CHAPTER 6 – SECTION N

PERCENT OF RESIDENTS WITH A URINARY TRACT INFECTION

QM Description

This measure reflects the percent of long-term residents who had an infection in their urinary tract anytime during the 30 days before their most recent assessment.

Rationale for the Urinary Tract Infection QM

Urinary tract infections (UTIs) are one of the most common infections in the long-term care setting. Some urinary tract infections can be prevented by keeping the periurethral area clean, emptying the bladder regularly, and drinking enough fluid. Nursing home staff should make sure the resident has good hygiene. Finding the cause and getting early treatment of a UTI can prevent the infection from spreading and becoming more serious or causing complications like delirium. In addition, many residents are incorrectly diagnosed with UTI, thus leading to inappropriate use of antibiotics that can have adverse effects on the elderly as well as increase the presence of antibiotic resistant organisms. Criteria for ordering urine cultures and interpreting urine analyses and cultures can help improve the accuracy and reduce the number of UTIs in the nursing home setting. Additional clinical information about urinary tract infections, as well as quality improvement strategies, can be found on CMS’s website at www.MedQIC.org.

MDS Assessments Used

- **Target assessment**: OBRA Full (AA8a = 01, 02, 03, or 04) or Quarterly Assessment (AA8a = 05 or 10). Latest assessment with assessment reference date (A3a) within the 3-month target period. Note that admission assessments (AA8a =01) are excluded from measure calculations.

QM Specifications

**NUMERATOR**
Residents with urinary tract infection on the target assessment (I2J = checked).

**DENOMINATOR**
All residents with a valid target assessment after exclusions are applied.

**RISK ADJUSTMENT STRATEGIES USED**
Exclusions….Yes  Stratification….No  Regression….No
EXCLUSIONS
Residents satisfying any of the following conditions are excluded:
♦ The target assessment is an admission (AA8a = 01) assessment.
♦ I2j is missing on the target assessment.

COVARIATES USED IN REGRESSION
No covariates are used in the calculation of the UTI quality measure.

MDS Elements Related to QM
I2j Urinary Tract Infection – Includes chronic and acute symptomatic infection(s) in the last 30 days.
SECTION I. DISEASE DIAGNOSES

Intent: To code those diseases or infections which have a relationship to the resident’s current ADL status, cognitive status, mood or behavior status, medical treatments, nursing monitoring or risk of death. In general, these are conditions that drive the current care plan.

- The disease conditions in this section require a physician-documented diagnosis in the clinical record. It is good clinical practice to have the resident’s physician provide supporting documentation for any diagnosis.

- Do not include conditions that have been resolved or no longer affect the resident’s functioning or care plan. In many facilities, clinical staff and physicians neglect to update the list of resident’s “active” diagnoses. There may also be a tendency to continue old diagnoses that are either resolved or no longer relevant to the resident’s plan of care. One of the important functions of the MDS assessment is to generate an updated, accurate picture of the resident’s health status.

Check condition only if the resident’s condition meets the description in II.

Definition: **Nursing Monitoring** - Includes clinical monitoring by a licensed nurse (e.g., serial blood pressure evaluations, medication management, etc.)

II. Diseases (7-day look back)

Definition: **ENDOCRINE/METABOLIC/NUTRITIONAL**

a. Diabetes Mellitus - Includes insulin-dependent diabetes mellitus (IDDM) and diet-controlled diabetes mellitus (NIDDM or AODM).

b. Hyperthyroidism

c. Hypothyroidism

**HEART/CIRCULATION**

d. Arteriosclerotic Heart Disease (ASHD)

e. Cardiac Dysrhythmias - Disorder of heart rate or heart rhythm.

f. Congestive Heart Failure

g. Deep Vein Thrombosis

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I2. Infections (7-day look back)

Definition:

a. Antibiotic Resistant Infection (e.g., including but not limited to Methicillin Resistant Staphylococcus Aureus (MSRA), Methycillin Resistant Staphylococcus Aureus, and Vancomycin Resistant Enterococcus (VRE), and Extended Spectrum Beta-Lactamase Organisms) - An infection in which bacteria have developed a resistance to the effective actions of an antibiotic. Check this item only if there is supporting documentation in the clinical record (including transmittal records of new admissions and recent transfers from other institutions).

b. Clostridium Difficile (C. diff) - Diarrheal infection caused by the Clostridium difficile bacteria. Check this item only if there is supporting documentation in the clinical record of new admissions and recent transfers (e.g., hospital referral or discharge summary, laboratory report).

c. Conjunctivitis - Inflammation of the mucous membranes lining the eyelids. May be of bacterial, viral, allergic, or traumatic origin.

d. HIV Infection - Check this item only if there is supporting documentation or the resident (or surrogate decision-maker) informs you of the presence of a positive blood test result for the Human Immunodeficiency Virus or diagnosis of AIDS. If a state has a policy to omit transmission of HIV information, the State policy supercedes the MDS requirement.

e. Pneumonia - Inflammation of the lungs; most commonly of bacterial or viral origin.

f. Respiratory Infection - Any upper or lower acute respiratory infection other than pneumonia.

g. Septicemia - Morbid condition associated with bacterial growth in the blood. Septicemia can be indicated once a blood culture has been ordered and drawn. A physician’s working diagnosis of septicemia can be accepted, provided the physician has documented the septicemia diagnosis in the resident’s clinical record.

h. Sexually Transmitted Diseases - Check this item only if there is supporting documentation of a current diagnosis including but not limited to gonorrhea, or syphilis. DO NOT include HIV in this category. If a state has established statutory or regulatory privacy policies precluding transmission of sexually transmitted diseases information, the State policy supercedes the MDS requirement.

i. Tuberculosis - Includes residents with active tuberculosis or those who have converted to PPD positive tuberculin status and are currently receiving drug treatment (e.g., isoniazid (INH), ethambutol, rifampin, cycloserine) for tuberculosis.
j. Urinary Tract Infection - Includes chronic and acute symptomatic infection(s) in the last 30 days. Check this item only if there is current supporting documentation and significant laboratory findings in the clinical record. For a new UTI condition identified during the observation period, a physician’s working diagnosis of UTI provides sufficient documentation to code the UTI at Item 12j, as long as the urine culture has been done and you are waiting for results. The diagnosis of UTI, along with lab results when available, must be documented in the resident’s clinical record. However, if it is later determined that the UTI was not present, staff should complete a correction to remove the diagnosis from the MDS record.

In response to questions regarding the resident with colonized MRSA, we consulted with the Centers for Disease Control (CDC) who provided the following information:

A physician often prescribes empiric antimicrobial therapy for a suspected infection after a culture is obtained, but prior to receiving the culture results. The confirmed diagnosis of UTI will depend on the culture results and other clinical assessment to determine appropriateness and continuation of antimicrobial therapy. This should not be any different, even if the resident is known to be colonized with an antibiotic resistant organism. An appropriate culture will help to ensure the diagnosis of infection is correct, and the appropriate antimicrobial is prescribed to treat the infection. The CDC does not recommend routine antimicrobial treatment for the purposes of attempting to eradicate colonization of MRSA or any other antimicrobial resistant organism.

k. Viral Hepatitis - Inflammation of the liver of viral origin. This category includes diagnoses of hepatitis A, hepatitis B, hepatitis non-A non-B, hepatitis C, and hepatitis E.

l. Wound Infection - Infection of any type of wound (e.g., postoperative; traumatic; pressure) on any part of the body.

m. NONE OF ABOVE

Process: Consult transfer documentation and the resident’s clinical record (including current physician treatment orders and nursing care plans). Accept statements by the resident that seem to have clinical validity. Consult with physician for confirmation. A physician diagnosis is required to code the MDS.

Physician involvement in this part of the assessment process is crucial.

Coding: Check an item only if the infection has a relationship to current ADL status, cognitive status, mood and behavior status, medical treatment, nursing monitoring, or risk of death. Do not record any conditions that have been resolved and no longer affect the resident’s functional status or care plan. For example, do not check “tuberculosis” if the resident had TB several years ago.
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unless the TB is either currently being controlled with medications or is being regularly monitored to detect a recurrence.

Check all that apply. If none of the conditions apply, check NONE OF ABOVE. If you have more detailed information available in the clinical record for a more definitive diagnosis, check the appropriate box in I2 and enter the more detailed information (with ICD-9-CM code) under I3.

13. Other Current Diagnoses and ICD-9-CM Codes (7-day look back)

**Intent:** To identify additional conditions not listed in Item I1 and I2 that affect the resident’s current ADL status, mood and behavioral status, medical treatments, nursing monitoring, or risk of death. If space permits, may also be used to record more specific designations for general disease categories listed under I1 and I2.

**Coding:** Enter the description of the diagnoses on the lines provided. For each diagnosis, an ICD-9-CM code must be entered in the boxes to the right of the line. If this information is not available in the medical records, consult the most recent version of the full set of volumes of ICD-9-CM codes. V codes may be used if they affect the resident’s current ADL status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.