

ANTIBIOTIC STEWARDSHIP



A CLINICAL AND REGULATORY UPDATE FROM REMEDI SENIORCARE

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Survey Solutions

with William Vaughan, BSN, RN VP of Education & Clinical Affairs

Use the Focus on Antibiotics to Sharpen Your OAPI Skills

As mandated by the Affordable Care Act, in July of 2015, CMS published proposed regulations regarding quality assurance and performance improvement (QAPI). CMS is currently reviewing public comments prompted by these regulations, but it's safe to assume that they will eventually become part of the nursing home regulatory landscape. And while the specific language of the regulations may change, the guiding principles behind them likely will not.

One component of the proposed regulations would require facilities to conduct at least one performance improvement project annually. Such a project would focus on a "high risk or problem prone area." In the January 2016 issue of *The Pulse*, we describe evolving clinical and regulatory concerns surrounding the administration of antibiotics in long-term care. Clearly, antibiotic use would qualify as a problem prone area in most nursing homes. So, below we take a look at how using the QAPI process such an issue could be addressed:

 DATA: At its core, QAPI is a data driven process. Vendors, such as pharmacies and laboratories, can provide robust and reliable data to examine how infections are identified and addressed. They may also be able to give comparative data on how an individual nursing home ranks against other facilities they serve in areas such as: antibiotic prescribing rates, class of antibiotic use, duration of therapy, and culture rates. Such data can cer-

tainly shed light on clinical practices, but may provide valuable financial insights, as well. Another important source of data is found in a facility's closed medical records. Routinely reviewing the records of residents, who were hospitalized or have ex-

pired, can increase the likelihood of identifying problems with antibiotic use. (Not surprisingly, as FOR MORE INFORMATION RemediRx.com

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Please do not hesitate to contact your Remedi Consultant Pharmacist or Account Manager if you have any questions or concerns.

One component of the proposed regulations would require facilities to conduct at least one performance improvement project annually.

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Urinary Tract Infections: A Clean Catch 22: Part I

Erin M. Foti, PharmD, CGP, Lead Consultant Pharmacist, Midwest Region

Urinary Tract infections (UTIs) account for up to 20% of healthcare acquired infections in long-term care facilities (LTCF).1 The purpose of this article is to discuss assessment, diagnosis, and treatment of UTIs in LTCF. Risk factors for developing a UTI include age related changes to the genitourinary tract, bladder or uterine prolapse, which may cause incomplete bladder emptying. In men, an enlarged prostate gland can also lead to incomplete voiding. UTIs are more common in females, since in females the urethra is in closer proximity to the anus and vagina, making it easier for bacteria to enter the genitourinary system. Obstructions and foreign instrumentation, such as kidney stones and catheters, may also increase the risk of a UTI. Diabetes Mellitus is a risk factor if someone is losing large amounts of glucose in their urine. UTIs can affect any part of the urinary tract. A UTI in the lower section is known as cystitis or a bladder infection, and a UTI in the upper section is pyelonephritis or a kidney infection. Classic signs and symptoms of a UTI include painful urination, polyuria, malodourous urine, and flank pain, or fever being more common with an upper UTI. In the geriatric population, these symptoms are vague and may become difficult to communicate to healthcare staff, especially for the cognitively impaired individual. Behavioral changes or changes in mental status are often seen and provoke staff to investigate a UTI as an underlying cause. The most common offending bacteria is Escherichia Coli, accounting for up to 80% of all infections.²

A UTI is deemed a facility acquired event, if the UTI presents after more than two calendar days from admission. If the UTI appears within two days of admission, it is considered a hospital acquired infection and should be recorded as such on the MDS. For LTCF reporting their UTI data, according to the CDC, at least six months of data is required to provide meaningful measures. Tracking data can help detect overtreatment of asymptomatic UTI, overtreatment of colonizations of bacteria, either from catheterization or a living environment with increased bacteria, and the subsequent increased antibiotic resistance and emergence of "super bugs."

TIMING

When do we order the urine analysis and treat the suspected UTI? At first change in behavior? When a resident's urine is a little bit darker than normal? The McGreer Criteria, named for the author (1991), help healthcare professionals determine if a urine analysis should be performed. According to this criteria, the resident needs to exhibit at least one of the following signs or symptoms:

- Acute dysuria or acute pain, swelling, or tenderness of testes, epididymis, or prostate
- Fever or leukocytosis and at least one of the following subcriteria
 - » Acute costovertebral angle pain or tenderness
 - » Suprapubic pain
 - » Gross hematuria
 - » New or marked increase in incontinence
 - » New or marked increase in urgency
 - » New or marked increase in frequency
- In the absence of fever or leukocytosis, then at least TWO of the above subcriteria need to be present.³

Resident pain management and hydration status should be evaluated, as well.

Another useful approach can be found on the Interact (Interventions to Reduce Acute Care Transfers) website. An algorithm takes healthcare workers on a care path based on UTI symptoms and management that includes symptom identification, evaluation of vital signs, consideration of whether or not to contact the prescriber, managing the UTI in the facility, and monitoring results.⁴

Once the criteria are met and communicated to the physician, he/she will either order a urine dipstick or a clean catch urine sample. A clean catch urine sample must be done appropriately *continued on next page*

Resources for Antibiotic Stewardship:

We have assembled this list of resources for you and your staff to reference. You will find more detailed information that may prove to be quite useful at your organization. If you prefer a link to these sites, please visit our website - <u>RemediRx.com/news-events/news/</u> for this issue of the *Remedi Pulse*.

- 1. Advancing Excellence: Infections/C.Difficile Tracking https://www.nhqualitycampaign.org/goalDetail.aspx?g=inf#tab1
- 2. AHA Antimicrobial Stewardship Program http://www.ahaphysicianforum.org/resources/appropriate-use/antimicrobial/index.shtml
- 3. AHRQ Toolkit for Reduction of Clostridium difficile Infections Through Antimicrobial Stewardship http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/cdifftoolkit/index.html
- 4. AMDA "Choose Wisely" Program https://www.amda.com/tools/choosingwisely.cfm
- 5. Association for Professionals In Infection Control and Epidemiology: Antimicrobial Stewardship http://www.apic.org/Professional-Practice/Practice-Resources/Antimicrobial-Stewardship
- 6. CDC Antibiotic Stewardship for Long Term Care http://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html
- 7. CDC Antibiotic Stewardship for Long Term Care- Core Elements Checklist http://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html

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in order to not contaminate the sample. If obtaining a sample from an individual with a catheter, a new catheter should be placed, and the sample taken from the new catheter. Proper universal infection control procedures should be executed with hand washing and use of gloves. Prior to voiding, the area should be cleaned with sterile wipes. The bladder should contain urine that has been inside for at least 2-3 hours, as that is how long it takes for bacteria to populate. The individual should void urine for a small amount into the toilet, then stop urination and place the collection cup to continue collecting until it is at least half full. If this procedure is followed appropriately, contamination should not occur.⁵

When the urine analysis is back from the laboratory, it should be reviewed by the prescriber to determine if further action is warranted with antibiotic medication management.

References

¹www.cdc.gov ²www.clevelandclinic.org ³www.infectioncontrolct.org ⁴https://interact2.net/about.html ⁵https://www.nlm.nih.gov/medlineplus/ency/article/007487.htm

Nurse of the Month

DONNA STEDRONSKY, LPN The Normandy Care Center, Rocky River, OH

CONGRATULATIONS to Donna Stedronsky, LPN, at The Normandy Care Center, Rocky River, OH for being chosen the Remedi "Nurse of the Month." Donna has been a nurse for more than 30 years and was nominated by her administrator, Matthew Shula, LNHA. Per Matthew, "Donna has been at The Normandy for more than 15 years and her clinical experience and skills are very sound. She manages a long-term care unit that is usually fully occupied with 26 residents. Donna creates a great teamwork atmosphere as she leads by example with answering call lights, assisting in the dining rooms, and assisting with hoyer transfers. Her unit can be one of the most difficult areas in the facility and



her priority is to assure that the needs of the

residents are being met. Donna is a very compassionate person and loves spending time with her residents. She is not one who seeks recognition, but comes to work each day and provides great care and customer service. Donna is a wonderful asset to this facility and deserves much recognition."

The Remedi "Nurse of the Month" exemplifies excellence in nursing practice. Email your Nurse of the Month nomination(s) to <u>Rebecca.Ogden@RemediRx.com</u>. Nurses Rock!!

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- a surveyor, I found a disproportionate number of actual harm deficiencies in closed records when compared to those of active residents.) Regarding antibiotics, data should be carefully examined to determine if 1) a resident's clinical presentation justified their use, 2) the drug administered provided reasonable coverage while minimizing the risk of related adverse events, and 3) the duration of therapy was appropriate.
- RESIDENT / SURROGATE / STAFF INPUT: It really does "take a village" for a QAPI program to be effective. Fundamentals, such as knowing a resident's goals of care, are pivotal in decisions regarding antibiotics. Having a culture where observations and concerns regarding residents, voiced by non-clinicians (e.g., maintenance and administrative staff, volunteers), are investigated can promptly identify an evolving infection. And lastly, leadership that creates an environment where staff is encouraged to challenge long-standing clinical practices, such as those related to antibiotic use, assure that QAPI activities, are truly on-going and outcome oriented.
- FEEDBACK: Identifying and putting in place interventions to address antibiotic misuse is important, but so is a system which evaluates the overall effectiveness of such interventions. Employing the same sources of data originally used to define the issues related to antibiotic use is a good starting point. But given that prescribing habits may be slow to change, facilities need to set realistic thresholds for improvement, as well as establish reasonable timeframes in which to evaluate their efforts.

Interestingly, while compliance with federal regulations is usually an all or nothing proposition (i.e., either a deficiency is written or it isn't), QAPI is more of a journey where facilities advance towards excellence. It's therefore possible that a facility, which self-identifies issues related to antibiotic use and has a solid process to address them, could be found in compliance with the forthcoming QAPI regulations, but still be deficient under F329 (Unnecessary Drugs). Only time will tell how CMS will handle this conundrum, but regardless of the regulatory outcomes, facilities owe it to their residents to manage antibiotics in the safest, most effective way possible.

Note: Bill was a surveyor with the Maryland State Survey Agency from 1988 until 2001. He became Chief Nurse of the agency in 2001 and remained in that position until joining Remedi SeniorCare in 2013.