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Urinary Incontinence, Catheters, and Urinary Tract Infections: An Overview of CMS Tag F 315

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More than 65% of nursing home residents experience some type of urinary incontinence (UI). It is a leading cause of institutionalization second only to dementia.[1] In addition to UI, other bladder-related disorders such as urinary retention and urinary tract infection (UTI) are common in nursing home residents. In this environment, in addition to urinary incontinence, identified areas of concern include the use of indwelling catheters without medical necessity, poor perineal hygiene and care, inadequate indwelling urinary catheter care, repeated UTIs, lack of toileting or bladder rehabilitation programs, and the misuse of absorbent products. Not surprisingly, the Centers for Medicare and Medicaid Services (CMS) issued a surveyor guidance for incontinence and urinary catheters in June 2005, collapsing Tags F 315 and F 316 into one Tag, F 315.[2] This article discusses this new CMS regulation with attention to the three areas it addresses: UI, indwelling urinary catheters, and UTIs.

F 315 Guidance Requirements

The CMS surveyor guidance for incontinence and urinary catheters[2] expects long-term care facilities to have in place systems/procedures to ensure assessments are timely and appropriate interventions are defined, implemented, monitored, and revised as necessary in accordance with current standards of practice. F 315 places greater emphasis on treating UI from the time of admission — the resident should

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be evaluated at admission and whenever a change in cognition, physical ability, or urinary tract function occurs. The intent of the guidance document is to ensure that:

- Incontinent residents are identified, assessed, and provided appropriate treatment to maintain as much normal urinary function as possible
- Indwelling catheters are not used without medical justification; if not justified, they should be removed as soon as clinically warranted
- Residents receive the appropriate care to prevent urinary tract infections.

Changes in these conditions must be recognized, evaluated, reported to the medical director, and addressed.

Urinary Incontinence

Urinary incontinence has a major impact in long-term care facilities. It is the second leading reason for placement of older adults into institutionalized care[3] and the primary reason why many elderly are not accepted into the less expensive and less environmentally restrictive environment of assisted-living facilities.[4,5] In long-term care facilities, it has been estimated that 50% of the residents are incontinent of urine[6] and that many who are continent at admission tend to become incontinent over time.[7]

Despite this highly prevalent condition, basic knowledge about UI and its management are lacking among nursing home staff. Generally, staff are not performing assessments of residents with UI but rather move forward with management or containment of urine leakage without either determining the presence of confounding variables such as transient causes or understanding the underlying causation.[8]

The treatment for UI depends on incontinence type and cause (see Table 1 and Table 2), as well as the capabilities and motivation of the resident. Options for managing UI in nursing home residents primarily include behavioral programs (see Table 3) and medication therapy. Other measures and supportive devices used in the management of UI may include intermittent catheterization; pelvic organ support devices (pessaries); the use of incontinence products, garments, and external collection systems; and environmental accommodation and/or modification.[9]

Assessment of incontinence is the key component of the new CMS guidance and emphasizes identification of the transient cause, especially in a resident with new onset UI and persistent causes of UI. Assessment should include onset, duration, history, and previous treatment. The assessor should consider the side effects of medications. Clinical testing also should be part of the assessment process. Post-void residual (PVR) testing will determine the presence of incomplete bladder emptying.[4] Elevated PVR levels (>150 to 200 mL) can increase risk of urinary retention, UTI, or upper tract pathology such as pyelonepthritis.

Once the resident is assessed, a plan of care should be developed to optimize bladder function and to prevent the use of an indwelling catheter or UTI. The guidance outlines areas that will be of importance during the survey process. The assessment, care plan, and medical director's orders identifying facility interventions will be scrutinized and corroborated through observations by interview and record review. Surveyors will no longer accept a blanket plan for all residents. Each plan must be specific to the type of incontinence and include the rationale for a specific treatment plan or management system.

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 accommodations for residents whose assessment indicates 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 is required for toileting (eg, prompting, transfer, stand-by assist to ambulate) and/or the resident is on a program (ie, to restore

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continence or for scheduled toileting), is generally continent, or provided assistance to try to prevent incontinence episodes. Many residents will not be candidates for toileting programs; in those cases, the facility will need to document its clinical assessment, including the inability of the resident to participate in a program to restore continence or toilet on schedule and who therefore requires care due to incontinence of urine. If the resident is on a scheduled check-and-change program, guidance stipulations 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 include:

- Condition of the pads/sheets/clothing (brown rings/circles, saturated linens/clothing, odors, and the like)
- 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 also reviews the different types of absorbent incontinence pads and notes that product selection should be based on the resident assessment.

Indwelling Urinary Catheters

The use of urinary catheters to manage bladder disorders such as UI and urinary retention is a major problem in this setting.[10] Historically, indwelling catheters have been used in the chronic, medically compromised elderly patient; the prevalence of long-term catheter use is greatest in residents with UI residing in skilled nursing facilities.[11] These devices increase mortality and morbidity in both men and women.[10,12] At least 40% of all infections seen in nursing homes are in the urinary tract system and 80% are due to urinary tract catheterization and instrumentation.[13] While many approaches have been used to minimize catheter-induced UTI, elimination of catheter usage remains the best method.

The guidance for F 315 reviews care of the resident with an indwelling urinary catheter.[14] The survey process includes use of appropriate infection control practices with regard to hand washing, catheter care, tubing, and the collection bag. Staff recognition and assessment of potential signs and symptoms of symptomatic UTI or other changes in urine condition (such as onset of bloody urine, cloudiness, oliguria, deepening/concentrating urine color, if present) are important. The management and assessment of catheter leakage or "bypassing" of the catheter should be evaluated. The guidance also provides nursing staff with "best practices" for catheter care, which involves anchoring the catheter and not tugging on the catheter during transfer and care delivery to prevent inadvertent catheter removal or tissue injury from dislodging the catheter.

Urinary Tract Infections

Urinary tract infections are common in elderly persons, especially those living in nursing homes. Women are at higher risk for UTI because the female urethra is shorter than the male urethra and in closer proximity to the anus. The most common infecting organisms are *Enterobacteriaceae*, *Escherichia coli* (normal bacteria found in stool and most common in women), and *Proteus mirabilis* (most common in men). Bacteriuria, the presence of bacteria in the urine, is a common problem in the long-term care resident — at least 25% to 50% of women and 15% to 40% of men have significant bacteriuria.[15] Bacterial colonization of residents with chronic indwelling urinary (Foley) catheters approaches 100%, usually with two to five different organisms by the 30th day of catheterization.[16] Bacteriuria occurring without other infection in a resident with a urinary catheter should not be treated with antibiotics. A positive urine culture will show bacteriuria, but that alone is not enough to diagnose a symptomatic UTI. Indwelling catheters develop a biofilm on the interior of the catheters where the organisms reside and

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urine cultures in chronically catheterized residents reflect the bacteriology of the catheter biofilm, not the urine in the bladder.[17]

Signs and symptoms of a UTI may include acute deterioration of the patient. Multiple co-existing signs and symptoms such as fever with hematuria are more likely to have a urological source. In someone with nonspecific symptoms such as a change in function or mental status, bacteriuria alone does not necessarily warrant antibiotic treatment.[18] Although sepsis, including urosepsis, can cause dizziness or falling, no clear evidence links bacteriuria or a localized UTI to an increased fall risk. The F 315 guidance outlines the signs and symptoms to assess in a long-term care resident with and without a Foley catheter who is suspected of having a UTI (see Table 4).

No single lab test proves that a UTI is present. For example, a positive urine culture will show bacteriuria; again, that alone is not enough to diagnose a symptomatic UTI. However, several test results (urinalysis with a urine culture) in combination with clinical findings can help identify UTIs. To determine a UTI, a "clean catch" urine specimen can be obtained for a urinalysis and urine culture. The resident should be catheterized for a urine specimen only if he/she is unable to provide a clean-catch urine sample. If dipstick urinalysis is positive for nitrites (indicating bacteriuria), white blood cells (WBCs), and leukocyte esterase (an enzyme present in WBCs, indicating pyuria) and the resident shows signs and symptoms of a UTI, staff should send a urine specimen for urine culture. A negative leukocyte esterase or the absence of pyuria strongly suggests that a UTI is not present but a positive leukocyte esterase test in itself does not prove that the individual has a UTI. Urine culture and sensitivity (urine C&S) results of a single predominant pathogen are sufficient for the microbiological diagnosis of symptomatic UTI based on the following result: >1,000 or 10^3 (colony forming units) CFU/mL. The CMS guidance notes that recurrent UTIs (two or more in 6 months) in a non-catheterized resident warrant additional evaluation to determine abnormal PVR urine volume and possible referral to a urologist to rule out structural abnormalities (eg, enlarged prostate, periurethral abscess, urethral stricture, bladder calculi [stones], polyps, and tumors).[2]

Nursing staff should institute whatever measures necessary to prevent UTIs in vulnerable residents. Poor perineal hygiene has been identified as a source of UTIs especially in women and in residents with double incontinence (both UI and fecal incontinence). Table 5 provides "best practices" for preventing UTIs and is a helpful tool for staff.[2,12,19-22]

Conclusion

The CMS Tag F 315 lists specific criteria for determining facility compliance when caring for residents with UI and with catheters. Because UTIs are endemic in long-term care facilities, staff must institute measures to prevent their occurrence. F 315 notes the scope and severity of deficient practices and provides examples of possible negative outcomes. The CMS guidance values "restoration of bladder function and continence" as a high quality-of-life goal for most nursing home residents.

References:

1. Mason D, Newman DK, Palmer MH. Changing UI practice. AJN. 2003;103(suppl):2–3.
2. Center for Medicare and Medicaid Services (CMS). Survey and certification (S & C) group. Delay in effective date for revisions of appendix PP, state operations manual (SOM), surveyor guidance for Urinary Incontinence and Catheters (Tag F315). CMS S & C Publication No. S&C-05-23. Available at: www.cms.hhs.gov/medicaid/survey-cert/sc0523.pdf. Accessed March 1, 2006.
3. Fantl JA, Newman DK, Colling J, et al. Urinary Incontinence in Adults: Acute and Chronic Management Clinical Practice Guideline Number 2 (1996 Update). Rockville, Md: Agency for Health Care Policy and Research;1996.

4. Newman DK, Gaines T, Snare E. Innovation in bladder assessment: use of technology in extended care. J Gerontol Nurs. 2005;31(12):33–41.
5. Lekan-Rutledge D, Colling J. Urinary incontinence in the frail elderly. AJN. 2003;March(suppl):36–46.
6. American Medical Directors Association. Urinary Incontinence. Columbia, Md: American Medical Directors Association; 2005. Available at: www.amda.org. Accessed November 15, 2006.
7. Palmer MH, German PS, Ouslander JG. Risk factors for urinary incontinence one year after nursing home admission. Res Nurs Health. 1991;14:405–412.
8. Watson NM, Brink CA, Zimmer JG, Mayer RD. Use of the Agency for Health Care Policy and Research Urinary Incontinence guideline in nursing homes. JAGS. 2003;51(12):1779–1786.
9. Newman DK. Managing and Treating Urinary Incontinence. Baltimore, Md: Health Professions Press;2002.
10. Newman DK. Incontinence products and devices for the elderly. Urolog Nurs. 2004;24(4):316–334.
11. Nicolle LE. Catheter-related urinary tract infection. Drugs Aging. 2005;22(8):627–639.
12. Newman DK, Fader M, Bliss DZ. Managing incontinence using technology, devices and products. Nurs Res. 2004;53(6 suppl):S42–S48.
13. Warren JW. Catheter-associated urinary tract infections. Int J Antimicrob Agents. 2001;17:299–303.
14. Newman DK. Urinary incontinence and indwelling catheters: CMS guidance for long term care. ECPN. 2005;June:50–56.
15. Warren JW. Nosocomial urinary tract infections. In: Mandel, Bennett, Dolin, eds. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. Philadelphia, Pa: Elsevier;2005:3370–3381.
16. Kalsi J, Arya M, Wilson P, Mundy A. Hospital-acquired urinary tract infection. Int J Clin Pract. 2003;57 (5):388–391.
17. Morris NS, Stickler DJ, Mclean RJC. The development of bacterial biofilms on indwelling urethral catheters. World J Urol. 1999;17: 345–350.
18. O'Donnell JA, Hofmann MT. Urinary tract infections — how to manage with or without chronic catheterization. Geriatr. 2002;57(5)45,49–50,52,55–56,57.
19. Cottenden A, Bliss D, Fader M, et al. Management with continence products. In Abrams P, Cardozo L, Khoury, A, Wein A (eds). Incontinence. Proceedings from the 3rd International Consultation on Incontinence. Plymouth, UK: Health Publications;2005:149-253.
20. Newman DK, Preston AK, Salazar S, Sarshik S. (2007) Moisture control, urinary and fecal incontinence and perineal skin management. In: Krasner DL, Rodeheaver G, Kane D (eds). Chronic Wound Care: A Clinical Source Book for Healthcare Professionals, 4th Edition. Malvern, PA, HMP Communications;2007: In Press.
21. Newman DK. Managing and Treating Urinary Incontinence, 2nd Edition. Baltimore, Md: Health Professions Press;2007.
22. Widmer A. Replace hand washing with use of a waterless alcohol hand rub? Clin Infect Dis. 2000;31:136–143.

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