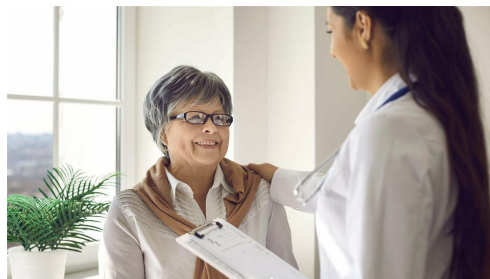


How advanced testing for UTIs can inform improved treatment for patients



(BPT) - If you've ever experienced a urinary tract infection (UTI), you know how uncomfortable it can be. Symptoms like pain or burning with urination, along with a frequent urge to go to the bathroom, can really disrupt your daily life. According to the [National Institutes of Health](#), over 40-60% of women have a UTI at least once in their lives, with 10% of women experiencing them yearly — and nearly half of those with infections get a

second one within a year.

When you have these recurring symptoms, the main thing you want is to treat them quickly, and to reduce recurrence. Unfortunately, standard methods for diagnosing UTIs have limitations, which may delay effective treatment or lead to your doctor prescribing a less effective antibiotic to address your particular infection.

The challenges in diagnosing and treating UTIs

The current standard for UTI diagnosis is through urinalysis and standard urine culture (SUC). However, SUC has many shortcomings, including failure to detect bacteria that may be causing a UTI. One study found that SUC missed 50% of all detected uropathogens in patients with severe urinary tract symptoms.¹

In addition, SUC can take up to 3-5 days, often causing providers to treat patients with antibiotics without first determining the individual bacteria that contribute to the UTI, or which antibiotics those individual bacteria are sensitive or resistant to. This means you may be treated with an antibiotic that won't be effective in eliminating the specific cause of your infection, so the treatment doesn't resolve the infection completely, and your infection may persist or recur.

Having an infection with more than one bacteria present is also common. A standard urine culture will often cite this finding as "contaminated" or as "mixed flora," providing no additional information on the organisms detected — or antibiotic sensitivity results to help guide specific treatment.

Improved antibiotic prescribing and usage is critical to effectively treat infections, to protect patients from adverse effects caused by unnecessary antibiotic use — and combat antibiotic resistance. In cases of recurrent and complicated UTIs, especially when initial antibiotic use may have failed, personalized therapy options can make all the difference in a patient's treatment results.

UTI testing tailored for patients' needs

Fortunately, newer technologies have been developed to improve the diagnosis of UTIs. Some of these tests include PCR technology, which is used in clinical settings for sexually transmitted diseases, respiratory illness and COVID-19 testing. When combined with unique antibiotic sensitivity testing methods, this new class of advanced testing provides helpful information to address the shortcomings of standard urine culture testing.

To help improve testing and diagnosis, [Guidance UTI](#) is 43% more sensitive than standard urine culture, helping to ensure more accurate diagnoses. This is vital particularly for those with recurrent, persistent and complicated UTIs or who have elevated risks. This testing process uses PCR technology to identify commonly tested uropathogens,

including many that are difficult to detect by standard urine culture. Guidance UTI detects 27 individual organisms (bacteria and yeast) and three bacterial groups known to be associated with UTIs. Not an at-home test, this advanced diagnostic testing is chosen by physicians to provide personalized results in less than one day from receipt at a lab to help identify the right treatment for each patient faster.

This is also the only test that combines PCR testing with Pooled Antibiotic Susceptibility Testing (P-AST), a unique technology that accounts for bacterial interactions that occur in polymicrobial infections (those with more than one bacteria present), which can impact antibiotic resistance. Together, PCR and P-AST technologies provide more detailed and accurate information to health care providers, to help provide personalized therapy options that result in better treatment.

"When you have UTI symptoms, timely, accurate testing is crucial for quicker, more effective treatment to relieve those symptoms and eradicate their cause," said board-certified urogynecologist and female pelvic medicine and reconstructive surgeon Dr. Terri-Ann Samuels. "With this advanced UTI testing that is now available, we can much more accurately pinpoint the cause or causes of a patient's UTI, helping us identify the best possible treatment plan for that particular patient."

If you are experiencing UTI symptoms, visit [Pathnostics.com](https://www.pathnostics.com) to learn more, and ask your doctor about Guidance UTI.

Reference:

1. Price, T. K. et al. The Clinical Urine Culture: Enhanced Techniques Improve Detection of Clinically Relevant Microorganisms. *Journal of Clinical Microbiology* 54, 1216–1222 (2016).