Module 24

Urinary and Male Genital Systems

**Urinary System**

The urinary system is composed of organs that remove waste and regulate fluid volume in the body. The organs of the urinary system are the kidneys, ureters, urinary bladder, and urethra.

**Anatomy**

**Kidneys**: Two bean-shaped organs that lie behind the abdominal cavity on the left and right side in the lumbar region
- **Cortex**: Outer layer
- **Medulla**: Inner region
- **Nephron**: Functional unit where filtration, absorption, and secretion take place
- **Renal pelvis**: Collecting area in the kidneys
- **Renal artery**: Carries blood to the kidneys
- **Renal vein**: Carries blood away from the kidneys
- **Glomerulus (Plural: Glomeruli)**: A small ball of capillaries located in the cortex
- **Bowman’s capsule**: Encloses the glomeruli
- **Calyx (Plural: Calyces)**: Cup-shaped collection area in the renal pelvis
- **Ureters**: Tubes leading from each kidney (2) to the urinary bladder
- **Urinary Bladder**: A temporary muscular reservoir (sac) that is hollow; stores urine
- **Trigone**: Smooth area in the bladder shaped like a triangle; ureters enter and urethra exits
- **Urethra**: A tube leading from the bladder to the outside of the body
- **Urinary meatus**: External opening of the urethra
Module 24

Urinary and Male Genital Systems (continued)

Diseases and Conditions

Renal Failure

Renal Failure (Kidney Failure): Failure of the kidneys due to disease, infection, trauma, toxins, congestive heart failure, diabetes, and hypertension.

- **Acute renal failure (ARF):** Sudden onset due to infection, inflammation, injury from trauma, or obstruction; symptoms include uremia, oliguria, and pulmonary edema
- **Chronic renal failure (CRF):** Progressive disease leading to loss of kidney function, resulting in end-stage renal disease (ESRD) and irreversible kidney failure

**Treatment**
- Physicians treat the underlying cause or disease
- May require dialysis or kidney transplantation
- Monitor proper fluid balance

Urinary Tract Infection (UTI)

Bacteria, such as E. coli, usually cause cystitis (inflammation of the bladder). Symptoms include painful urination (dysuria), lower back pain, urinary frequency, and cloudy urine.

**Treatment**
- Antibiotics
- Increased consumption of water or fluids (cranberry juice)

Obstructions (Kidney Stones)

Urinary obstructions (kidney stones) are a common condition of the urinary system. Stones are formed due to an excess of minerals and salts and decreased fluid intake. Stones can form or develop anywhere in the urinary tract. Symptoms include extreme pain, nausea, and perspiration with an increased heart rate due to the pain.

**Treatment**
- Increased fluid intake
- Stones may pass spontaneously without medical intervention
- Diagnostic CT scan
- Extracorporeal shock wave lithotripsy (ESWL)
- Drugs to dissolve clots

Polycystic Kidney Disease (PKD)

Genetic disorder characterized by numerous cysts in the kidneys. Patients are often asymptomatic until midlife. This disease may lead to chronic renal failure (CRF).

**Treatment**
- Dialysis or kidney transplant
Module 24

Urinary and Male Genital Systems (continued)

Surgery/Urinary System (50010-53899)

There are four subheadings of the Urinary System in the CPT manual: Kidney, ureter, bladder, and urethra.

Kidney (50010-50593)

Codes are divided by the following procedures/approaches: Incision, excision, renal transplantation, introduction, repair, laparoscopy, endoscopy, and other procedures.

Incision (50010-50135)
- Nephrostomy and nephrotomy
- Removal of stones

Excision (50200-50290)
- Biopsy
- Nephrectomy, partial, complicated, or radical

Renal Transplantation (50300-50380)
- Extensive notes
- Use modifier -51 for multiple procedures
- Allotransplantation involves three distinct components:
  1. Cadaver donor nephrectomy (unilateral or bilateral) and living donor nephrectomy
  2. Backbench work
  3. Recipient renal allotransplantation
- See 90935-90999 for dialysis codes and end-stage renal disease services

Introduction (50382-50398)
- Catheter procedures (internally dwelling or externally accessible)
- Aspirations, stents, and injection procedures

Repair (50400-50540)

Laparoscopy (50541-50549)
- Always includes diagnostic laparoscopy

Endoscopy (50551-50580)
- Use 99070 for supplies
- Codes for Endoscopy through an already established nephrostomy
- If significant may be billed in addition to 50045 and 50120 (will require a report)
Module 24

Urinary and Male Genital Systems (continued)

Other Procedures (50590-50593)
- Lithotripsy (ESWL)
- Ablation

Ureter (50600-50980)
Incision, excision, introduction, repair, laparoscopy, and endoscopy

Caution: Unilateral or Bilateral

Bladder (51020-52700)
Incision, removal, excision, introduction, urodynamics, repair, laparoscopy, endoscopy, transurethral surgery, ureter and pelvis, vesical neck and prostate

- Codes are bundled together – read notes carefully
- Urodynamics: Procedures related to urine flow; used to diagnose obstructions; use modifier -51 for multiple procedures
- Endoscopy: Cystoscopy, urethroscopy, and cystourethroscopy (may use modifier -22 for significant time and effort)
- Therapeutic cystourethroscopy includes diagnostic
- Prostate surgery: Initial or after 90 days for regrowth

2015 Coding Alert!
- Codes 51715, 51784, and 51792 contain new instructions.
- Codes 52441-52442 are new.

Urethra (53000-53899)
Incision, excision, repair, manipulation, and other procedures

Male Genital System

The male genital system is composed of reproductive organs, which include the penis, testes, epididymis, tunica vaginalis, scrotum, vas deferens, seminal vesicles, and prostate. This system functions by producing sperm for reproduction and works closely with the urinary system to dispel urine from the bladder through the male urethra.

Anatomy

Penis: Male copulatory organ composed of erectile tissue
Testes: (Testis–singular, testes–plural) Two reproductive organs held in a sac called the scrotum; also called the gonads
Epididymis: A tube approximately 7 meters long that connects the testes to the vas deferens
Tunica vaginalis: Covering of the testes
Scrotum: Sac that holds the testes
Module 24

Urinary and Male Genital Systems (continued)

**Vas deferens**: A tube that carries sperm, which joins with the seminal vesicles to form the ejaculatory duct leading to the urethral opening

**Seminal vesicles**: Produce semen

**Prostate**: A gland that lies just above the urethra that produces seminal fluid, which allows the motility of sperm

**Surgery/Male Genital System (54000-55899)**

Coding for the male genital system requires an understanding of the anatomical structures and surgical approaches used for various treatments and surgical procedures. The procedures from this section are divided by anatomy, beginning with the penis, where you will find the majority of codes within this section, and ending at the prostate.

**Penis (54000-54450)**

Incision, destruction, excision, introduction, repair, and manipulation:

- **Code 54000**: Modifier -63 exempt
- **Incision of prepuce**: Slitting
- **Destruction of lesions**: Simple or extensive; chemical, electrodesiccation, cryosurgery, laser, excision; condyloma, herpes, papilloma
- **Excision**: Biopsy, grafts, amputation–partial or radical
  - Circumcision codes based on approach and device used in addition to age of patient (54150-54164)
  - Codes 54150 and 54160 are modifier -63 exempt
- **Introduction**: Injections, irrigation, plethysmography, and rigidity test
- **Repair**: Chordee procedures, hypospadias repairs, urethroplasty; repair codes are separated by stages
- **Manipulation**: Foreskin, includes lysis of adhesions

**Testis (54500-54699)**

- **Excision**: Biopsy of testis, needle, incisional biopsy, use modifier -50 for bilateral procedure, orchiectomy–partial or complete
- **Exploration**: Undescended testis, use modifier -50 for bilateral
- **Repair**: Reduction of torsion, orchiopexy–based on approach (abdominal or intraabdominal), insertion of prosthesis, suture for injury
- **Laparoscopy**: Surgical laparoscopy always includes diagnostic laparoscopy
Module 24
Urinary and Male Genital Systems (continued)

**Epididymis (54700-54901)**
- Incision, excision, exploration, and repair

**Tunica Vaginalis (55000-55060)**
- Incision, excision, and repair
- Puncture aspiration: For hydrocele; with or without injection of medication (bill for medication using HCPCS)
- Repair: Hydrocele (Bottle type)

**Scrotum (55100-55180)**
- **Incision**: Drain abscess, removal of foreign body
- **Excision**: Resection of scrotum
- **Repair**: Scrotoplasty; simple or extended

**Vas Deferens (55200-55450)**
- **Incision**: Vasotomy
- **Excision**: Vasectomy (unilateral or bilateral) (includes postoperative semen analysis)
- **Introduction**: Vasotomy (incision of the vas deferens) to perform a vasogram
- Bill for radiological supervision and interpretation separately (74440)
- Use modifier -51 for multiple procedures when combined with 54505
- **Repair**: Vasovasostomy
- **Suture**: Ligation of vas deferens (separate procedure), unilateral or bilateral

**Spermatic Cord (55500-55559)**
- Excision and laparoscopy (varicocele)

**Seminal Vesicles (55600-55680)**
- Vesiculotomy and vesciculectomy

**Prostate (55700-55899)**
- Procedures performed for BPH (benign prostatic hypertrophy), prostate cancer, and inflammation (prostatitis)
- **Other procedures**: Electroejaculation, placement of radiation therapy device, and cryosurgery for ablation of the prostate

**Reproductive System Procedures (55920)**

**Intersex Surgery (55970-55980)**