

MDS Alert

In The Spotlight: Combo Of Assessment, Interventions And 'Wait And See' Reins In Inaccurate UTI Dx And Rx

Check out this protocol for residents with one potential symptom of UTI.

Looking to drive down your UTI QI/QM and antibiotic use, improve the facility's quality of care and bottom line? That may sound like a tall order, but using a simple protocol did the trick for this nursing facility.

Saint Elizabeth Home in East Greenwich, RI, uses a three-day protocol for residents who show one potential symptom of a UTI, such as urgency or frequency, a change in mental status, complaints of burning on urination, cloudy urine, fever or pain, reports **Janelle Hackett, RN**, who was involved in implementing the protocol along with administrator **Matthew Trimble, CNHA**, and **Andrea Smith, RNC**.

Tailor Interventions to Assessment

The protocol includes additional assessment and interventions targeting the resident's single symptom. As a first step, the care staff obtains additional information from the resident and/or caregiver about the resident's symptom.

Example: If a female resident complains of burning upon urination, the staff checks her perineum. They also check how the resident performs her peri-care or how CNAs are doing it.

"We educate the resident about toilet hygiene," reminding the person to wipe from front to back, Hackett explains. If the person has cloudy urine or urine that has a strong odor, the care staff pushes fluids up to 1,500 cc a day. All residents are encouraged to drink at least that much, Hackett says. But the staff found that some cognitively intact residents would say they were drinking fluids when they were actually restricting fluid intake due to fear of toileting accidents, Hackett reports.

Smart strategy: "We make sure residents have a bathroom accessible to them at activities. We also provide personal wipes in all the bathrooms for residents who do their own toileting hygiene," she relays.

If pain in the pelvis or lower back is the single symptom, the staff asks the resident to describe it exactly. After a careful assessment, the team may realize the person has arthritic back pain that's relieved by a heating pad -- not lower back pain related to a kidney infection. In fact, pain very rarely turns out to be UTI, says Hackett. When a resident has a mental status change as an initial symptom, staff carefully investigates the cause. For example, did the resident start a new medication in the past week or two?

"Sometimes we realize that the person is wandering in the dining room because we changed her seat -- or the resident's family has had some emotional crisis that's affecting the resident," Hackett says.

The care team may ask the social worker to do a mini-mental exam and compare that to the one before. "The person may have a physical condition, such as early congestive heart failure or pneumonia, causing the change in mental status or behavior," Hackett says.

Single Sx Usually Disappears

The staff keeps the person on the protocol and monitors the person for three days to see if he develops another symptom. "If another symptoms pops up in the three days, such as a mental status change, we immediately call the doctor and obtain an order for UA and culture and sensitivity," Hackett says.

"A lot of times the second symptom that occurs on the protocol is mental status change," Hackett adds. The resident may just act differently or have a little confusion. "Usually, if that happens, a third symptom occurs quickly, such as fever or sometimes incontinence or changes in the urine."

The usual outcome: Rather than a resident developing a second symptom of UTI, the resident's initial symptom usually disappears by day four, says Hackett. If the person still has the single symptom of UTI by then, the physician or nurse practitioner would order a UA and C&S.

Saint Elizabeth Home's experience mirrors that of **Susan Levy, MD, CMD**, a medical director in Baltimore, who often finds that a resident's clinical issue, such as mental status change, has resolved without antibiotic therapy by the time lab results for UTI come back (see the article on p. 62).

Reduce Antibiotic Use and the Facility's UTI QI/QM

Saint Elizabeth Home's protocol has reined in antibiotic use, which, in turn, helps reduce antibiotic resistance and negative outcomes, such as an increased risk of *Clostridium difficile*, Hackett reports.

Accomplishing that feat, however, required provider education.

Before the protocol went into effect, the physicians or nurse practitioners would sometimes immediately order lab testing and start a resident on antibiotics when he had a single symptom, such as mental status change. "Then the tests would come back negative," says Hackett. "Or even if the culture was positive, the antibiotic might not have been the correct choice."

Now the facility even puts residents with recurrent UTI on the protocol if they have a single symptom, just in case this time they aren't developing a UTI, Hackett adds.

Water trumped cranberry juice: The facility tried giving residents with recurrent UTI cranberry juice, but most of them didn't like it. Staff even tried serving the juice in fancy glasses or making smoothies to disguise the juice, Hackett says. But "we find that good old-fashioned water is best" for hydrating people on the protocol.

The protocol for evaluating UTI symptoms has also reduced lab utilization by focusing testing on residents who really require it -- and ensuring testing adds something to the diagnostic picture.

For example, initially, staff were doing urine dipsticks at day three to detect infection in those on the protocol, but that didn't seem to help, Hackett says. "And the dipsticks were pretty expensive."

Proof in the QI/QM statistics: The facility measures its UTIs every month and finds its numbers have dropped to the bottom percentile, Hackett reports.

"We had a dramatic decline right after we started using the protocol, and we continue to have low numbers of UTIs."

Editor's note: Review the facility's UTI protocol assessment form on the next page. Saint Elizabeth Home presented findings from a pilot study testing the protocol at the **American Association of Homes & Services for the Aging** annual conference in 2005. In addition, Hackett, Trimble, Smith and **James Wiggins, LPN**, co-authored an article on the pilot study published in the July 2006 Extended Care Product News.