Anthem

Clinical UM Guideline

Subject: Outpatient Urine Culture
Guideline #: CG-LAB-24
Status: Reviewed

Publish Date: 01/03/2024
Last Review Date: 11/09/2023

Description

This document addresses outpatient urine culture testing for bacteria.

Clinical Indications

Medically Necessary:

Outpatient urine culture testing for bacteria is considered **medically necessary** to evaluate any of the following situations:

1. Clinical signs or symptoms suggesting urinary tract infection (UTI); **or**
2. Abnormal urinalysis suggesting UTI; **or**
3. Asymptomatic bacteriuria in pregnant persons; **or**
4. Bacteriuria in individuals prior to undergoing an endoscopic urologic procedure; **or**
5. Suspected interstitial cystitis or bladder pain syndrome.

Not Medically Necessary:

Outpatient urine culture testing for bacteria is considered **not medically necessary** when the above criteria are not met and for all other situations.

Coding

The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services are Medically Necessary:

CPT	
87086	Culture, bacterial; quantitative colony count, urine
87088	Culture, bacterial; with isolation and presumptive identification of each isolate, urine

ICD-10 Diagnosis	
A02.1	Salmonella sepsis
A02.25	Salmonella pyelonephritis
A18.11-A18.14	Tuberculosis of kidney/ureter/bladder/other urinary organs/prostate
A34	Obstetrical tetanus
A40.0-A41.9	Streptococcal sepsis, other sepsis
A42.7	Actinomycotic sepsis
A56.00-A56.2	Chlamydial infection of genitourinary tract
C61	Malignant neoplasm of prostate
C64.1-C68.9	Malignant neoplasms of urinary tract
D29.1	Benign neoplasm of prostate
D30.00-D30.9	Benign neoplasm of urinary organs
D40.0	Neoplasm of uncertain behavior of prostate
D41.00-D41.9	Neoplasm of uncertain behavior of urinary organs
D49.4-D49.59	Neoplasm of unspecified behavior of bladder/other genitourinary organs
D65	Disseminated intravascular coagulation [defibrination syndrome]
D70.0-D70.9	Neutropenia
D72.89	Other specified disorders of white cells
E08.21-E08.29	Diabetes mellitus due to underlying condition with kidney complications
E09.21-E09.29	Drug or chemical induced diabetes mellitus with kidney complications
E10.10-E10.29	Type 1 diabetes mellitus with ketoacidosis, kidney complications
E11.10-E11.29	Type 2 diabetes mellitus with ketoacidosis, kidney complications
E13.21-E13.29	Other specified diabetes mellitus with kidney complications
E87.20-E87.29	Acidosis
E87.4	Mixed disorder of acid-base balance
F45.8	Other somatoform disorders (related to urinary conditions)
G93.31-G93.39	Postviral and related fatigue syndromes
I50.1-I50.9	Heart failure
I5A	Non-ischemic myocardial injury (non-traumatic)
J80	Acute respiratory distress syndrome
K72.00-K72.01	Acute and subacute hepatic failure
K76.2	Central hemorrhagic necrosis of liver
M04.1	Periodic fever syndromes
M32.14-M32.15	Glomerular disease/tubule-interstitial nephropathy in systemic lupus erythematosus
M35.04	Sjögren syndrome with tubulo-interstitial nephropathy
M35.0A	Sjögren syndrome with glomerular disease
M54.89-M54.9	Dorsalgia, other/unspecified

N00.0-N08	Glomerular diseases
N10-N16	Renal tubulo-interstitial diseases
N17.0-N23	Acute kidney failure and chronic kidney disease
N25.0-N29	Other disorders of kidney and ureter
N30.00-N39.9	Other disorders of kidney and ureter
N40.0-N42.9	Benign prostatic hyperplasia, inflammatory/other and unspecified diseases of prostate
N43.40-N43.42	Spermatocele of epididymis
N44.00-N45.4	Noninflammatory disorders of testis, orchitis and epididymitis
N49.0-N51	Inflammatory/other and unspecified disorders of male genital organs
N53.11-N53.9	Other male sexual dysfunction
N70.01-N77.1	Inflammatory diseases of female pelvic organs
N82.0-N82.9	Fistulae involving female genital tract
N83.511-N83.53	Torsion of ovary and ovarian pedicle and fallopian tube
N99.0-N99.538	Postprocedural complications and disorders of genitourinary system
O08.0-O08.9	Complications following ectopic and molar pregnancy
O09.00-O09.93	Supervision of high risk pregnancy
O10.011-O16.9	Edema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium
O23.00-O24.93	Infections of genitourinary tract in pregnancy, diabetes mellitus in pregnancy, childbirth and the puerperium
O26.831-O26.839	Pregnancy related renal disease
O28.0-O28.9	Abnormal findings on antenatal screening of mother
O30.001-O30.93	Mulitple gestation
O33.7XX0-O33.7XX9	Maternal care for disproportion due to other fetal deformities
O34.80-O34.93	Maternal care for other/unspecified abnormalities of pelvic organs
O36.8310-O36.8399	Maternal care for abnormalities of the fetal heart rate or rhythm
O44.20-O44.53	Partial placenta previa or low lying placenta NOS or without hemorrhage, or with hemorrhage
O85	Puerperal sepsis
O86.11-O86.89	Other infections of genital tract, urinary tract, and pyrexia following delivery, and puerperal infections
P36.0-P36.9	Bacterial sepsis of newborn
P39.3	Neonatal urinary tract infection
R00.0	Tachycardia, unspecified
R10.0-R10.9	Abdominal and pelvic pain
R30.0-R36.9	Symptoms and signs involving the genitourinary system
R39.0-R39.9	Other and unspecified symptoms and signs involving the genitourinary system
R40.2410-R40.2444	Glasgow coma scale, total score
R40.4	Transient alteration of awareness
R41.0-R41.9	Other symptoms and signs involving cognitive function and awareness
R45.84	Anhedonia
R45.88	Nonsuicidal self-harm
R50.2-R50.9	Fever of other and unknown origin
R52-R53.83	Pain, unspecified; malaise and fatigue
R57.0-R57.9	Shock, not elsewhere classified
R65.21	Severe sepsis with septic shock
R68.0-R68.89	Other general symptoms and signs
R73.03	Prediabetes
R78.81	Bacteremia
R80.0-R82.998	Abnormal findings on examination of urine, without diagnosis
T19.0XXA-T19.1XXS	Foreign body in urethra, bladder
T19.4XXA-T19.4XXS	Foreign body in penis
T83.010A-T83.098S	Mechanical complications of urinary catheter
T83.113A-T83.113S	Breakdown (mechanical) of other urinary stents
T83.123A-T83.123S	Displacement of other urinary stents
T83.193A-T83.193S	Other mechanical complication of other urinary stent
T83.24XA-T83.25XS	Erosion of graft of urinary organ, exposure of graft of urinary organ
T83.510A-T83.598S	Infection and inflammatory reaction due to urinary catheter, prosthetic device, implant and graft in urinary system
T83.61XA-T83.79XS	Infection and inflammatory reaction due to prosthetic device, implant and graft in genital tract, complications due to implanted mesh and other genitourinary prosthetic materials
Z05.0-Z05.9	Encounter for observation and evaluation of newborn for suspected diseases and conditions ruled out
Z19.1-Z19.2	Hormone sensitivity malignancy status
Z31.7	Encounter for procreative management and counseling for gestational carrier
Z34.00-Z34.93	Encounter for supervision of normal pregnancy
Z36.89	Encounter for other specified antenatal screening
Z43.5-Z43.6	Encounter for attention to cystostomy, other artificial openings of urinary tract
Z79.01-Z79.899	Long term (current) drug therapy
Z84.82	Family history of sudden infant death syndrome
Z93.50-Z93.59	Cystostomy status
Z93.6	Other artificial openings of urinary tract status

When services are Not Medically Necessary:
For the procedure codes listed above for all other diagnoses not listed..

Discussion/General Information

A urine culture is a laboratory test done on a urine sample to check for germs in the urinary tract to find the cause of a presumed UTI. A urine sample can be obtained by a clean catch using a special kit to collect the urine or by insertion of a catheter through the urethra into the bladder. The urine sample is sent to a laboratory to see if there is bacteria or yeast present.

The presence of germs or bacteria in the urine can lead to a UTI. A UTI can occur in any part of the urinary system including the kidneys, ureters, bladder, and urethra. Clinical symptoms of a UTI can include dysuria, nocturia, frequent urination, feeling the need to

urinate despite having an empty bladder, hematuria, pressure or cramping in the lower abdomen or groin, fever, chills, lower back pain, and nausea or vomiting.

The American Urological Association 2020 guideline for microhematuria recommends those suspected of having a UTI undergo a urine culture.

Another laboratory test done on a urine sample is a urinalysis. Oftentimes a urinalysis is done prior to a urine culture. With a urinalysis, a urine sample is analyzed visually, with a dipstick, and microscopically. Urinalysis results are typically quicker than urine culture. If urinalysis results are abnormal, a urine culture may be the next step. Examples of abnormal microscopic urinalysis findings include microscopic hematuria, pyuria, or bacteriuria. Examples of abnormal biochemical urinalysis findings include positive leukocyte esterase, presence of nitrites, and proteinuria.

Inappropriate antimicrobial use leads to the risk of antimicrobial resistance. It is important to treat known bacterial infections appropriately. However, not all those who have bacteria in their urine have symptoms. Most asymptomatic individuals would not require urine screenings. The Infectious Diseases Society of America (2019) published their guideline on Management of Asymptomatic Bacteriuria. They give a strong recommendation to screen pregnant persons with urine culture early in pregnancy, even if the pregnant person does not have any signs or symptoms of bacteriuria. There may be a reduced risk of preterm labor, low birth weight, and pyelonephritis after treatment with antimicrobials. The U.S. Preventive Services Task Force (USPSTF) also issued recommendations in 2019. They recommend using urine culture to screen for asymptomatic bacteriuria in pregnant persons (Grade B recommendation).

There may be other instances when urine cultures are done for asymptomatic bacteriuria and treatment is given prophylactically. Sepsis is a potentially serious postoperative complication from endoscopic urologic procedures. Examples include cystoscopy, ureteroscopy, and lithotripsy. For individuals who have bacteriuria, these procedures are in a highly contaminated surgical field. Screening using urine culture and treatment for asymptomatic bacteriuria prior to surgery is strongly recommended by the Infectious Diseases Society of America 2019 guideline on Management of Asymptomatic Bacteriuria.

A 2022 guideline issued by the American Urological Association for the Diagnosis and Treatment of Interstitial Cystitis/Bladder Pain Syndrome (Clemens, 2022) defines interstitial cystitis/bladder pain syndrome as:

> An unpleasant sensation (pain, pressure, discomfort) perceived to be related to the urinary bladder, associated with lower urinary tract symptoms of more than six weeks duration, in the absence of infection or other identifiable causes.

The hallmark symptom of interstitial cystitis or bladder pain syndrome is pain. The pain can be in the suprapubic region, throughout the pelvis, and in the lower abdomen and back. Symptoms may also include urinary urgency or frequency and diagnosis can be challenging. The 2022 guideline by the American Urological Association for the Diagnosis and Treatment of Interstitial Cystitis/Bladder Pain Syndrome recommends urine culture even in those individuals who have a negative urinalysis. This is to assist in the detection of lower levels of bacteria which may be present in the urine but not identifiable with a urinalysis (dipstick or microscopic exam). Another 2022 guideline issued by the European Association of Urology on Chronic Pelvic Pain also recommends urine culture for those suspected of having bladder pain syndrome.

Definitions

Bacteriuria: The presence of bacteria in the urine.

Dysuria: Pain or burning while urinating.

Hematuria: Blood in the urine.

Leukocyte esterase: A chemical assay to look for the presence of lysed or intact white blood cells in the urine.

Microscopic hematuria: Blood in the urine which is only visible by a microscope.

Nitrites: When bacteria in the urine changes a normal chemical called nitrates into another chemical.

Nocturia: Waking up during the night to urinate.

Proteinuria: The presence of a high level of protein in the urine.

Pyuria: The presence of white blood cells in the urine.

Urinary tract infection: Refers to an infection of any part of the urinary system (kidneys, ureters, bladder, urethra).

References

Peer Reviewed Publications:

1. Simerville JA, Maxted WC, Pahira JJ. Urinalysis: a comprehensive review. Am Fam Physician. 2005; 71(6):1153-1162.

Government Agency, Medical Society, and Other Authoritative Publications:

1. Barocas DA, Boorjian SA, Alvarez RD, et al. Microhematuria: AUA/SUFU Guideline. J Urol. 2020; 204(4):778-786.
2. Clemens JQ, Erickson DR, Varela NP et al. Diagnosis and treatment of interstitial cystitis/bladder pain syndrome. J Urol. 2022; 208(1):34-42.
3. European Association of Urology. Guideline on Chronic Pelvic Pain, 2022. Available at: https://d56bochluxqnz.cloudfront.net/documents/full-guideline/EAU-Guidelines-on-Chronic-Pelvic-Pain-2022_2022-03-29-084111_kpbq.pdf. Accessed on September 21, 2023.
4. Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the Infectious Diseases Society of America. Clin Infect Dis. 2019; 68(10):e83-e110.
5. U.S. Preventive Services Task Force (USPSTF). Asymptomatic bacteriuria in adults: screening. 2019. Available at: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/asymptomatic-bacteriuria-in-adults-screening. Accessed on September 21, 2023.

Websites for Additional Information

1. National Institute of Diabetes and Digestive and Kidney Diseases. Bladder Infection (Urinary Tract Infection – UTI) in Adults. Available at: https://www.niddk.nih.gov/health-information/urologic-diseases/bladder-infection-uti-in-adults. Accessed on September 21, 2023.

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History

Status	Date	Action
Reviewed	11/09/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References section. Revised coding section to list diagnosis ranges that are considered medically necessary.
New	11/10/2022	MPTAC review. Initial document development.