Section 26

Urinary Incontinence CAP

Problem

Urinary incontinence is the inability to control urine in a socially appropriate manner. In the United States, 15% of older adults living at home have a urinary incontinence problem. In long-term care facilities, over 50% of persons experience urinary incontinence either occasionally or on a regular basis. This problem is often cited as a factor in the decision to move from a home environment to an assisted living facility or a long-term care facility.

Although it frequently increases with age, urinary incontinence is not a normal part of the biological process of aging. Regrettably, it is often embarrassing and therefore not even mentioned to the health care provider. Discussing the problem openly with the person and family members is the first step in developing a successful plan of care.

Urinary incontinence causes many problems, including skin rashes, falls, isolation, pressure ulcers, and the potentially troubling use of indwelling catheters. Catheter use increases the risk of life-threatening infections. Use of catheters also contributes to discomfort and the needless use of medications that are often required for the treatment of the associated bladder spasms.

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Overall Goals of Care

- Recognize urinary incontinence and establish the cause.
- Expedite improvement in bladder function in those who could improve by instituting appropriate diagnostic and therapeutic interventions.
- Prevent increasing degrees of incontinence in persons who are already incontinent and may benefit from a treatment program.

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Urinary Incontinence CAP Trigger

The goal of this CAP is first to expedite improvement in bladder function in those who could so improve, and second, to prevent worsening of bladder function in persons who may have the ability to respond to a treatment program. The following rules indicate the two subgroups of persons triggered for specialized follow-up, as well as the two subgroups that are not targeted for follow-up.

TRIGGERED TO FACILITATE IMPROVEMENT IN BLADDER FUNCTION

Included in this group are persons who have **all** of the following characteristics:

- Have reoccurring episodes of incontinence (even if less than weekly) or no urine output.

- Have at least a minimal level of cognitive abilities (as indicated by being Independent or having Modified Independence in Cognitive Skills for Daily Decision Making).
- Not totally dependent or receiving extensive assistance in locomotion, and
- Have **either or both** of the following acute triggering criteria:
  - **Not** on a scheduled toileting program
  - One or more of the following indicators are present that suggest the person is in a fluctuating status, and thus his or her urinary incontinence may be of more recent onset, or subject to improvement:
    - Hip fracture
    - Recent decline in ADLs
    - Use of an indwelling catheter
    - Pneumonia
    - Diarrhea

This group includes about 5% of persons in long-term care facilities, 10% of persons receiving home care, and 2% of older adults living independently in the community. In a long-term care facility setting, about 22% of the persons triggered into this group will improve over a 90-day period. The rate of improvement in home care is about the same, at 16%. At the same time, however, some in this group will decline over 90 days; in long-term care facilities about 15% will decline and in home care about 10% will decline.

TRIGGERED TO PREVENT DECLINE — Higher Rate of Decline Expected

Included in this group are persons who have **all** of the following characteristics:

- Reoccurring episodes of incontinence (even if less than weekly) or no urine output.
- Independent to Moderately Impaired in Cognitive Skills for Daily Decision Making (thus they are not Severely Impaired).
- **Do not** meet the two **above** acute criteria under the Improvement Trigger (the scheduled toileting program and the fluctuating status criteria).

This group includes about 40% of persons in long-term care facilities, 24% of persons receiving home care, and 5% of older adults living independently in the community. In a long-term care facility setting, about 20% of the persons triggered into this group will decline over a 90-day period, while 10% will improve. The rate of decline in home care is about 10%, while the improvement rate is also about 10%.

NOT TRIGGERED — Continent

This group consists of those who are continent at the time of assessment.

This group includes about 35% of persons in long-term care facilities, 55% of persons receiving home care, and 92% of older adults living independently in the community. In a long-term care facility setting, about 13% of the persons triggered into this group will decline over a 90-day period. The rate of decline in home care is about 11%.

NOT TRIGGERED — Poor Decision Making

This group is assessed as Severely Impaired (or having no discernable consciousness) for Cognitive Skills for Daily Decision Making at the time of assessment.

This group includes about 15% of persons in long-term care facilities, 11% of persons receiving home care, and less than 1% of older adults living independently in the community. In a long-term care facility setting, about 26% of the persons triggered into this group will decline over a 90-day period, while 4% will improve. In home care the rate of decline is about 20%, while the improvement rate is about 8%.

Urinary Incontinence CAP Guidelines

Urinary incontinence is the inability to control urine in a socially appropriate manner, and for many this means the person cannot hold his or her urine until he or she reaches a toilet. There are multiple classifications of incontinence, the common causes being grouped into five general categories: stress, urge, mixed (stress and urge), overflow, and functional. There are a number of causes of each (see the following), and there are considerable differences between men and women in the likelihood of each type. To a great extent this reflects differences in the length of the urethra, the tube exiting the bladder, and in women who have experienced pregnancy or childbirth, changes in the anatomy of the pelvis. In addition, many older adults are incontinent because they simply cannot make it to the bathroom in time, for example, those who have limitations in ambulation because of arthritis or a stroke.

Types of Incontinence

Stress incontinence. Incontinence that occurs during coughing, sneezing, laughing, lifting heavy objects, or making other movements that put pressure or stress on the bladder. Leakage tends to be of small amounts of urine with the stimulus. In some reports this condition is the most common form of incontinence in women, resulting from weak pelvic muscles or a weakening of the wall between the bladder and the vagina. In women, the weakness is commonly due to pregnancy and childbirth or lower levels of the hormone estrogen during menstrual periods or after menopause. In men, stress incontinence may occur postprostatectomy. Often stress incontinence is eliminated or markedly reduced in frequency by

- Pelvic floor muscle rehabilitation, for which there is strong evidence of effectiveness for persons with stress incontinence. This should be the first line of treatment offered.
- Lifestyle counseling to encourage appropriate amounts of fluid, limited alcohol and caffeinated drinks, and weight loss for overweight persons.
- Medications may be prescribed by a physician to be used in combination with pelvic floor strengthening exercises, but the drugs may have side effects.
- Biofeedback, acupuncture, and electrical stimulation have been used in conjunction with pelvic floor reeducation programs with varying levels of effectiveness.
- Intravaginal devices, for example, pessaries

- Implants
- Surgery

Urge incontinence (also called overactive or spastic bladder). An unplanned loss of urine after feeling a sudden urge to urinate such as while sleeping, drinking water, or listening to water running. Leakage tends to be of significant amounts of urine with each episode. Treatments for urge incontinence include

- Biofeedback
- Timed voiding
- Bladder training
- Medications such as anticholinergics and antispasmotics to relax muscles and block nerve signals leading to bladder spasms

Mixed incontinence. Involuntary leakage associated with urgency and also with exertion, effort, sneezing, or coughing. The predominant condition, stress or urge incontinence, should be treated first.

Overflow incontinence. Incontinence that occurs when the bladder is constantly full and reaches a point where it overflows and leaks urine. This condition can occur when the urethra is blocked due to causes such as urinary stones, tumors, or an enlarged prostate. It may also be the result of weak bladder muscles, due to nerve damage from diabetes or other diseases. This is a common form of incontinence in men. Treatment may involve

- Timed voiding
- Bladder training
- Intermittent catheterization
- Medication such as those listed below have been prescribed by physicians to improve urine flow or shrink the prostate:
  - Alpha blockers are used to treat problems caused by prostate enlargement and bladder outlet obstruction.
  - Medications such as alpha reductase inhibitors have been prescribed to shrink an enlarged prostate.
- Surgery and radiation

Functional incontinence. A loss of urine in a person whose urinary tract function is such that he or she should be able to maintain continence, but who because of physical disabilities, external obstacles, or problems in thinking or communicating is unable to get to the bathroom before urinating. Eliminating or reducing the functional incontinence depends on identifying and treating the underlying problem. [See ADL CAP to improve mobility and transfers.]

Incontinence Assessment

There are multiple factors that cause or contribute to incontinence. Identifying and improving these factors can improve continence. It is important to be aware of risk factors for incontinence in order to raise the topic, as it is sometimes difficult for persons to discuss continence issues. Risk factors include age, childhood problems such as bedwetting, prostatectomy in men, and pregnancy and childbirth in women.

High Body Mass Index (BMI) is also a risk factor. Menopause is a contributing factor in women.

It is important to obtain a good history and description of the problem, with the goal of determining whether the incontinence is transient or established in character. The description can include information from standardized tests of function and symptoms, a urinary diary (detailing the times and amount of incontinence as well as the circumstances — for example, when coughing, and the amount of urine voided when the person does reach the bathroom), and stress tests such as coughing to see if they elicit incontinence.

Testing methods include the following:

- Physical exam (includes pelvic and rectal exams)
- Stress testing (for example, having a woman cough and see if there is leakage of urine)
- Observation of voiding or uroflometer (looking for stream size, hesitation, volume of urine)
- Urinalysis
- Urine culture
- Evaluation of postvoid residual urine is an important diagnostic parameter that should be considered in persons with complex histories.
- Cystoscopy
- Urodynamic evaluation

Modifiable factors contributing to transitory urinary incontinence are listed below, and they can be addressed to improve continence. Treatable underlying factors that should be routinely "ruled out" are presented under the acronym "DIAPPERS."

Delirium

Infection (UTI)

Atrophic vaginitis

Pharmaceuticals/Medications (of many types)

Psychological and psychiatric problems

Excessive urine output

Restricted mobility

Stool constipation/impaction

The following are potential underlying causes of incontinence that can be addressed to improve continence:

- **Delirium —** Identify cause of delirium, including recent hospitalizations as well as pharmaceutical agents. [See Delirium CAP.]
- **Infection (UTI) —** A symptomatic urinary tract infection (blood in urine, frequency of urination, urge, burning on urination, WBC elevation in urinalysis). Refer for further medical examination to include urinalysis, culture, and course of antibiotics.

- **Atrophic vaginitis —** These conditions in postmenopausal women often cause lower urinary tract symptoms. Use of appropriate creams or the use of an estrogen ring may be helpful.
- **Atrophic urethritis —** This condition leads to thinning of the lining of the urethra, causing local irritation and loss of the mucosal seal. Incontinence due to atrophic urethritis is often characterized by urgency and dysuria (painful urination).
- **Pharmaceuticals/Medications —** Medications may cause persons to have transient incontinence, but they may also be useful in improving incontinence. It is helpful to review the person's medications for potential effects on incontinence as well as to search the literature for new medications that may be helpful. Alcohol use and medication use are common causes of transient incontinence in older adults. [See Appropriate Medications CAP, as well as Tobacco and Alcohol CAP.]
  - Diuretics ("fluid pills" taken to reduce blood pressure, or for CHF) can lead to sudden onset of urge incontinence.
  - Anticholinergics can lead to overflow incontinence (these medications cause the bladder not to contract, the bladder becomes full, and urine leaks out).
  - Nighttime incontinence can be caused or exacerbated by heart failure, peripheral venous insufficiency, and medications. Before altering a person's medication, a physician must be contacted.
- **Psychological and psychiatric problems —** Severe depression. [See Mood CAP.]
  - Initial treatment focuses on depression.
- **Excessive urine output —** This condition can be caused by high fluid intake (including alcohol and caffeine). The person should be encouraged to adjust his or her fluid intake to produce a 24-hour urinary output of between 1,000 ml and 2,000 ml.
- **Restricted mobility —** This can prevent a person from reaching the toilet in time and may result from physical limitations, inability to get out of a bed or chair independently, impaired vision, fear of falling, or foot problems. [See ADL CAP for suggestions on improving mobility and Physical Activities Promotion CAP for suggestions on exercise.]
  - Consider environmental adaptations — for example, offering mobility aids, facilitating entry to the bathroom, placing a commode near the bed at night, and instituting an assisted toileting program.
- **Stool constipation/impaction —** Presence of constipation may lead to an impaction (a mass of hardened stool stuck in the intestinal tract). Presence of a fecal impaction may lead to pressure or stimulation of the bladder. Usually these persons have urge or overflow incontinence. Removing the impaction should restore continence.

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Appliances and Pads

Factors to Consider for Brief/Pad Use:

- Fit
- Cost
- Absorbency
- Gender of the user
- Activity level of the user (person mostly sits all day, or person walks around and changes position more frequently)
- Ability of the user to insert and remove brief/pad
- Ability of the user to clean/launder brief-type garments
- Ability of the user to handle disposable pad waste

What to Use:

- There is no one-size-fits-all brief/pad.
- It is best to try a small quantity of a few different types/brands of pads/briefs.
- Pads placed on chairs are not very useful for an active person. Also, they are very noticeable.

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Additional Resources

Balmforth JR, Mantle J, Bidmead J, Cardozo L. 2006. A prospective observational trial of pelvic floor muscle training for female stress urinary incontinence. *BJU Int.* (October) 98(4): 811–17.
European Association of Urology: www.uroweb.org.
National Institute for Health and Clinical Excellence. 2007. NICE Guideline 50, Urinary incontinence. National Collaborating Center for Acute Care, London, England. www.nice.org.uk
NAFC: National Association for Continence; www.nacf.org. 1-800-BLADDER; 1-800-252-3337
National Institutes of Health: www.nih.gov; including the AGE Pages: www.niapublications.org/shopagepages
SIGN: Scottish Incontinence Guidelines Network. Management of Urinary Incontinence in Primary Care. www.sign.ac.uk/pdf/sign79.pdf
Urinary incontinence: 2005. *Clinical Practice Guideline,* AMDA.
Wainner, RS. 2005. Urinary incontinence is no longer just your grandmother's concern. www.texpts.com/uplimg/UINotJustGrandmotherProblem.pdf

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