reasons for this increase involve cognitive and mobility impairment and adjustment to the nursing home environment.

In addition to staff, many nursing home residents believe UI is inevitable. Residents will utilize self-management strategies for urine leakage in order to protect social and psychological integrity, privacy, and dignity.[6] Not only does UI have a substantial social effect on residents, it also has associated morbidities, including urinary tract infections (UTI), pressure ulcers, and falls with subsequent injury.[2,7] In addition, caring for residents with UI adds considerably to the burden of nursing staff and can result in morale problems and increased staff turnover.[8] Because of these negative influences, the prevalence of UI is considered an indicator of the quality of care within long-term care facilities,[9] and several clinical practice guidelines have been developed by regulatory agencies and caregiver associations in an effort to improve the recognition, treatment, and outcomes of UI.[10,11]

In addition to UI, other bladder-related disorders like UTI are common in nursing home residents. The use of catheters to manage bladder disorders, such as UI and urinary retention, is a major problem in this setting. Historically, indwelling catheters have been used in the chronic, medically compromised elderly patient, and the prevalence of long-term catheter usage is the greatest in residents with UI residing in skilled nursing facilities (SNF). These devices increase mortality and morbidity in both men and women.[12,13] Urinary tract infections are very common in elderly persons, especially those living in nursing homes. At least 40% of all infections seen in nursing homes are in the urinary tract system; of these infections, 80% are due to urinary tract catheterization and instrumentation. UTI is of major importance because of its effect on outcomes and treatment costs. While many approaches have been used to minimize catheter-induced UTI, elimination of catheter usage remains the best method.

FEDERAL TAG 315

The Centers for Medicare and Medicaid Services (CMS) plans to issue new surveyor guidance for incontinence and urinary catheters. This new guidance collapses current Federal Tags 315 and 316 into 1 Tag, which will be Federal Tag 315 (Tag F315). The new guidance contains interpretive guidelines, a new investigative protocol, and compliance and severity guidance. The intent of this requirement is to ensure that:

- 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
- An indwelling catheter is not used unless there is valid medical justification and, if not medically justified, it is discontinued as soon as clinically warranted
- Services are provided to restore or improve normal bladder function to the extent possible after the removal of

Table 1. Transient Causes of Urinary Incontinence

Type	Causes
Delirium	Acute medical illness, such as myocardial infarction, cerebrovascular accident, sepsis, or infection can dull awareness of the urge sensation and lead to an inability or unwillingness to reach a toilet.
Urinary tract infection	Bacteria in the bladder can irritate bladder mucosa, creating bladder overactivity and frequency, leading to UI.
Atrophic vaginitis/urogenital atrophy	Thinning in the skin around the urethra and vagina from loss of the hormone estrogen can lead to complaints of burning, itching, frequency, and UI. Use of topical estrogen (eg, cream, tablets, or ring) can improve symptoms.
Bowel disorders, such as constipation and fecal impaction	Increased pressure on an already weakened bladder causes urinary frequency, urgency, and UI. Fecal impaction of hard feces accumulates in the rectum, putting pressure on the bladder, which causes UI, and can result in overflow fecal incontinence. Chronic straining with defecation and chronic constipation can result in loss of rectal tone, leading to fecal incontinence.
Multiple medications	Certain medications have secondary side effects that cause increased incidence of forgetfulness or confusion. Altering administration time or changing to different medication in the same classification may alleviate the problem.
Diuretics	Rapidly increase urine volume in the bladder and, in combination with decreased resistance in the urethra, can lead to urgency, frequency, and UI.
Adrenergics including antihypertensives	Relax the smooth muscle of the urethra, sphincter, or bladder neck, inducing stress incontinence.
Hypnotics, narcotics, analgesics, and sedatives	Dull or suppress cognitive and physical functioning, thereby decreasing the ability to delay bladder emptying and awareness of the urge to void. Nighttime incontinence is common. Altering dosage, time of administration, and type of drug may alleviate incontinence episodes.
Anticholinergics (antidepressants, antipsychotics, and antihistamines)	Cause incomplete bladder emptying through inhibition of the bladder muscle and weakness and disuse atrophy of pelvic floor muscles, leading to urinary retention with overflow UI. Also, these drugs cause constipation and fecal impaction.
Urinary retention	Obstruction (eg, from an enlarged prostate; hard, impacted stool) or certain medications, such as calcium channel blockers, can cause overflow incontinence.
Dehydration	Urine becomes concentrated, which in turn irritates the bladder wall, and can precipitate UI and urinary urgency and frequency.
Functional changes	Decrease in mobility due to surgery, illness, or physical restraints can interfere or limit ability to reach the toilet. Environmental considerations, such as bedside commode or urinal, and toileting a restrained resident can help avoid UI episodes.
Endocrine disorders	Hyperglycemia (diabetes) and hypercalcemia can cause increased urine output and a delay or lowered state of awareness of the urge sensation to void, contributing to UI.

Adapted from Newman DK. *Managing and Treating Urinary Incontinence.* Baltimore, Md: Health Professions Press; 2002 and Newman DK. Urinary incontinence. *Adv Nurs.* 2004;6(3):19–24.

the catheter
- A resident, with or without a catheter, receives the appropriate care and services to prevent infections to the extent possible.

Assessment of incontinence is the key component of this new guidance, and emphasis is placed on identifying the transient and persistent causes of UI (see Tables 1 and 2).

CRITERIA FOR COMPLIANCE

The guidance provides information for compliance to this regulation. Whether the resident is incontinent of urine on admission or develops incontinence after admission, the steps of assessment, monitoring, reviewing, and revising approaches to care (as needed) are essential to managing UI and restoring as much normal bladder function as possible.

For a resident with UI, the facility is in compliance with this requirement if it 1) recognized and assessed factors affecting the risk of symptomatic UTIs and impaired urinary function; 2) defined and implemented interventions to address correctable underlying causes of UI (see Table 1) and to try to minimize the occurrence of symptomatic UTIs; 3) monitored and evaluated the resident's response to preventive efforts and treatment interventions; and 4) revised the approaches as appropriate.

For a resident with an indwelling urinary catheter, the facility is in compliance if it has 1) recognized and assessed factors affecting the resident's urinary function and identified the medical justification for the use of an indwelling urinary catheter; 2) defined and implemented pertinent interventions to try to minimize complications from an indwelling urinary catheter and to remove it if clinically indicated; 3) monitored and evaluated the resident's response to interventions; and 4) revised the approaches as appropriate.

For a resident who has or has had a symptomatic UTI, the facility is in compliance with this requirement if it has 1) recognized and assessed factors affecting the risk of symptomatic UTIs and impaired urinary function; 2) defined and implemented interventions to try to minimize the occurrence of symptomatic UTIs and to address correctable underlying causes; 3) monitored and evaluated the resident's responses to preventive efforts and treatment interventions; and 4) revised the approaches as appropriate.

SURVEYOR STEPS

The guidance outlines areas that will be of importance during the survey process. The assessment, care plan, and orders identifying facility interventions will be scrutinized and corroborated through observations by interview and record review. The surveyor will determine if staff consistently implemented care plan interventions across various shifts and will note and/or follow up on deviations from the care plan or from current standards of practice as well as potential negative outcomes. Surveyors will determine if staff made appropriate resident accommodations for residents whose assessments indicate that a toileting program is most appropriate (eg, placing the call bell within reach, responding to the call bell, and maintaining a clear pathway and ready access to toilet facilities). Toileting programs will be scrutinized to determine if assistance (eg, prompting, transfer, stand-by assist to ambulate) is required for toileting and/or the resident is on a program to restore continence or a scheduled toileting program. Also, surveyors will check to see whether the patient is generally continent and observe whether assistance has been provided to try to prevent incontinence episodes. Many residents will not be candidates for toileting programs, and in those cases the facility will need to document its clinical assessment that notes the inability of the resident to participate in a program to restore continence or a scheduled toileting program as well as who requires care due to incontinence of urine. If the resident is on a scheduled check-and-change program, compliance will be met if the staff checks and changes the resident in a timely fashion. The care of the resident who has experienced an incontinent episode will be observed as part of the survey process. Areas of interest will include:
- Condition of the pads/sheets/clothing (eg, brown rings/circles, saturated linens/clothing, odors, etc.)
- The resident's physical condition (eg, skin integrity, maceration, erythema, erosion)
- Whether staff implemented appropriate hygiene measures (eg, cleansing, rinsing, drying, and applying protective moisture barriers or barrier films as indicated) to try to prevent skin breakdown from prolonged exposure of the skin to urine.

The guidance for Tag F315 also reviews care of the resident with an indwelling urinary catheter. The survey process will include use of appropriate infection control practices with regard to hand washing, care of the catheter tubing, and the collection bag. Of importance will be whether staff recognizes and assesses potential signs and symptoms of symptomatic UTI or other changes in urine condition (such as onset of bloody urine, cloudiness, oliguria, or deepening/concentrating urine color). The management and assessment of urinary leakage or bypassing of the catheter will be evaluated.

The guidance also provides nursing staff with "best practices" for catheter care to include anchoring the catheter. The avoidance of tugging on the catheter during transfer and care delivery is best to prevent inadvertent catheter removal or tissue injury from dislodging the catheter. The guidance also reviews the different types of absorbent incontinence pads and notes that product selection should be based on the resident assessment.

URINARY INCONTINENCE TREATMENT

The treatment for UI depends on the type of incontinence, its causes, and the capabilities and motivation of the resident. Options for managing UI in nursing home residents include primarily behavioral programs (see Table 3) and medication therapy. Other measures

Table 2. Common Causes of Persistent and Long-Term Urinary Incontinence

Type	Definition	Causes	Symptoms
Urge or overactive bladder	Involuntary and uninhibited bladder contractions (commonly referred to as overactive bladder) characterized by abrupt urgency, frequency, and nocturia (part of the overactive bladder diagnosis)	• Age-related, neurological (eg, stroke, diabetes, Parkinson's disease, multiple sclerosis), or other causes (eg, bladder infection, urethral irritation, etc.) • The resident can feel the need to void but is unable to inhibit voiding long enough to reach and sit on the commode • Most common cause of UI in elderly persons	• Sudden, intense urge to pass urine • Usually little warning time, so the patient is unable to delay or postpone voiding after sensation of bladder fullness (urge) is perceived • Moderate to large amounts (several milliliters) of leakage • Urine loss on way to bathroom • Timing of urine loss is unpredictable • Associated with other symptoms, such as frequency and nocturia
Stress	Urine leakage results from an increase in intra-abdominal pressure (physical exertion) on a bladder that is not over distended and is not the result of detrusor (bladder) contractions	• Urethral sphincter dysfunction due to relaxation and weakness of the pelvic floor muscles and reduction in urethral resistance (as women age, many develop intrinsic urethral sphincter dysfunction) • Second most common type of UI in older women	• Urine leakage in small amounts or drops occurs with physical activities or exercises (eg, coughing, sneezing, laughing, walking stairs, or lifting) or any action that increases intra-abdominal pressure
Mixed		• A combination of bladder and urethral dysfunction, causing stress and urge incontinence	• Combination of above symptoms
Overflow	Occurs when the bladder is distended from urine retention	• Urine retention may result from outlet obstruction (eg, benign prostatic hypertrophy, prostate cancer, and urethral stricture), hypotonic bladder (detrusor under activity) or both • Hypotonic bladder may be caused by outlet obstruction, impaired or absent contractility of the bladder (neurogenic bladder), or other causes • Neurogenic bladder may also result from neurological conditions, such as diabetes mellitus, spinal-cord injury, or pelvic nerve damage from surgery or radiation therapy	• Post void residual (PVR) volume (the amount of urine remaining in the bladder within 5–10 minutes following urination) exceeds 200mL (normal PVR is usually 50mL or less); a PVR of 150–200mL may suggest a need for retesting to determine if this finding is clinically significant • Interrupted urinary flow (start and stop voiding) • Post-void dribbling • Continual leakage of small amounts of urine
Functional	Refers to incontinence that is secondary to factors other than inherently abnormal urinary tract function	• Physical weakness or poor mobility/dexterity (eg, due to poor eyesight, arthritis, deconditioning, stroke, contracture), cognitive problems (eg, confusion, dementia, unwillingness to toilet), various medications (eg, anticholinergics, diuretics), or environmental impediments (eg, excessive distance of the resident from the toilet facilities, poor lighting, low chairs that are difficult to get out of, physical restraints and toilets that are difficult to access)	• Leakage of small amounts of urine when the bladder has reached its maximum capacity and has become distended

Adapted from Newman DK. *Managing and Treating Urinary Incontinence.* Baltimore, Md: Health Professions Press; 2002 and Newman DK. Urinary incontinence. *Adv Nurs.* 2004;6(3):19–24.

Table 3. Understanding Toileting Programs

Type	Key Elements	Considerations
Scheduled or timed toileting	Independent voiding or a program provided by the caregiver where toileting occurs on a fixed schedule at regular times	Other publications and most nursing home staff often report toileting schedules of every 2 hours. This frequent toileting schedule is unrealistic in most nursing homes because it requires high numbers of staff and consistent intensive efforts. It cannot be maintained over time. A more reasonable schedule would be timing voiding with activities.
Habit training	Based on a pattern observed in the bladder and bowel record, toileting interval is established, usually every 2–4 hours. In institutions like nursing homes, a typical toileting schedule may be determined around daily events.The following is an example of a toileting program that can be used by institutions or caregivers. Toileting occurs 8 times in a 24-hour period, or every 3 hours: • **Day:** Upon awakening, after breakfast, mid-morning, before lunch, and following an afternoon nap (mid-afternoon) • **Evening:** Before dinner and at bedtime • **Night:** Determine if the person wants to be awakened at night to void and identify times.	
Prompted voiding (usually used in nursing homes)	Prompted voiding is used with habit training and promotes active participation by the person in his or her toileting behavior. Prompted voiding is most successful in individuals who can ask for assistance or respond when prompted to void. The individual may have decreased cognitive ability to participate in a bladder retraining program. The major elements of prompted voiding are as follows: • **Monitoring:** Caregiver checks on a regular basis (use toileting schedule described in habit training), and person is asked to report verbally if wet or dry • **Prompted:** Person is asked if he or she needs to void, and staff assists with voiding • **Praising:** If the person has maintained the goal of dryness, he or she is praised.	• Ensure privacy during toileting • Toilet tissue and the call signal should be placed in easy reach • Helping the person to relax by offering a magazine to read is important to elimination • Do not rush the person; allow him or her to sit on the toilet, commode, or bedpan for about 15 minutes. A shorter time is too rushed, and more time defeats the purpose: getting the person to void at expanding intervals when placed on the proper receptacle.
Bladder Training	This promotes restoration of normal bladder function through education of urge inhibition techniques and requires person to be able and willing to participate in active rehabilitation and education techniques. The 3 primary components are as follows: 1. Education program that usually combines written, visual, and verbal instruction that addresses the physiology and pathophysiology of the lower urinary tract 2. Scheduled voiding with systematic delay of voiding that requires the ability to resist or inhibit the sensation of urgency to postpone voiding and to urinate according to a timetable rather than according to the urinary urge 3. Reinforcement through consistent encouragement and positive feedback.	• Teach patients to relax when the urge to void occurs by taking several slow, deep breaths until the bladder relaxes and urge sensation lessens • If the urge sensation diminishes and there is less urgency and pressure as the person attempts to go from sitting/lying to standing, a bladder contraction with subsequent leakage will not occur • Always have the person walk unhurriedly to the bathroom.

Adapted from Newman DK. *Managing and Treating Urinary Incontinence.* Baltimore, Md: Health Professions Press; 2002 and Newman DK. Urinary incontinence. *Adv Nurs.* 2004;6(3):19–24.

and supportive devices used in the management of UI and/or urinary retention may include intermittent catheterization, pelvic organ support devices (ie, pessaries), incontinence products, garments and an external collection system, and environmental accommodation and/or modification.

DEFICIENCY CATEGORIZATION

The key elements for severity determination for Tag F315 are as follows:

- Presence of harm/negative outcome(s) or potential for negative outcomes because of lack of appropriate treatment and care
- Actual or potential harm/negative outcome for Tag F315 may include the development, recurrence, persistence, or increasing frequency of UI, which is not the result of underlying clinical conditions; complications, such as urosepsis or urethral injury, related to the presence of an indwelling urinary catheter that is not clinically justified; significant changes in psychosocial functioning, such as isolation, withdrawal, or embarrassment, related to the presence of unassessed or unmanaged UI and/or a decline in continence, and/or the use of a urinary catheter without a clinically valid medical justification
- Complications like skin breakdown that are related to the failure to manage UI.

The guidance also notes that surveyors will be instructed to determine the degree of harm (actual or potential) related to the noncompliance. The survey team must evaluate the harm or potential for harm based upon levels of severity for Tag F315. These levels are detailed in the guidance.

CONCLUSION

The success of an incontinence care program hinges on nursing staff. The CMS guidance values "restoration of bladder function and continence" as a high quality-of-life goal for most nursing home residents. This guidance has a wealth of information about how to assess and manage residents with UI and provides resources for staff. Nursing staff will need to embrace this goal, as CMS will be watching. ■

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Learning Objectives: At the conclusion of this educational activity, the participants should be able to:

- Describe the CMS guidance for the assessment of residents with urinary incontinence (UI) and indwelling catheters
- Characterize the prevalence of UI in long-term care
- Identify components of assessment and evaluation of UI
- Illustrate procedures for toileting programs that can be implemented in this population.

Target Audience: Nurses

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CE Course #1

Urinary Incontinence and Indwelling Catheters: CMS Guidance

Choose the single best response to each question listed below.

1. CMS guidance to surveyors on urinary incontinence (UI) and indwelling catheters is targeting:
a) Deficient nursing practices in long-term care
b) Insurance coverage
c) Resident discharge procedures
d) Facility hiring practices

2. The focus of the CMS guidance on UI and indwelling catheters is to:
a) Identify those residents at risk for indwelling incontinence
b) Ensure assessment of bladder function
c) Improve bladder function
d) All of the above

3. The second leading cause for a person to be admitted to a nursing home is:
a) Heart disease
b) Dementia
c) Urinary incontinence
d) Diabetes

4. The step that is not part of a prompted voiding program is:
a) Catheterization
b) Checking for wetness
c) Praising the resident for continence
d) Prompting the person to void

5. Management of indwelling catheters includes:
a) Clamping of catheter before removal
b) Use of antibiotics to prevent infections
c) Anchoring of catheter to prevent urethral trauma
d) Frequent cleansing of the entry site with antiseptic to avoid migration of bacteria

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Please fill in your responses below to the questions:

1. ❑ a. ❑ b. ❑ c. ❑ d.
2. ❑ a. ❑ b. ❑ c. ❑ d.
3. ❑ a. ❑ b. ❑ c. ❑ d.
4. ❑ a. ❑ b. ❑ c. ❑ d.
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1 = Poor
2 = Satisfactory
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Now that you have participated in this activity, can you:

- Describe the CMS guidance for the assessment of residents with urinary incontinence (UI) and indwelling catheters
- Characterize the prevalence of UI in long-term care
- Identify components of assessment and evaluation of UI
- Illustrate procedures for toileting programs that can be implemented in this population?

Yes No

How will you use what you have learned from this activity?

_____
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