Clinical Policy: Urodynamic Testing

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Coding Implications
Revision Log

Description
Urodynamic testing is an important part of the comprehensive evaluation of voiding dysfunction. The clinician must exercise clinical judgment in the appropriate selection of urodynamic tests following an appropriate evaluation and symptom characterization. The purpose of this policy is to define medical necessity criteria for commonly used urodynamic studies.

Policy/Criteria

I. It is the policy of PA Health & Wellness® (PHW) that urodynamic testing is **medically necessary** to assist in the diagnosis of urologic dysfunction with **any** of the following indications:
- A. Uncertain diagnosis and inability to develop an appropriate initial treatment plan based on the clinical diagnostic evaluation;
- B. Failure to respond to an adequate therapeutic trial;
- C. Consideration of urologic surgical intervention, particularly if previous surgery failed or if the patient is a high surgical risk;
- D. Presence of other comorbid conditions such as any of the following:
  1. Urinary incontinence;
  2. Persistent symptoms of difficult bladder emptying;
  3. History of previous anti-incontinence surgery or radical pelvic surgery;
  4. Symptomatic pelvic prolapse;
  5. Prostate nodule, asymmetry or other suspicion of prostate cancer;
  6. Abnormal post void residual urinalysis;
  7. Diabetes mellitus with secondary urinary incontinence;
  8. Neurological conditions affecting voiding function (neurogenic bladder) such as multiple sclerosis, Parkinson's disease, and spinal cord lesions or injury;
  9. Complex anorectal malformation.

II. It is the policy of PHW that urodynamic testing in the following cases is considered **not medically necessary**:
- A. More than one cystometrogram (CPT codes 51725 or 51726) or uroflowmetry study (CPT codes 51736 or 51741) per visit.
- B. The use of any urodynamic testing for screening in asymptomatic patients, except for evaluation of neurogenic bladder or urological abnormalities associated with complex anorectal malformation.

Background
Lower urinary tract symptoms (LUTS), which include urinary incontinence, are a common and significant source of impaired quality of life and comorbidity in a large number of adults and children. LUTS is also a general term used to describe symptoms related to overactive bladder such as frequency, urgency and nocturia.[22] Commonly, patients presenting with lower urinary tract symptoms have overlapping symptoms and conditions, making an isolated or homogeneous source of symptoms rare. Clinicians evaluating these disorders collectively utilize history,

physical examination, questionnaires and testing data in the evaluation of symptoms.[3] Cystometrogram, uroflowmetry, urethral pressure profile, and voiding pressure studies, among others, are used to identify abnormal voiding patterns in symptomatic patients with disorders of urinary flow. The urodynamic evaluation measures the relationship between movement and compression of bladder and abdominal pressures during the filling/storage and elimination phase of micturition.[22] Each of the urodynamic studies has benefits and limitations that must be understood for each specific clinical application.

In clinical practice, the role of invasive urodynamic testing is not clearly defined. Urologists generally accept that conservative or empiric, non-invasive treatments may be instituted without urodynamic testing. Conservative treatments for urinary incontinence include pelvic muscle exercises (Kegel exercise), behavioral therapies such as bladder training and/or biofeedback, and pharmacotherapies (e.g., anticholinergic agents, musculotropic relaxants, calcium channel blockers, tricyclic antidepressants, or a combination of anticholinergic, antispasmodic medications and tricyclic antidepressants). Specifically, urge incontinence is more effectively managed with peripherally acting receptor agonists or antagonists, while stress incontinence is better controlled by pelvic muscle exercises, behavioral therapies, or corrective surgery.[4]

Urodynamic studies are indicated only after an initial evaluation is performed that, at minimum, includes an appropriate history, physical exam, and urinalysis with microscopy. Infection, if present, should be treated and effectiveness of treatment observed before further diagnostic (urodynamic) testing or other therapeutic interventions are undertaken.

Many types of urodynamic testing require urethral catheterization and include cystometry, pressure flow studies (PFS), and urethral function testing. Such testing subjects patients to risks of urethral instrumentation including infection, urethral trauma, and pain. Thus, the clinician must weigh whether urodynamic tests offer additional diagnostic benefit beyond symptom assessment, physical examination, and other diagnostic testing. A cystometrogram is used to distinguish bladder outlet obstruction from other voiding dysfunctions.

- In a simple cystometrogram (CPT code 51725), the physician inserts a pressure catheter into the bladder and using a manometer, records the pressure and flow in the lower urinary tract.
- A complex cystometrogram (CPT code 51726) uses a transurethral catheter to fill the bladder with water or gas while simultaneously obtaining rectal pressure and a transducer measures intravesical pressure.
- CPT code 51727 reports a complex cystometrogram performed in conjunction with a measurement of urethral pressure studies.
- CPT code 51728 reports a complex cystometrogram performed in conjunction with a measurement of voiding pressure studies.
- CPT code 51729 reports a complex cystometrogram performed in conjunction with a measurement of voiding pressure studies and urethral pressure studies.
- Voiding pressure studies (CPT code 51797) measure the effort the patient makes while voiding. This measurement includes the pressure required and the subsequent urine flow.

Uroflowmetry and ultrasound post-void residual (PVR) studies may be appropriate noninvasive tests given the clinical scenario and the options for treatment.[3]

- In simple uroflowmetry (CPT code 51736), a stopwatch is used to record the volume of the flow of urine over time.
- Complex uroflowmetry (CPT code 51741) uses electronic equipment to measure and record the volume of urine flow over time.
- Measurement of residual urine and/or bladder emptying capacity (CPT code 51798) is accomplished using ultrasound after voiding.

Coding Implications

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CPT® Codes	Description
51725	Simple cystometrogram (CMG) (eg, spinal manometer)
51726	Complex cystometrogram (ie, calibrated electronic equipment)
51727	Complex cystometrogram (ie, calibrated electronic equipment); with urethral pressure profile studies (i.e., urethral closure pressure profile), any technique
51728	Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure), any technique
51729	Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure) and urethral pressure profile studies (ie, urethral closure pressure profile), any technique
51736	Simple uroflowmetry (UFR) (eg, stop-watch flow rate, mechanical uroflowmeter)
51741	Complex uroflowmetry (eg, calibrated electronic equipment)
51792	Stimulus evoked response (Eg, measurement of bulbocavernous reflex latency time)
51797	Voiding pressure studies, intra-abdominal (ie, rectal, gastric, intraperitoneal (List separately in addition to code for primary procedure)
51798	Measurement of post-voiding residual urine and/or bladder capacity by ultrasound, non-imaging

ICD-10-CM Diagnosis Codes that Support Medical Necessity

ICD-10-CM Code	Description
A18.13	Tuberculosis of other urinary organs
A52.10	Symptomatic neurosyphilis, unspecified
A52.11	Tabes dorsalis
A52.12	Other cerebrospinal syphilis
A52.13	Late syphilitic meningitis

ICD-10-CM Code	Description
A52.14	Late syphilitic encephalitis
A52.15	Late syphilitic neuropathy
A52.16	Charcot's arthropathy (tabetic)
A52.17	General paresis
A52.19	Other symptomatic neurosyphilis
A52.3	Neurosyphilis, unspecified
A80.9	Acute poliomyelitis, unspecified
C61	Malignant neoplasm of prostate
C70.1	Malignant neoplasm of spinal meninges
C72.0	Malignant neoplasm of spinal cord
C72.1	Malignant neoplasm of cauda equina
C79.82	Secondary malignant neoplasm of genital organs
D29.1	Benign neoplasm of prostate
D33.4	Benign neoplasm of spinal cord
D40.0	Neoplasm of uncertain behavior of prostate
D49.4	Neoplasm of unspecified behavior of bladder
D49.511	Neoplasm of unspecified behavior of right kidney
D49.512	Neoplasm of unspecified behavior of left kidney
D49.519	Neoplasm of unspecified behavior of unspecified kidney
D49.59	Neoplasm of unspecified behavior of other genitourinary organ
E10.21	Type 1 diabetes mellitus with diabetic nephropathy
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication
E10.69	Type 1 diabetes mellitus with other specified complications
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication
E11.69	Type 2 diabetes mellitus with other specified complication
E13.21	Other specified diabetes mellitus with diabetic nephropathy
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease
E13.29	Other specified diabetes mellitus with other diabetic kidney complication
E13.49	Other specified diabetes mellitus with other diabetic neurological complication
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy
F45.8	Other somatoform disorders
F98.0	Enuresis not due to a substance or known physiological condition
G04.1	Tropical spastic paraplegia
G04.90	Encephalitis and encephalomyelitis, unspecified
G04.91	Myelitis, unspecified
G12.21	Amyotrophic lateral sclerosis
G20.A1	Parkinson's disease without dyskinesia, without mention of fluctuations
G20.A2	Parkinson's disease without dyskinesia, with fluctuations

ICD-10-CM Code	Description
G20.B1	Parkinson's disease with dyskinesia, without mention of fluctuations
G20.B2	Parkinson's disease with dyskinesia, with fluctuations
G20.C	Parkinsonism, unspecified
G20	Parkinson's disease
G21.4	Vascular parkinsonism
G24.1	Genetic torsion dystonia
G35	Multiple sclerosis
G37.3	Acute transverse myelitis in demyelinating disease of central nervous system
G37.4	Subacute necrotizing myelitis of central nervous system
G60.9	Hereditary and idiopathic neuropathy, unspecified
G82.20	Paraplegia, unspecified
G82.21	Paraplegia, complete
G82.22	Paraplegia, incomplete
G82.50	Quadriplegia, unspecified
G82.51	Quadriplegia, C1-C4 complete
G82.52	Quadriplegia, C1-C4 incomplete
G82.53	Quadriplegia, C5-C7 complete
G82.54	Quadriplegia, C5-C7 incomplete
G83.4	Cauda equina syndrome
M46.41	Discitis, unspecified, occipito-atlanto-axial region
M46.42	Discitis, unspecified, cervical region
M46.43	Discitis, unspecified, cervicothoracic region
M46.44	Discitis, unspecified, thoracic region
M46.45	Discitis, unspecified, thoracolumbar region
M46.46	Discitis, unspecified, lumbar region
M46.47	Discitis, unspecified, lumbosacral region
M50.80	Other cervical disc disorders, unspecified cervical region
M50.81	Other cervical disc disorders, high cervical region
M50.83	Other cervical disc disorders, cervicothoracic region
M50.90	Cervical disc disorder, unspecified, unspecified cervical region
M50.91	Cervical disc disorder, unspecified, high cervical region
M50.93	Cervical disc disorder, unspecified, cervicothoracic region
M51.84	Other intervertebral disc disorders, thoracic region
M51.85	Other intervertebral disc disorders, thoracolumbar region
M51.86	Other intervertebral disc disorders, lumbar region
M51.87	Other intervertebral disc disorders, lumbosacral region
N13.0	Hydronephrosis with ureteropelvic junction obstruction
N13.1	Hydronephrosis with ureteral stricture, not elsewhere classified
N13.2	Hydronephrosis with renal and ureteral calculous obstruction
N13.39	Other hydronephrosis
N13.70	Vesicoureteral-reflux, unspecified
N13.71	Vesicoureteral-reflux without reflux nephropathy
N13.721	Vesicoureteral-reflux with reflux nephropathy without hydroureter, unilateral

ICD-10-CM Code	Description
N13.731	Vesicoureteral-reflux with reflux nephropathy with hydroureter, unilateral
N30.10 through N30.11	Interstitial cystitis (chronic) without hematuria/with hematuria
N30.20 through N30.21	Other chronic cystitis without hematuria/with hematuria
N31.0 through N31.9	Neuromuscular dysfunction of bladder, not elsewhere classified
N32.0 through N32.89	Other disorders of bladder
N35.010	Post-traumatic urethral stricture, male, meatal
N35.011	Post-traumatic bulbous urethral stricture
N35.012	Post-traumatic membranous urethral stricture
N35.013	Post-traumatic anterior urethral stricture
N35.014	Post-traumatic urethral stricture, male, unspecified
N35.021	Urethral stricture due to childbirth
N35.028	Other post-traumatic urethral stricture, female
N35.811	Other urethral stricture, male, meatal
N35.812	Other bulbous urethral stricture, male
N35.813	Other membranous urethral stricture, male
N35.814	Other anterior urethral stricture, male
N35.816	Other urethral stricture, male, overlapping sites
N35.819	Other urethral stricture, male, unspecified site
N35.82	Other urethral stricture, female
N36.0	Urethral fistula
N36.1	Urethral diverticulum
N36.41	Hypermobility of urethra
N36.42	Intrinsic sphincter deficiency (ISD)
N36.43	Combined hypermobility of urethra and intrinsic sphincter deficiency
N36.44	Muscular disorders of urethra
N36.8	Other specified disorders of urethra
N37	Urethral disorders in diseases classified elsewhere
N39.0 through N39.8	Other disorders of urinary system
N40.1	Benign prostatic hyperplasia with lower urinary tract symptoms
N40.3	Nodular prostate with lower urinary tract symptoms
N42.81	Prostatodynia syndrome
N42.82	Prostatosis syndrome
N42.83	Cyst of prostate
N42.89	Other specified disorders of prostate
N81.0 through N81.9	Female genital prolapse
N82.0	Vesicovaginal fistula
N82.1	Other female urinary-genital tract fistulae

ICD-10-CM Code	Description
N99.110	Postprocedural urethral stricture, male, meatal
N99.111	Postprocedural bulbous urethral stricture, male
N99.112	Postprocedural membranous urethral stricture, male
N99.113	Postprocedural anterior bulbous urethral stricture, male
N99.12	Postprocedural urethral stricture, female
Q05.0 through Q05.9	Spina bifida
Q06.0 through Q06.9	Other congenital malformations of spinal cord
Q07.00 through Q07.9	Other congenital malformations of nervous system
Q42.0 through Q42.3	Congenital absence, atresia and stenosis of large intestine
R33.8	Other retention of urine
R33.9	Retention of urine, unspecified
R35.1	Nocturia
R39.11	Hesitancy of micturition
R39.12	Poor urinary stream
R39.13	Splitting of urinary stream
R39.14	Feeling of incomplete bladder emptying
R39.16	Straining to void
R39.81	Functional urinary incontinence
S14.0XXA through S14.9XXS	Injury of nerves and spinal cord at cervical level
S24.0XXA through S24.9XXS	Injury of nerves and spinal cord at thoracic level
S34.01XA through S34.9XXS	Injury of lumbar and sacral spinal cord and nerves at abdomen, lower back and pelvis level
T79.5XXA	Traumatic anuria, initial encounter
T79.5XXD	Traumatic anuria, subsequent encounter
T79.5XXS	Traumatic anuria, sequela

In addition to the above ICD-10 codes, the following additional diagnosis codes support medical necessity for CPT code 51798.

ICD-10-CM Code	Description
N13.8	Other obstructive and reflux uropathy
R33.0 through R33.9	Retention of urine
R35.0	Frequency of micturition

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy developed	4/18	09/18
References reviewed and updated. Coding reviewed.	09/18	10/18
References reviewed and updated. Added indication of complex anorectal malformation, along with accompanying diagnosis codes of Q42.0 to Q42.3. Noted in investigational statement regarding asymptomatic patients, that evaluation of suspected urological abnormalities is appropriate in the presence of complex anorectal malformation.	12/19	
Added ICD-10-CM code R39.14 to support medical necessity of all procedure codes. Added ICD-10-CM code R35.1 to support medical necessity for CPT 51798.	1/2020	6/7/2020
References reviewed and updated. Added ICD-10 codes: C70.1, C72.0, C72.1, D33.4. Replaced "members" with "members/enrollees" in all instances.	01/2021	
Code update: ICD-10 N40.1 and R35.1, no longer specific to 51798 and moved to list of codes that support medical necessity. Added ICD-10 codes that support medical necessity: A18.13, G82.21, G82.22, R39.11, S14.0XXA to S14.9XXS, and S24.0XXA to S24.9XXS.	1/2021	
Annual review completed. Codes checked. References updated and reformatted for AMA style. Changed "Review Date" in the header to "Date of Last Revision" and "Date" in the revision log header to "Revision Date." Specialty review completed.	03/23	
References reviewed and updated. In 1.D.1, changed "incontinence associated with recurrent UTI" to "Urinary incontinence." Codes checked. Updated background with no impact to policy statement.	03/23	
Annual review. Added criteria I.D.5. for 4.5. Prostate nodule, asymmetry or other suspicion of prostate cancer. Moved N40.3 from ICD-10 Table 2 to ICD-10 Table 1. References reviewed and updated.	03/23	
Annual review. References reviewed and update. Reviewed by external specialist.	04/2024	05/2024
Annual review. Added CPT 51792 to CPT coding table. Added the following ICD-10 codes that support medical necessity: A52.10, A52.11, A52.12, A52.13, A52.14, A52.15, A52.16, A52.17, A52.19, A52.3, A80.9, C61, C79.82, D29.1, D40.0, D49.4, D49.511, D49.512, D49.519, D49.59, E10.21, E10.22, E10.29, E10.49, E13.21, E13.22, E13.29, E13.49, E13.610, F45.8, F98.0, G04.1, G04.90, G04.91, G12.21, G20.A1, G20.A2, G20.B1, G20.B2, G20.C, G21.4, G24.1, G37.4, G60.9, G82.20, G82.50, G82.51, G82.52, G82.53, G82.54, M46.41, M46.42, M46.43, M46.44, M46.45, M46.46, M46.47, M50.80, M50.81, M50.83, M50.90, M50.91, M50.93, M51.84, M51.85, M51.86, M51.87, N13.0, N13.1, N13.2, N13.39, N13.70, N13.71, N13.721, N13.731, N35.010, N35.011, N35.012, N35.013, N35.014, N35.021, N35.028, N35.811, N35.812, N35.813, N35.814, N35.816, N35.819,	04/2025	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
N35.82, N36.0, N36.1, N36.41, N36.42, N36.43, N36.44, N36.8, N37, N42.81, N42.82, N42.83, N42.89, N82.0, N82.1, N99.110, N99.111, N99.112, N99.113, N99.12, R39.12, R39.13, R39.16, T79.5XXA, T79.5XXD, T79.5XXS. References reviewed and updated.		

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