BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:

Urodynamic Testing to Evaluate Urinary Incontinence

Policy #: 315
Latest Review Date: February 2025
Category: GI/GU

BACKGROUND:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage, the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
   - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
   - *Furnished in a setting appropriate to the patient's medical needs and condition;*
   - *Ordered and furnished by qualified personnel;*
   - *One that meets, but does not exceed, the patient's medical need; and*
   - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000, which meet the requirements of the Clinical Trials NCD, are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual, Chapter 32, Sections 69.0-69.11).*

POLICY:

Blue Advantage will treat **urodynamic testing** as a **covered benefit** when any of the following indications are documented:

1. The diagnosis with respect to the type of urinary incontinence is uncertain after the initial history and physical examination.
2. The patient's symptoms do not correlate with the objective physical findings.
3. The patient has mixed symptoms (stress and urge urinary incontinence).
4. The patient fails to improve with treatment or has failure of prior incontinence procedures.
5. The patient is being considered for surgical intervention, has a complicated diagnostic situation and is at high surgical risk.
6. The patient has a history of extensive pelvic surgeries, prior radiation therapy to the pelvis, or has neurologic abnormalities.
7. The patient has symptomatic pelvic organ prolapse (Grade III or higher).
8. Benign prostatic hypertrophy (BPH) – uroflowmetry only.
9. Pressure flow studies for the evaluation of urinary symptoms in patients with maximum flow rates above 10ml./sec. with abnormal presentations.
10. For the evaluation of urinary symptoms in patients who have failed prior invasive therapy for the treatment of BPH.
11. The patient has a history of extensive pelvic surgeries, prior radiation therapy to the pelvis, or has neurological abnormalities.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment, or procedure is one made between the physician and their patient. Blue Advantage administers benefits based on the members' contracts and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

Urinary incontinence (UI) is common and may affect up to 50% of adult women and up to 11% of men. Prevalence increases gradually during young adulthood, peaks broadly around middle age, and then steadily increases in the elderly. In up to 75% of ambulatory women with incontinence, urodynamic stress incontinence is the main condition. Detrusor overactivity accounts for up to 33% of incontinence cases, with the remainder being mixed forms.

Urodynamic testing refers to a group of tests used to assess function of the urinary tract by measuring various aspects of urine storage and emptying. Some types of urodynamic testing include:

- Cystometry measures bladder pressure during bladder filling. It is used to assess detrusor activity and bladder sensation, capacity, and compliance. Cystometry can be simple and office based or it can be multichannel, including measurement of intra-abdominal, bladder, and detrusor (bladder minus intra-abdominal) pressures.
- Uroflowmetry measures urine volume voided over time. It can be done with or without a pressure-flow study.
- Pressure flow study measures both bladder pressure and urinary flow. It determines the mechanism of abnormal voiding revealed by a low flow rate on uroflowmetry.
- Urethral pressure profile measures the intraluminal pressure along the urethra with the bladder at rest.
- Leak point pressure refers to the amount of abdominal pressure required to overcome urethral resistance and produce urine leakage when the patient is not trying to void. The pressure can be produced by Valsalva or cough.
- Post-void residual volume measurement is made by straight catheterization or by bladder ultrasound. A high volume on repeat determinations indications outlet obstruction or poor detrusor contractility.
- Video urodynamics is similar to conventional cystometry, but with the addition of a radio-opaque filling medium, video recorder, and x-ray equipment. Most authorities think it is seldom indicated.

KEY POINTS:

A literature review was performed through February 5, 2025.

Summary of Evidence

For patients receiving urodynamic testing, the evidence consists of systematic reviews and prospective studies. There are some limitations in urodynamic testing that limit its value. These include lack of standardization of technical details, such as patient position, type of pressure sensor, and filling rate. These variables can affect results. Consensus statements and practice recommendations agree that conservative treatment should be done prior to any urodynamic tests. There is agreement for certain situations in which urodynamic testing may be useful and should be performed after an initial evaluation that includes an appropriate history, physical exam, and urinalysis with microscopy.

Practice Guidelines and Position Statements

American Urological Association and Society of Urodynamics Female Pelvic Medicine and Urogenital Reconstruction

In 2012, the AUA and SUFU developed a guideline regarding adult urodynamics.

Stress Urinary Incontinence (SUI)/pelvic organ prolapse

1. Clinicians who are making the diagnosis of urodynamic stress incontinence should assess urethral function. (Recommendation; Evidence Strength: Grade C)
2. Surgeons considering invasive therapy in patients with SUI should assess post-void residual (PVR) urine volume. (Expert Opinion)
3. Clinicians may perform multi-channel urodynamics in patients with both symptoms and physical findings of stress incontinence who are considering invasive, potentially morbid or irreversible treatments. (Option; Evidence Strength: Grade C)

4. Clinicians should perform repeat stress testing with the urethral catheter removed in patients suspected of having SUI who do not demonstrate this finding with the catheter in place during urodynamic testing. (Recommendation; Evidence Strength: Grade C)
5. Clinicians should perform stress testing with reduction of the prolapse in women with high grade pelvic organ prolapse (POP) but without the symptom of SUI. Multi-channel urodynamics with prolapse reduction may be used to assess for occult stress incontinence and detrusor dysfunction in these women with associated LUTS. (Option; Evidence Strength: Grade C)

Overactive Bladder (OAB), Urgency Urinary Incontinence (UUI), Mixed Incontinence

6. Clinicians may perform multi-channel filling cystometry when it is important to determine if altered compliance, detrusor overactivity or other urodynamic abnormalities are present (or not) in patients with urgency incontinence in whom invasive, potentially morbid or irreversible treatments are considered. (Option; Evidence Strength: Grade C)
7. Clinicians may perform pressure flow studies (PFS) in patients with urgency incontinence after bladder outlet procedures to evaluate for bladder outlet obstruction. (Expert Opinion)
8. Clinicians should counsel patients with urgency incontinence and mixed incontinence that the absence of detrusor overactivity (DO) on a single urodynamic study does not exclude it as a causative agent for their symptoms. (Clinical Principle)

Neurogenic Bladder (NGB)

9. Clinicians should perform PVR assessment, either as part of a complete urodynamic study or separately, during the initial urological evaluation of patients with relevant neurological conditions (e.g., spinal cord injury and myelomeningocele) and as part of ongoing follow-up when appropriate. (Standard; Evidence Strength: Grade B)
10. Clinicians should perform a complex cystometrogram (CMG) during initial urological evaluation of patients with relevant neurological conditions with or without symptoms and as part of ongoing follow-up when appropriate. In patients with other neurological diseases, physicians may consider CMG as an option in the urological evaluation of patients with LUTS. (Recommendation; Evidence Strength: Grade C)
11. Clinicians should perform pressure flow analysis during the initial urological evaluation of patients with relevant neurological conditions with or without symptoms and as part of ongoing follow-up when appropriate, in patients with other neurologic disease and elevated PVR or in patients with persistent symptoms. (Recommendation, Evidence Strength: Grade C)
12. When available, clinicians may perform fluoroscopy at the time of urodynamics (videourodynamics) in patients with relevant neurologic disease at risk for neurogenic bladder, in patients with other neurologic disease and elevated PVR or in patients with urinary symptoms. (Recommendation; Evidence Strength: Grade C)
13. Clinicians should perform electromyography (EMG) in combination with CMG with or without PFS in patients with relevant neurologic disease at risk for neurogenic bladder, in patients with other neurologic disease and elevated PVR or in patients with urinary symptoms. (Recommendation; Evidence Strength: Grade C)

Lower Urinary Tract Symptoms (LUTS)

14. Clinicians may perform PVR in patients with LUTS as a safety measure to rule out significant urinary retention (UR) both initially and during follow up. (Clinical Principle)
15. Uroflow may be used by clinicians in the initial and ongoing evaluation of male patients with LUTS when an abnormality of voiding/emptying is suggested. (Recommendation; Evidence Strength: Grade C)
16. Clinicians may perform multi-channel filling cystometry when it is important to determine if DO or other abnormalities of bladder filling/urine storage are present in patients with LUTS, particularly when invasive, potentially morbid or irreversible treatments are considered. (Expert Opinion)
17. Clinicians should perform PFS in men when it is important to determine if urodynamic obstruction is present in men with LUTS, particularly when invasive, potentially morbid or irreversible treatments are considered. (Standard: Evidence Strength: Grade B)
18. Clinicians may perform PFS in women when it is important to determine if obstruction is present. (Option; Evidence Quality: Grade C)
19. Clinicians may perform videourodynamics in properly selected patients to localize the level of obstruction, particularly for the diagnosis of primary bladder neck obstruction. (Expert Opinion)

In 2019, the AUA and SUFU published a guideline for Incontinence after Prostate Treatment which states that "Clinicians may perform urodynamic testing in a patient prior to surgical intervention for stress urinary incontinence in cases where it may facilitate diagnosis or counseling. (Conditional Recommendation; Evidence Level C)

U.S. Preventive Services Task Force

N/A

KEY WORDS:

Urodynamic testing, Urodynamic studies, urinary stress incontinence, incontinence, mixed incontinence, organ prolapse, prostate

APPROVED BY GOVERNING BODIES:

Not applicable

BENEFIT APPLICATION:

Coverage is subject to member's specific benefits. Group-specific policy will supersede this policy when applicable.

CURRENT CODING

CPT codes:

51725	Simple cystometrogram (CMG) (e.g., spinal manometer)
51726	Complex cystometrogram (i.e., calibrated electronic equipment)
51727	Complex cystometrogram (i.e., calibrated electronic equipment); with urethral pressure profile studies (i.e., urethral closure pressure profile), and technique
51728	Complex cystometrogram (i.e., calibrated electronic equipment); with voiding pressure studies (i.e., bladder voiding pressure), any technique
51729	Complex cystometrogram (i.e., calibrated electronic equipment); with voiding pressure studies (i.e., bladder voiding pressure) and urethral pressure profile studies (i.e., urethral closure pressure profile), any technique
51736	Simple uroflowmetry (UFR) (e.g., stop-watch flow rate, mechanical uroflowmeter)
51741	Complex uroflowmetry (e.g., calibrated electronic equipment)
51784	Electromyography studies (EMG) of anal or urethral sphincter, other than needle, any technique
51785	Needle electromyography studies (EMG) of anal or urethral sphincter, any technique
51792	Stimulus evoked response (e.g., measurement of bulbocavernosus reflex latency time)
51797	Voiding pressure studies, intra-abdominal (i.e., 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

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POLICY HISTORY:

Adopted for Blue Advantage, November 2008
Available for comment November 6-December 19, 2008
Medical Policy Group, January 2010
Medical Policy Group, September 2011
Medical Policy Group, September 2012 (3): Effective September 14, 2012, this policy is no longer scheduled for regular literature reviews and updates.
Medical Policy Group, August 2019
Medical Policy Group, February 2021
Medical Policy Group, February 2022: Reviewed by consensus. No new published peer-reviewed literature available that would alter the coverage statement in this policy.
Medical Policy Group, February 2023: Reviewed by consensus. No new published peer-reviewed literature available that would alter the coverage statement in this policy.
UM Committee, December 2023: Policy approved by UM Committee for use for Blue Advantage business.
Medical Policy Group, February 2024: Reviewed by consensus. No new published peer-reviewed literature available that would alter the coverage statement in this policy.
UM Committee, February 2024: Annual review of policy approved by UM Committee for use for Blue Advantage business.
Medical Policy Group, February 2025: Reviewed by consensus. No new published peer-reviewed literature available that would alter the coverage statement in this policy.
