In This Issue

<table>
<thead>
<tr>
<th>In This Issue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Mass Index</td>
<td>77</td>
</tr>
<tr>
<td>Changes to the ICD-10-CM Official Guidelines for Coding and Reporting</td>
<td>57</td>
</tr>
<tr>
<td>Changes to the ICD-10-PCS Official Guidelines for Coding and Reporting</td>
<td>75</td>
</tr>
</tbody>
</table>

New/Revised ICD-10-CM Codes

<table>
<thead>
<tr>
<th>New/Revised ICD-10-CM Codes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal Findings in Urine</td>
<td>29</td>
</tr>
<tr>
<td>Abnormal Findings on Diagnostic Imaging of Testis</td>
<td>30</td>
</tr>
<tr>
<td>Abscess of Anal and Rectal Regions</td>
<td>19</td>
</tr>
<tr>
<td>Acute Appendicitis</td>
<td>17</td>
</tr>
<tr>
<td>Angelman Syndrome</td>
<td>28</td>
</tr>
<tr>
<td>Blepharitis</td>
<td>13</td>
</tr>
<tr>
<td>Brow Ptosis</td>
<td>15</td>
</tr>
<tr>
<td>Cannabis Dependence and Cannabis Use with Withdrawal</td>
<td>7</td>
</tr>
<tr>
<td>Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy</td>
<td>17</td>
</tr>
<tr>
<td>Clonic Hemifacial Spasm</td>
<td>10</td>
</tr>
<tr>
<td>Congenital Zika Virus Disease</td>
<td>25</td>
</tr>
<tr>
<td>Disorders of Gamma Aminobutyric Acid Metabolism</td>
<td>5</td>
</tr>
<tr>
<td>Doubling of Uterus/Septate Uterus</td>
<td>27</td>
</tr>
<tr>
<td>Elevated Lipoprotein</td>
<td>6</td>
</tr>
<tr>
<td>Eyelid Neoplasms</td>
<td>4</td>
</tr>
<tr>
<td>Factitious Disorder</td>
<td>9</td>
</tr>
<tr>
<td>Fetal Inflammatory Response</td>
<td>23</td>
</tr>
<tr>
<td>Forced Labor and Sexual Exploitation</td>
<td>32</td>
</tr>
<tr>
<td>Gangrene and Perforation of Gallbladder in Cholecystitis</td>
<td>19</td>
</tr>
<tr>
<td>Infection of Obstetric Surgical Wound</td>
<td>22</td>
</tr>
<tr>
<td>Lacunar Infarction</td>
<td>16</td>
</tr>
<tr>
<td>Lagophthalmos</td>
<td>14</td>
</tr>
<tr>
<td>Meibomian Gland Dysfunction</td>
<td>14</td>
</tr>
<tr>
<td>Multiple Sulfatase Deficiency</td>
<td>5</td>
</tr>
<tr>
<td>Muscular Dystrophy</td>
<td>11</td>
</tr>
<tr>
<td>Myalgia of Mastication and Auxiliary Muscles</td>
<td>21</td>
</tr>
<tr>
<td>Neonatal Metabolic Disturbances</td>
<td>26</td>
</tr>
<tr>
<td>Newborn Affected by Noxious Substances Transmitted via Placenta or Breast Milk</td>
<td>24</td>
</tr>
<tr>
<td>Paralytic Ectropion</td>
<td>13</td>
</tr>
<tr>
<td>Plasminogen Deficiency</td>
<td>6</td>
</tr>
<tr>
<td>Poisoning by Ecstasy</td>
<td>30</td>
</tr>
<tr>
<td>Postpartum Depression and Puerperal Psychosis</td>
<td>8</td>
</tr>
<tr>
<td>Primary Sclerosing Cholangitis</td>
<td>20</td>
</tr>
<tr>
<td>Rosacea Conjunctivitis</td>
<td>15</td>
</tr>
<tr>
<td>Surgical Site Infection Following a Procedure</td>
<td>33</td>
</tr>
<tr>
<td>Trichorionic/Triaminotic Triplet and Quadrachorionic/Quadra-Amniotic Quadruplet Pregnancy</td>
<td>22</td>
</tr>
<tr>
<td>Urethral Stricture</td>
<td>21</td>
</tr>
<tr>
<td>Williams Syndrome</td>
<td>28</td>
</tr>
<tr>
<td>Z Code Update</td>
<td>35</td>
</tr>
</tbody>
</table>

New codes contained in this issue effective with discharges October 1, 2018. Other coding advice or code assignments contained in this issue effective October 8, 2018.
**New/Revised ICD-10-PCS Codes**

Anatomical Regions Bypass Qualifiers 41
Articulating Spacer for Hip and Knee Joint 43
Bypass Axillary Artery to Abdominal Artery 46
Bypass Common Carotid Artery to Other Upper Artery 47
Control of Epistaxis 37
Descending Thoracic Aorta Bypass 45
Drug-Coated Balloon Angioplasty of Additional Sites 48
Endovascular Thrombectomy with Stent Retriever 47
Extraction of Hepatobiliary and Pancreas Sites 39
Influenza Vaccine Administration 51
Irreversible Electroporation 39
Joint Fusion Device Value 43
New Qualifier Values 45
Partial Knee Joint Replacements 44
Percutaneous Extracorporeal Membrane Oxygenation 52
Revised Qualifier Values for Root Operation “Extraction” (Cesarean Delivery) 49
Spinal Canal Bypass Qualifiers 41
Transfer of Prepuce 40
Uterus Transplant 40

**Section X - New Technology**

New Therapeutic Substances 56
Robotic Waterjet Ablation 55

**Ask the Editor**

Acute Myeloid Leukemia 87
Conflicting Coding Clinic Advice 90
Disagreement with Coding Clinic Advice 91
Excludes1 Instructional Note 87
Externalization of Lumboatrial Shunt 85
Fine Needle Aspiration Biopsy of Lymphatic Tissue 84
Hypertension, Diabetes Mellitus and Chronic Kidney Disease 88
Nutritional Anemia and Anemia Unspecified 88
Placement of Lumboatrial Shunt 86
Radial Head Arthroplasty 92
Sepsis due to Hemodialysis
Central Venous Catheter 89

**Clarification**

Insertion and Removal of Failed Watchman Device 94
ICD-10-CM
NEW/REVISED CODES

Summary explanations of the Fiscal Year 2019 (FY 2019) ICD-10-CM changes effective October 1, 2018 are provided below. Addenda changes demonstrating the specific revisions to the code titles or instructional notes are not included in the explanations below. The Centers for Disease Control and Prevention (CDC) National Center for Health Statistics posted the official ICD-10-CM addenda at https://www.cms.gov/Medicare/Coding/ICD10/2019-ICD-10-CM.html.

There are 279 new ICD-10-CM codes effective October 1, 2018. In addition, there are 143 revised codes and 51 codes have been deleted.

**Eyelid Neoplasms**

Malignant and other types of neoplasms can affect structures of the eye including the eyeball, uvea, orbit, eyelid and lacrimal gland. However, the skin of the eyelid is a common site for non-melanoma malignances to occur. For statistical purposes, it is important to capture the actual eyelid involved as well as laterality. Several new subcategories were created to describe the following neoplasms of the right, left and unspecified eyelid:

- Malignant melanoma (C43.11-C43.12);
- Merkel cell carcinoma (C4A.11-C4A.12);
- Basal cell carcinoma (C44.112-C44.119);
- Squamous cell carcinoma (C44.122-C44.129);
- Sebaceous cell carcinoma (C44.131-C44.139);
- Other specified malignant neoplasm (C44.192-C44.199);
- Unspecified malignant neoplasm (C44.102-C44.109);
- Melanoma in situ (D03.11-D03.12);
- Carcinoma in situ (D04.11-D04.12);
- Melanocytic nevi (D22.11-D22.12); and
- Other benign neoplasm (D23.11-D23.12).
Disorders of Gamma Aminobutyric Acid (GABA) Metabolism

Code **E72.81, Disorders of gamma aminobutyric acid metabolism**, was created for gamma aminobutyric acid (GABA) metabolism disorders. GABA is the major neurotransmitter that has the primary function of inhibiting activity of the central nervous system so that too many signals are not sent to the brain. It slows down the signals transmitted between neurons. The new code will allow the reporting of conditions that include succinic semialdehyde dehydrogenase deficiency (SSADHD) and GABA transaminase (GABA-T) deficiency.

SSADHD is an autosomal recessive metabolic disorder that disrupts the normal metabolism of GABA so that GABA and the GABA derivative gamma-hydroxybutyric acid (GHB) accumulate in the body. SSADHD presents in the first two years of life and is characterized by infantile hypotonia, developmental delay, cognitive impairment, expressive language deficit, and ataxia. It may also involve epilepsy, hyperkinetic behavior, aggression, hallucinations and sleep disturbances. Symptoms vary from person to person. The diagnosis is based on clinical examination and enzyme testing for levels of succinic semialdehyde dehydrogenase.

GABA-T deficiency is a very rare autosomal recessive disorder that disrupts the metabolism of GABA into succinic semialdehyde. Similar to SSADHD, it is believed that GABA accumulation plays a key role in GABA-T deficiency pathophysiology, but the phenotype of GABA-T deficiency is more severe than what is seen in SSADH deficiency. The condition causes profound impairment and is characterized by severe neonatal-infantile epileptic encephalopathy, hypotonia, hypersomnolence, profound developmental impairments, choreoathetosis, and accelerated linear growth.

Code **E72.89, Other specified disorders of amino-acid metabolism**, was created for other specified disorders of amino-acid metabolism.

Multiple Sulfatase Deficiency

Code **E75.26, Sulfatase deficiency**, was created for multiple sulfatase deficiency (MSD), a rare inherited metabolic disorder that is caused by the deficiency of the formylglycine-generating enzyme (FGE) that is responsible for activating various sulfatase enzymes. Deficiency in the FGE results in defective functioning of sulfatase enzymes. The impairment causes signs and symptoms in the brain, skeleton and skin. While there is a wide spectrum in
the effects of MSD, the age of onset distinguishes the three types of MSD. The most severe form, neonatal MSD, develops soon after birth. There may be loss of motor skills, epilepsy, spasticity, scoliosis, heart malformations, hepatomegaly, scaly dry skin, and slow growth. Late-infantile type is the most common form and presents as progressive loss of mental abilities and movement after a period of normal development. Juvenile type is rare, and has slow regression of psychomotor development in mid to late childhood. The regression is at a slower rate than the late-infantile type. In all types of MSD, life expectancy is shortened by the condition and varies based on neurological deterioration.

**Elevated Lipoprotein(a)**

Code **E78.41, Elevated lipoprotein(a)**, was created for elevated Lipoprotein(a) (also represented as Lp(a), a common genetic lipid disorder that increases the risk for early cardiovascular disease including myocardial infarction, stroke, peripheral artery disease and calcific aortic valve stenosis.

Lipoprotein(a) is a plasma lipoprotein that is similar to LDL (low-density lipoprotein) in containing one molecule of apolipoprotein B (apoB), but differs in that it contains the additional protein, apolipoprotein(a) (apo(a)). The apo(a) portion of Lp(a) may interfere with fibrinolysis and promote thrombosis, by inhibiting plasminogen activation. The apo(B) portion may promote atherosclerosis similar to LDL cholesterol. The first sign that a person might have an elevated Lp(a) may be stroke or myocardial infarction. Diet, weight loss and exercise are not effective in lowering elevated Lp(a) levels. Levels may be lowered through lipoprotein apheresis therapy, a 1-3 hour process that removes Lp(a) and triglycerides from the blood.

Code **Z83.430, Family history of elevated lipoprotein(a)**, was created to report a family history of elevated Lp(a).

Code **E78.49, Other hyperlipidemia**, was created for other specified disorders of high levels of lipids. Code **Z83.438, Family history of other disorder of lipoprotein metabolism and other lipidemia**, was created for family history of other lipid metabolism disorders.

**Plasminogen Deficiency**

Code E88.02, Plasminogen deficiency, has been created for the rare genetic disorder caused by a deficiency in plasminogen, an inactive proenzyme that circulates in the blood plasma.
Plasminogen deficiency is the absence or dysfunction of plasminogen caused by mutations in the PLG gene. There are two types, Type I and type II. Type I plasminogen deficiency, a quantitative deficiency, is also called hypoplasminogenemia. It is associated with inflamed growths caused by an excess in deposits of fibrin, the active enzyme derived from plasminogen that aids in blood clotting and healing of wound tissues. The deposits form ligneous (wood-like) lesions on the mucous membranes that line the eye, mouth, lining of the nose, middle ear, trachea, gastrointestinal tract, and the female genital tract.

Presentation of the patient varies by the site of the lesion. The most common finding is ligneous conjunctiva which may occur on the inside of the eyelid and progresses from redness and pseudomembranes to thick wood-like masses that replace the mucosa and can lead to loss of vision. Growths may appear spontaneously, but are also triggered by infection or trauma. Once removed, the growth often recurs.

Type II, a qualitative deficiency, is also known as dysplasminogenemia. This type is not known to be associated with any symptoms.

The incidence of plasminogen deficiency is estimated at 1.6 per 1,000,000 of the general population, but the condition is thought to be underdiagnosed. Females are affected more often than males. Systemic and topical plasminogen replacement has proven to be effective in improving symptoms and preventing recurrence in some patients.

**Cannabis Dependence and Cannabis Use with Withdrawal**

Code **F12.23, Cannabis dependence with withdrawal**, was created to distinguish cannabis withdrawal syndrome in a patient with cannabis dependence. Code **F12.93, Cannabis use, unspecified with withdrawal**, was created for cases of physiological withdrawal from cannabis occurring in a person who is using cannabis regularly in contexts that are not defined as cannabis dependence.

The symptoms of cannabis withdrawal are irritability, nervousness or anxiety, sleep difficulty, decreased appetite or weight loss, restlessness, and depressed mood. Physical discomfort may involve abdominal pain, sweating, fever, chills and headache. Symptoms develop within 24 to 48 hours of cessation, and last up to 3 weeks, ranging from mild to moderate in severity. Heavy and prolonged use of cannabis may produce more severe symptoms.
Postpartum Depression and Puerperal Psychosis

Code **F53.0, Postpartum depression**, was created for postpartum depression, a mood disorder that affects women after childbirth. Symptoms and onset vary among women. Postpartum depression may start a few days after delivery or it may emerge 2-3 months later and is oftentimes indistinguishable from depression that is not associated with pregnancy and childbirth. There is no single cause for the extreme sadness, anxiety, fatigue, feelings of guilt, worthlessness, incompetence, and suicidal thoughts. The symptoms of postpartum depression may last from one week up to a year and may require treatment with counseling and antidepressants.

Code **F53.1, Puerperal psychosis**, was created for the most severe form of postpartum psychiatric illness. Puerperal psychosis occurs within the first two weeks after childbirth in approximately 1-2 per 1000 deliveries. The mother may experience hallucinations and become delusional, paranoid, obsessive and erratic. Personal or family history of bipolar disorder or a previous psychotic episode is the most significant risk factor. Puerperal psychosis requires immediate treatment that could require a mood stabilizer and antipsychotic medications.

**Question:**
Patient is seen 10 days after the birth of her baby and is diagnosed with postpartum depression. How should this be coded?

**Answer:**
Assign code O99.345, Other mental disorders complicating the puerperium, and code F53.0, Postpartum depression, for postpartum depression. The instructional note “use additional code to identify specific condition,” at category O99, Other maternal diseases classifiable elsewhere, indicates that a secondary code is needed to specify the mental disorder.

**Question:**
A 25-year-old patient two weeks postpartum was brought to the emergency department with severe confusion, paranoia, hallucinations and delusions. She was hospitalized and treated with antipsychotic medication, determined not to be a suicide risk.
and discharged with a diagnosis of postpartum psychosis. How should postpartum psychosis be coded?

**Answer:**
Assign codes O99.345, Other mental disorders complicating the puerperium, and code F53.1, Puerperal psychosis, for postpartum psychosis. The Excludes2 note at subcategory O99.34, Other mental disorders complicating pregnancy, childbirth, and the puerperium, indicates code O99.345 may be assigned with code F53.1. Additionally, the instructional note “use additional code to identify specific condition,” at category O99, Other maternal diseases classifiable elsewhere, indicates that a secondary code is needed.

**Factitious Disorder**

A new code was created for factitious disorder imposed on another (F68.A) and changes were made in the titles for codes in subcategory F68.1, Factitious disorder, to distinguish between two types of factitious disorders classified to category F68, Other disorders of adult personality and behavior.

Factitious disorder imposed on self, also referred to as Munchausen’s syndrome, is a disorder in which a person falsely reports or causes his or her own physical or psychological signs or symptoms. Subcategory F68.1, Factitious disorder imposed on self, has been further subdivided as follows: unspecified (F68.10), with predominantly psychological signs and symptoms (F68.11), with predominantly physical signs and symptoms (F68.12), and with combined psychological and physical signs and symptoms (F68.13).

Factitious disorder imposed on another, is a disorder in which a caregiver (perpetrator) falsely reports or causes an illness or injury in another person (victim) under his or her care, such as a child, an elderly adult, or a person who has a disability. The condition is also referred to as “Munchausen’s syndrome by proxy (MSBP)” or “factitious disorder by proxy.” The perpetrator, not the victim, receives this diagnosis. Code **F68.A, Factitious disorder imposed on another**, is assigned to the perpetrator’s record. For the victim of a patient suffering from MSBP, the appropriate code from categories T74, Adult and child abuse, neglect and other maltreatment, confirmed, or T76, Adult and child abuse, neglect and other maltreatment, suspected, is assigned.
Clonic Hemifacial Spasm

Codes were created to allow the reporting of clonic hemifacial spasm laterality:

- G51.31 Clonic hemifacial spasm, right
- G51.32 Clonic hemifacial spasm, left
- G51.33 Clonic hemifacial spasm, bilateral and
- G51.39 Clonic hemifacial spasm, unspecified

Hemifacial spasm is a neuromuscular condition that causes brief, involuntary, irregular clonic or tonic movement of muscles that are innervated by the seventh cranial nerve. The condition usually begins with a brief twitching of the eyelid muscle on one side of the face. The twitch may pull the eyelid down to completely shut the eye. As it progresses, the condition may ultimately extend down the face to affect the muscles of the cheek and mouth. The spasm may spread to the other side.

Clonic hemifacial spasm is caused by compression or injury of the facial nerve, brainstem lesion, multiple sclerosis, or Bell’s palsy. Treatment includes botulinum toxin injection and medications such as carbamazepine, benzodiazepine and baclofen. Compression of the nerve may require surgical intervention.

Question:
A patient with clonic hemifacial spasm of the left side was admitted for percutaneous endoscopic release of the facial nerve. What are the diagnosis and procedure code assignments?

Answer:
Assign code G51.32, Clonic hemifacial spasm, left, for the diagnosis.

Assign code 00NM4ZZ, Release facial nerve, percutaneous endoscopic approach, for the procedure.
Muscular Dystrophy

Codes G71.00, Muscular dystrophy, unspecified, G71.01, Duchenne or Becker muscular dystrophy, G71.02, Facioscapulohumeral muscular dystrophy, and G71.09, Other specified muscular dystrophies, were created to specifically identify different types of muscular dystrophy.

Muscular dystrophy is a group of diseases caused by genetic mutations that impede the production of proteins involved in muscle growth and development. It causes progressive weakness and degeneration of the skeletal muscles that control movement. There are several major types and dozens of sub-types of muscular dystrophy. Most are extremely rare. The disorders differ by distribution and extent of muscle weakness, age of onset, rate of progression and pattern of inheritance.

Duchenne muscular dystrophy is the most common form of muscular dystrophy. It is due to the absence of the protein, dystrophin, and causes weakness and wasting of the skeletal and cardiac muscles. Boys are most commonly affected. Symptoms of muscle weakness affecting the hips, thighs, pelvis and shoulders are noticeable between the ages of 1-6 years old as the child has difficulty walking, sitting and running. The progression is rapid. Most individuals affected by Duchenne muscular dystrophy will need a respirator by age 12 as heart and respiratory muscles become weak due to worsening muscle atrophy. There may be learning and memory impairments.

Faulty or inadequate amounts of dystrophin also causes Becker muscular dystrophy, as the same gene is involved, but with different mutations. It is very similar to Duchenne muscular dystrophy, with similar signs and symptoms, but symptoms start later in childhood, are less severe and progress more slowly. Patients with Duchenne muscular dystrophy typically live into their twenties, while patients with Becker muscular dystrophy can survive into their forties or beyond.

Facioscapulohumeral muscular dystrophy begins in the teenage years and causes progressive weakness of the muscles of the face, shoulder blades and upper arms, as indicated by the name of the condition. Difficulty smiling, or fully closing the eyes is usually the first symptom of the disease. Weakness in the muscles of the shoulder causes winging, or protruding of the scapulae from the back. The trunk and lower extremities are eventually affected.
Muscular dystrophy cannot be cured. Medication and therapy for functional disabilities help to manage symptoms. Non-steroidal anti-inflammatory drugs slow and reduce the muscle degeneration; immunosuppressants delay damage to dying muscle cells and antibiotics treat any infections.

**Question:**
A patient with facioscapulohumeral dystrophy (FSHD) presents with chronic right shoulder pain and scapular winging. Due to the persistent and refractory symptoms, the surgeon performed a scapulothoracic fusion with iliac crest bone graft. During surgery, the surgeon fused the scapula to the underlying ribs. Bone graft harvested from the iliac crest was used as an autograft, and the scapula was wired to the adjacent ribs creating a stable platform. The bone graft was supplemented with some cancellous allograft croutons to increase its volume and was placed along each rib in the interface between the rib and scapula. How is the diagnosis and procedure coded?

**Answer:**
Assign code G71.02, Facioscapulohumeral muscular dystrophy, for the diagnosis.

Assign the following codes for the procedure:

- **0PH504Z**  
  Insertion of internal fixation device into right scapula, open approach, for fixation of the scapula to the ribs

- **0PU507Z**  
  Supplement right scapula with autologous tissue substitute, open approach, for the iliac bone autograft applied to the site, and

- **0PU50KZ**  
  Supplement right scapula with nonautologous tissue substitute, open approach, for the allograft croutons applied to the site
0QB20ZZ  Excision of right pelvic bone, open approach, for the harvesting of the autologous bone for grafting

The placement of iliac crest bone graft and allograft is captured with the root operation “Supplement” – “Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part.”

**Blepharitis**

Blepharitis refers to inflammation of the eyelids with red, irritated, itchy eyelids associated with dandruff-like scales forming at the eyelashes. The condition is commonly seen when the tiny oil glands near the base of the eyelashes become clogged. Codes at subcategories H01.00, Unspecified blepharitis, H01.01, Ulcerative blepharitis, and H01.02, Squamous blepharitis, have been expanded to create unique codes for blepharitis involving both upper and lower eyelids.

**Paralytic Ectropion**

Ectropion typically involves the outward turning of the lower eyelid away from the globe with a component of horizontal lid laxity. Ectropion can result in exposure of the cornea, excessive tearing, keratinization of the palpebral conjunctiva, and loss of vision. Paralytic ectropion may occur with seventh nerve paralysis due to Bell’s palsy, cerebellopontine angle tumors, herpes zoster oticus, stroke, and lesions involving the parotid gland. Other causes may include but are not limited to trauma, scarring, previous surgeries or skin cancer. The condition can also develop because of tissue loosening associated with aging. The following codes were created to identify and track patients with this condition:

- H02.151 Paralytic ectropion of right upper eyelid
- H02.152 Paralytic ectropion of right lower eyelid
- H02.153 Paralytic ectropion of right eye, unspecified eyelid
- H02.154 Paralytic ectropion of left upper eyelid
- H02.155 Paralytic ectropion of left lower eyelid
- H02.156 Paralytic ectropion of left eye, unspecified eyelid
- H02.159 Paralytic ectropion of unspecified eye, unspecified eyelid
Lagophthalmos

The following codes for lagophthalmos were expanded to provide unique codes to identify when the condition presents in the right eye, left eye, and bilateral eyes:

- **H02.20** Unspecified lagophthalmos (H02.20A, H02.20B, and H02.20C)
- **H02.21** Cicatricial lagophthalmos (H02.21A, H02.21B, and H02.21C)
- **H02.22** Mechanical lagophthalmos (H02.22A, H02.22B, and H02.22C), and
- **H02.23** Paralytic lagophthalmos (H02.23A, H02.23B, and H02.23C)

Lagophthalmos refers to the inability to close the eyelids completely. Patients suffering from lagophthalmos present with complaint of foreign body sensation in the eye and increased tearing. The condition typically involves both upper and lower eyelids. The main cause for paralytic lagophthalmos is Bell’s palsy. Other leading causes are trauma, infections, and tumors, among other conditions.

This condition may be treated medically, along with supportive care for corneal exposure. Surgical treatment includes tarsorrhaphy, gold weight implantation, upper eyelid retraction, levator recession, lower eyelid tightening, and elevation.

Meibomian Gland Dysfunction

Code H02.8, Other specified disorders of eyelid, has been expanded and a new subcategory (H02.88-) created for Meibomian gland dysfunction of eyelid. Unique codes were created for right upper eyelid (H02.881), right lower eyelid (H02.882), right eye unspecified eyelid (H02.883), left upper eyelid (H02.884), left lower eyelid (H02.885) and left eye unspecified eyelid (H02.886), unspecified eye, unspecified eyelid (H02.889), right eye, upper and lower eyelids (H02.88A), and left eye, upper and lower eyelids (H02.88B).

Meibomian glands are the tiny oil glands that line the margin of the eyelids (the edges that touch when the eyelids are closed). These glands secrete oil, which coats the surface of the eyes and keeps the water component of tears from evaporating. Together, the water and the oil layer make up the tear film. Meibomian gland dysfunction refers to abnormality of the meibomian
glands where they do not secrete enough oil into the tears. The clinical signs and symptoms of Meibomian gland dysfunction include distinct changes in viscosity and clarity of expressed contents from the Meibomian glands, increased tear film osmolarity, which may be reflected by complaints of burning and stinging, and premature evaporation, leading to decreased tear-film stability. This condition is also a leading cause of dry eye syndrome.

**Rosacea Conjunctivitis**

Code H10.8, Other conjunctivitis, has been expanded and new codes created for rosacea conjunctivitis of the right eye (H10.821), left eye (H10.822), bilateral (H10.823) and unspecified eye (H10.829).

Rosacea is one of the most common chronic inflammatory diseases of the skin, and may involve the eyes in 58–72% of patients causing eyelid and ocular surface inflammation. A common ocular manifestation associated with rosacea is an inflammatory conjunctivitis. Symptoms include itching, burning, a gritty or foreign body sensation, and erythema and swelling of the eyelid. Treatment is often systemic medication.

**Question:**
A 75-year-old woman with a long history of red eye and relapsing conjunctivitis-blepharitis presented to the ophthalmology clinic and was diagnosed with bilateral rosacea conjunctivitis. How should this be coded?

**Answer:**
Assign code L71.8, Other rosacea, as the first listed diagnosis, followed by code H10.823, Rosacea conjunctivitis, bilateral.

**Brow Ptosis**

Code H57.8, Other disorders of eye and adnexa, has been expanded to uniquely identify brow ptosis of the right brow (H57.811), left brow (H57.812), bilateral brow (H57.813) and unspecified brow (H57.819).

Brow ptosis refers to drooping of the eyebrow. Brow ptosis is usually the result of the involutional changes that affect the forehead muscles and soft tissue. It may also be due to facial nerve palsy, trauma, and surgery. Brow ptosis can lead to mechanical drooping of eyelid skin causing impairment of vision.
Treatment consists of different surgeries depending on whether the temporal portion of the brow is lifted, or the entire brow is lifted.

**Lacunar Infarction**

Code I63.8, Other cerebral infarction, was expanded and two new codes created:

- **I63.81**  Other cerebral infarction due to occlusion or stenosis of small artery
- **I63.89**  Other cerebral infarction

Code I63.81 includes lacunar infarction to align with the World Health Organization’s indexing of this condition.

Lacunar infarcts are small cerebral infarctions in the deep cerebral white matter, basal ganglia or pons. They are presumed to result from the occlusion of a single small perforating artery supplying the subcortical areas of the brain. Lacunar infarcts account for approximately one-fourth of all ischemic strokes. The “lacune” refers to the space left behind after infarct healing. Lacunar infarctions are often manifested by syndromes based on location, which are represented in the current ICD-10-CM codes, G46.5, Pure motor lacunar syndrome; G46.6, Pure sensory lacunar syndrome; and G46.7, Other lacunar syndromes.

**Question:**
A patient is admitted to the hospital due to altered mental status, gait imbalance and vertigo. The patient is diagnosed with an acute lacunar infarct and encephalopathy secondary to the lacunar infarction. How should this be coded?

**Answer:**
Assign code I63.81, Other cerebral infarction due to occlusion or stenosis of small artery, for the lacunar infarct. In addition, assign code G93.49, Other encephalopathy, as a secondary diagnosis, since the encephalopathy is not inherent to the lacunar infarct.
Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy

Code I67.8, Other specified cerebrovascular diseases, has been expanded and a new sub-subcategory (I67.85) created for hereditary cerebrovascular diseases. Two new codes were created as follows:

- **I67.850** Cerebral autosomal dominant arteriopathy with subcortical infarct and leukoencephalopathy
- **I67.858** Other hereditary cerebrovascular disease

Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL) is a cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy. It is an autosomal dominant genetic disorder caused by mutations in the Notch3 gene.

CADASIL can cause strokes, brain lesions, and other impairments. Symptoms of CADASIL can be variable. Initial symptoms are migraine and mood disorders in individuals in their 20s and 30s, followed by strokes in their 40s and 50s. Epilepsy may also occur. As the disease advances, multiple strokes generally lead to a vascular dementia. Patients may present at any age depending on which symptom is more prominent. Death generally occurs 10 to 20 years after the onset of strokes and dementia.

Associated diagnoses, such as epilepsy, stroke and vascular dementia are coded separately.

**Acute Appendicitis**

The following codes were created for acute appendicitis:

- **K35.20** Acute appendicitis with generalized peritonitis, without abscess
- **K35.21** Acute appendicitis with generalized peritonitis, with abscess
- **K35.30** Acute appendicitis with localized peritonitis, without perforation or gangrene
- **K35.31** Acute appendicitis with localized peritonitis and gangrene, without perforation
- **K35.32** Acute appendicitis with perforation and localized peritonitis, without abscess
• K35.33  Acute appendicitis with perforation and localized peritonitis, with abscess
• K35.890 Other acute appendicitis without perforation or gangrene
• K35.891 Other acute appendicitis without perforation, with gangrene

Appendicitis occurs when blockage of the appendix causes increased pressure and inflammation. There may be pain around the navel or the right side of the lower abdomen, loss of appetite, and nausea. Acute appendicitis progresses to gangrene as circulation to the appendix is obstructed and the lumen become necrotic. Profuse vomiting may be a sign that there is rupture or perforation with peritonitis as the peritoneal space becomes contaminated with bacteria.

Localized peritonitis involves a confined area of the abdominal cavity, usually around an abscess or collection of pus. General, diffuse peritonitis affects most of the peritoneum. Perforation, the presence of an abscess, and peritonitis are key complications of appendicitis that physicians use to describe the severity of acute appendicitis and to determine the most appropriate course of treatment. Percutaneous drainage of the abscess with the administration of antibiotics is one effective treatment of acute appendicitis with peritonitis. However, an appendectomy is the standard treatment for acute appendicitis, and is the most common reason for surgery in children.

**Question:**
A patient was admitted for an emergency appendectomy due to acute perforated appendicitis. What are the appropriate diagnosis codes?

**Answer:**
Assign code K35.32, Acute appendicitis with perforation and localized peritonitis, without abscess.

**Question:**
A patient was admitted with sepsis due to acute necrotic appendicitis with generalized peritonitis. What are the diagnosis code assignments?

**Answer:**
Assign codes A41.9, Sepsis, unspecified organism, and K35.20, Acute appendicitis with generalized peritonitis, without abscess.
**Abscess of Anal and Rectal Regions**

A new subcategory was created at category K61, Abscess of anal and rectal regions, for ischiorectal abscess (K61.3). Two new codes were created at this new subcategory to specifically identify horseshoe abscess (K61.31), and other ischiorectal abscess (K61.39),

A new code was also created for supralevator abscess (K61.5). Codes already exist for anal abscess (K61.0) and intrasphincteric abscess (K61.4); however, an inclusion term was added at code K61.4 for intersphincteric abscess.

Abscesses of the anal and rectal regions are categorized according to their anatomic location: perianal, ischiorectal, intersphincteric, and supralevator. Perianal abscesses are the most common, comprising over half of all anorectal abscesses. They are superficially located adjacent to the anus. Ischiorectal abscesses are the next most common; these abscesses are located deep to the superficial subcutaneous space. A horseshoe abscess is a specific type of ischiorectal abscess. Intersphincteric abscesses occur between the external and internal sphincter muscles. Supralevator abscesses are located deep to the levator muscle in the true pelvis. The anatomic details determine appropriate treatment and accurate prognostication.

**Gangrene and Perforation of Gallbladder in Cholecystitis**

A new subcategory K82.A, Disorders of gallbladder in diseases classified elsewhere, was created to specifically identify gangrene and/or perforation in cholecystitis. The two new codes in this subcategory are K82.A1, Gangrene of gallbladder in cholecystitis, and K82.A2, Perforation of gallbladder in cholecystitis.

Disorders of the gallbladder and biliary tract are common and frequently attributable to cholelithiasis. Prolonged obstruction of the cystic duct or stasis of bile in the gallbladder leads to inflammation of the gallbladder, or “cholecystitis.” Cholecystitis varies in severity from mild inflammation of the gallbladder to severe inflammation resulting in tissue necrosis and eventually perforation of the gallbladder.
**Question:**
A patient presents to the hospital and is admitted with acute cholecystitis and cholelithiasis. She underwent cholecystectomy. During surgery, gangrene and perforation of the gallbladder were found. How is this diagnosis coded?

**Answer:**
Assign code K80.00, Calculus of gallbladder with acute cholecystitis without obstruction; code K82.A1, Gangrene of gallbladder in cholecystitis; and code K82.A2, Perforation of gallbladder in cholecystitis.

---

**Primary Sclerosing Cholangitis**

Codes **K83.01, Primary sclerosing cholangitis**, and **K83.09, Other cholangitis**, were created for cholangitis.

Primary sclerosing cholangitis (PSC) is an autoimmune condition that causes inflammation of the bile duct. The inflammation damages the duct inside and outside the liver and progresses to scarring that eventually narrows the duct. When the duct becomes blocked, bile accumulates in the liver. Damage to the liver leads to cirrhosis, fibrosis and liver failure.

The symptoms of PSC include feeling tired, weakness, itchy skin, poor appetite, weight loss, fever, and pain in the abdomen. It is estimated that the condition occurs in 1 in 10,000 people. Men between the ages of 30 and 40 years-old are most often affected, but it also occurs in children, women and the elderly. PSC patients usually have inflammatory bowel disease and ulcerative colitis. The risk of colon cancer increases with PSC and requires close monitoring.

There is no treatment to slow the disease progression for PSC. Treatment is directed at strictures and keeping the duct patent. Liver transplant is the definitive treatment for patients with advanced cirrhosis and liver failure.

**Question:**
A patient is admitted for liver transplant due to end-stage liver disease secondary to primary sclerosing cholangitis. What are the appropriate diagnosis code assignments?
Answer:
Assign codes K72.90, Hepatic failure, unspecified without coma and K83.01, Primary sclerosing cholangitis.

**Myalgia of Mastication and Auxiliary Muscles**

New codes were created for myalgia of mastication muscle (M79.11); myalgia of auxiliary muscles, head and neck (M79.12); myalgia of unspecified site (M79.10); and myalgia of other sites (M79.18). Myalgia of the mastication and auxiliary muscles is the most common complaint of patients who present with temporomandibular dysfunction. There are four muscles of mastication – the masseter, temporalis, medial pterygoid and lateral pterygoid. These muscles of mastication are associated with movements of the jaw (temporomandibular joint). An estimated 60 -70% of presenting patients have some degree of myalgia, even if they also have a true internal derangement. These codes describe specific areas of pain, since the site of pain helps in determining treatment protocols.

**Urethral Stricture**

Codes were created to describe the following urethral strictures:

- Overlapping post-traumatic male urethral stricture of overlapping sites (N35.016);
- Post-infective male urethral stricture NEC (N35.116);
- Other male urethral strictures involving specific segments (N35.811-N35.814, N35.911-N35.914);
- Overlapping sites of the male urethra (N35.816 and N35.916);
- Unspecified sites of the male urethra (N35.819 and N35.919);
- Post-procedural overlapping male urethral stricture (N99.116), and
- Other and unspecified female urethral stricture (N35.82 and N35.92).

The urethra passes urine to the outside of the body. Inflammation of the urethra due to trauma, infection, neoplasm, and iatrogenic urologic interventions can lead to scarring, narrowing and obstruction of the flow of urine.

Urethral stricture is more common in males than females, because men have a longer urethra. The male urethra is divided into different segments that can be involved in a stricture. The posterior urethra consists of the segments that pass through the prostatic urethra and membranous urethra. The anterior
urethra consists of the segment fixed to the pelvic floor (bulbar urethra) and the segment passing through the pendulous portion and glans penis (penile and glandular urethra).

**Trichorionic/Triamniotic Triplet and Quadrachorionic/Quadra-Amniotic Quadruplet Pregnancy**

New subcategories describing the number of chorionic and amniotic sacs in triplet pregnancy (O30.13); quadruplet pregnancy (O30.23); and other specified multiple gestation pregnancy (O30.83) were created to capture the most common presentation in multiple gestation pregnancy, where the number of placentas is equal to the number of amniotic sacs. In trichorionic/triamniotic triplet and quadrachorionic/quadra-amniotic quadruplet pregnancy, each infant has a separate placenta and amniotic sac. Depending on the number of chorions and amnions, the risk of complication is higher and treatment plans can vary.

Multiple gestation pregnancies with monochorionic pairs have a much greater risk of perinatal mortality. Previously, codes in category O30, Multiple gestation, only reflected conditions potentially associated with higher morbidity and fetal loss, such as monochorionic or monoamniotic pairs in triplets, quadruplets, or other multiple pregnancies.

**Infection of Obstetric Surgical Wound**

Subcategory O86.0, Infection of obstetric surgical wound, was expanded and new codes created to describe obstetric surgical wounds according to the depth:

- Infection of obstetrical surgical wound, unspecified (O86.00);
- Infection of obstetric surgical wound, superficial incisional site (O86.01);
- Infection of obstetric surgical wound, deep incisional site (O86.02);
- Infection of obstetric surgical wound, organ and space site (O86.03);
- Sepsis following an obstetrical procedure (O86.04); and
- Infection of obstetric surgical wound, other surgical site (O86.09).

These codes are assigned based on the provider’s documentation of a postoperative obstetrical wound infection (surgical site infection).
This code expansion aligns with the new codes at category T81.4, Infection following procedure, and is consistent with the Centers for Disease Control and Prevention criteria for defining a Surgical Site Infection (SSI). The Patient Assessment and Outcome Committee of the American Association for the Surgery of Trauma requested these code revisions in order to distinguish the severity of an infection following a procedure.

In addition, revisions were made to the *ICD-10-CM Official Guidelines for Coding and Reporting* to clarify usage of the new codes.

**Question:**
A 25-year-old female was readmitted to the hospital with fever, tachycardia, tachypnea, erythema, discharge, and induration of the cesarean incision site. She had delivered an infant via low transverse cesarean section approximately one week ago. The provider ordered blood, urine, and wound cultures. The blood and wound cultures were positive for beta-hemolytic Streptococcus group B. The provider’s documentation reflected beta-hemolytic Streptococcal group B sepsis due to deep incisional infection of cesarean wound. How should this case be coded?

**Answer:**
Assign code O86.02, Infection of obstetric surgical wound, deep incisional site, as the principal diagnosis. Codes O85, Puerperal sepsis, and B95.1, Streptococcus group B, as the cause of diseases classified elsewhere, should be assigned as additional diagnoses.

**Fetal Inflammatory Response Syndrome**

New codes have been created to identify newborns affected by fetal inflammatory response syndrome (P02.70); and newborns affected by other conditions from chorioamnionitis (P02.78).

Fetal inflammatory response syndrome (FIRS) is an acute systemic inflammatory response to maternal intra-amniotic fluid infection such as chorioamnionitis, amnionitis, membranitis or placentitis. FIRS can occur if the neonate is exposed to chorioamnionitis either through direct contact with infected amniotic fluid or inflammatory cell transfer from the uteroplacental...
circulation. Preterm birth may be caused by intrauterine infection and maternal/fetal inflammatory responses.

The syndrome is characterized by fetal prematurity, elevated level of fetal plasma interleukin 6, neutrophilia, suspected or confirmed sepsis, and multi-organ involvement. Target organs involved may include the hematopoietic system, the fetal thymus, adrenal glands, skin, kidneys, heart, lungs, and brain. The syndrome can progress to organ failure, septic shock, and fetal mortality. The syndrome typically manifests in neonates with preterm labor with intact membranes, preterm pre-labor rupture of the membranes, and in fetal viral infections such as cytomegalovirus. A diagnosis of FIRS is only considered in fetuses or newborns through amniotic testing, so the syndrome is classified in the perinatal chapter.

Assign code P02.70, Newborns affected by fetal inflammatory response syndrome, when the provider has documented a diagnosis of fetal inflammatory response syndrome. If the newborn is affected by other conditions from chorioamnionitis, code P02.78 is assigned.

Newborn Affected by Noxious Substances Transmitted via Placenta or Breast Milk

Several modifications have been made to codes in category P04, Newborn affected by noxious substances transmitted via placenta or breast milk. The inclusion term under code P04.0, Newborn affected by maternal anesthesia and analgesia in pregnancy, labor and delivery, has been revised to state: “Newborn affected by reactions and intoxications from maternal opiates and tranquilizers administered for procedures during pregnancy or labor and delivery.”

Subcategory P04.1, Newborn affected by other maternal medication, has been expanded and new codes were created to identify specific substances known to have teratogenic effects. A teratogenic drug can be a prescribed medication, a street drug, or alcohol use that can increase the risk of congenital anomalies. According to research, approximately 4% to 5% of birth defects are caused by exposure to a teratogen. Several substances have recognized teratogenic effects when the mother is exposed to the substance during pregnancy.

An instructional note “Code first withdrawal symptoms from maternal use of drugs of addiction, if applicable (P96.1)” has also been added under subcategory P04.1. For example, if the infant experiences signs of drug
withdrawal, because of the mother’s use of opiates, assign code P96.1, Neonatal withdrawal symptoms from maternal use of drugs of addiction, and code P04.14, Newborn affected by maternal use of opiates. Both codes are required to capture the infant’s withdrawal symptoms and the specific drug causing the withdrawal. Code P96.1 is sequenced first.

The new codes identifying specific substances the mother used are as follows:

- **P04.11** Newborn affected by maternal antineoplastic chemotherapy
- **P04.12** Newborn affected by maternal cytotoxic drugs
- **P04.13** Newborn affected by maternal use of anticonvulsants
- **P04.14** Newborn affected by maternal use of opiates
- **P04.15** Newborn affected by maternal use of antidepressants
- **P04.16** Newborn affected by maternal use of amphetamines
- **P04.17** Newborn affected by maternal use of sedative-hypnotics
- **P04.1A** Newborn affected by maternal use of anxiolytics
- **P04.18** Newborn affected by other maternal medication
- **P04.19** Newborn affected by maternal use of unspecified medication

Subcategory P04.4, Newborn affected by maternal use of drugs of addiction, has been further expanded, and two new codes created: **P04.40**, Newborn affected by maternal use of unspecified drugs of addiction, and **P04.42**, Newborn affected by maternal use of hallucinogens.

In addition, two new codes have been created under subcategory P04.8, Newborn affected by other maternal noxious substances: **P04.81**, Newborn affected by maternal use of cannabis, and **P04.89**, Newborn affected by other maternal noxious substances.

### Congenital Zika Virus Disease

A new code was created to uniquely identify congenital Zika virus disease (**P35.4**). The Zika virus is an arthropod-borne virus spread by the bite of infected mosquitoes. The virus can be passed from the mother to the fetus via the placenta. In the United States, approximately one in ten pregnant women with Zika virus delivered infants with congenital anomalies, such as microcephaly in which head and brain development is abnormal when compared to normal infants. This new code will capture newborn infants who are infected with the virus and who may require additional resources for their care.
Question:
An infant, born via vaginal delivery in the hospital, is diagnosed with “microcephaly due to Zika virus infection.” What are the appropriate diagnosis codes for this case?

Answer:
Assign code Z38.00, Single liveborn infant, delivered vaginally, as the principal diagnosis. Assign codes P35.4, Congenital Zika virus disease, and Q02, Microcephaly, as additional diagnoses.

Question:
A 25-year-old woman delivered an infant who tested positive for the Zika virus. The infant was diagnosed with microcephaly at birth, and was transferred to a specialty hospital on day 2 of life. Zika virus IgM testing was performed for serum, which was positive for Zika virus. The provider’s final diagnostic statement listed Microcephaly due to congenital Zika virus infection. There is an instructional note to use an additional code at both P35.4, Congenital Zika virus disease, and Q02, Microcephaly. How should the specialty hospital code and sequence these conditions?

Answer:
Sequence code P35.4, Congenital Zika virus disease, as the principal diagnosis. Code Q02, Microcephaly, should be assigned as an additional diagnosis. Code P35.4 is sequenced as the principal diagnosis since it is the underlying cause of the microcephaly.

Neonatal Metabolic Disturbances

Neonatal metabolic disturbances are transitory conditions that occur during birth or shortly thereafter. New codes were created to identify metabolic disturbances in the major serum electrolytes (sodium, potassium, chloride and bicarbonate) that are specific to the newborn. These new codes also differentiate hyper- and hyponatremia, and hyper- and hypokalemia.
These conditions have different etiologies, consequences, and treatment with potential for a different level of urgency. Fluid management is an important component of treatment and varies greatly between these conditions. Medications may also be given depending on which condition is present. Newborns may experience both hyper- and hyponatremia or hyper- and hypokalemia during the same hospital stay; the same is true for high or low serum chloride and bicarbonate concentrations.

The American Academy of Pediatrics requested the addition of new codes in category P74, Other transitory neonatal electrolyte and metabolic disturbances, to specifically identify these metabolic disturbances.

The new codes are as follows:

- P74.21  Hypernatremia of newborn
- P74.22  Hyponatremia of newborn
- P74.31  Hyperkalemia of newborn
- P74.32  Hypokalemia of newborn
- P74.41  Alkalosis of newborn
- P74.421  Hyperchloremia of newborn
- P74.422  Hypochloremia of newborn
- P74.49  Other transitory electrolyte disturbance of newborn

**Doubling of Uterus/Septate Uterus**

Codes at subcategory Q51.2, Other doubling of uterus, were expanded to include complete septate uterus (Q51.21) and partial septate uterus (Q51.22). The American Congress of Obstetricians and Gynecologists requested this expansion to allow for specificity when reporting a septate uterus. In addition, there are new codes for unspecified septate uterus (Q51.20) and other specified septate uterus (Q51.28).

A septate uterus is a deformity of the uterus, which happens during fetal development and before birth. It occurs when a wall of tissue (septum) remains between the two halves of the uterus, dividing it either fully or partially into two separate cavities. A septate uterus does not usually affect a woman’s ability to conceive, but it does significantly increase the risk of a miscarriage. Septate uterus may also be accompanied by a double cervix and double vagina, but that is classified to the existing codes at subcategory Q51.1, Doubling of uterus with doubling of cervix and vagina. Doubling of uterus is thought to be the most common type of abnormal uterine development.
Angelman Syndrome

Subcategory Q93, Monosomies and deletions from the autosomes, not elsewhere classified, was expanded and new codes were created to specifically identify Angelman Syndrome (Q93.51) and other deletions of part of a chromosome (Q93.59).

Angelman Syndrome (AS) is a genetic neurodevelopmental disorder characterized by cognitive disability, motor dysfunction, speech impairment, hyperactivity, seizures, excessive laughing, decreased sleeping and gastroesophageal reflux. AS generally results from deletion, mutation or silencing of the gene for ubiquitin-protein ligase E3A (UBE3A). Deletions usually start and end at common breakpoints. Certain symptoms are associated with deletions involving particular regions, such as epilepsy. Some cases with large deletions are also associated with hypopigmentation or oculocutaneous albinism. There are different classes of deletions identified.

AS affects an estimated 1 in 12,000 to 20,000 people. With life expectancy being close to normal, this corresponds to approximately 15,000 to 25,000 people in the US being affected.

This code was created at the request of the Angelman Biomarkers and Outcome Measures Alliance to aid in the tracking of these patients, for clinical and research purposes.

Williams Syndrome

Code Q93.82 was created to identify Williams Syndrome (WS). WS, also known as Williams Beuren syndrome (WBS), is a multi-system, neurodevelopmental genetic disorder caused by a “micro-deletion” on the long arm of chromosome 7 (7q11.23) associated with the loss of 26-28 contiguous genes. Both medical and cognitive problems are present throughout the lifespan of those with WS. The most common medical problems include cardiovascular abnormalities, various endocrine abnormalities, gastrointestinal issues and musculoskeletal problems.

Neurodevelopmental aspects of WS include mild to moderate intellectual disability and learning disabilities. Anxiety and other behavioral/emotional issues are also typical in WS.

Individuals with WS share common facial features. Children usually have a small upturned nose, long philtrum, delicate jaw, and puffiness around the
eyes, while adolescents and adults are more likely to display a bulbous nose, wide mouth and full lips. A stellate pattern in the iris of blue-eyed individuals lasts throughout the life of the patient.

The Williams Syndrome Association requested the creation of a specific code for WS. This will provide opportunities for research, assist in more accurately determining the true frequency of this disorder, help to identify people to participate in research, and enable surveillance for the disorder.

**Abnormal Findings in Urine**

One of the most commonly used diagnostic tests for patients who form kidney stones is a urine collection test looking for abnormal levels of certain substances. When these abnormalities are identified, treatment can be started to reduce the risk of future stone formation. The American Urological Association (AUA) requested the creation of new codes for specific abnormal findings in urine collection to help with research and public health. The new codes are as follows:

Hypocitraturia (**R82.991**) – Low levels of citrate in the urine is usually defined, as citrate excretion of less than 320 mg/day but in severe cases can be less than 100 mg/day. Low citrate levels are a known risk factor for kidney stone formation. Citrate inhibits stone formation by complexing with calcium in the urine, inhibiting spontaneous nucleation, and preventing growth and agglomeration of crystals. This condition is usually treated with citrate medications.

Hyperoxaluria (**R82.992**) – Occurs when there is too much oxalate in the urine. Oxalate is a natural chemical in the body and is found in certain types of food. Hyperoxaluria can be caused by inherited (genetic) disorders, an intestinal disease or eating too many oxalate-rich foods. Individuals with hyperoxaluria often have calcium oxalate kidney stones. Treatment for these patients may consist of dietary changes or medications.

Please note that there was already a code for hyperoxaluria (E72.53); however, the descriptor for code E72.53, Hyperoxaluria, has been revised to “Primary hyperoxaluria.” Code E72.53 is reserved specifically for a childhood inborn error of metabolism, primary hyperoxaluria, which is a diagnostic condition that can be determined by genetic testing. This is different from someone who has an idiopathic or diet-induced mild elevation of oxalate in the urine, who does not have the genetic inborn error of metabolism.
Hyperuricosuria (R82.993) – Is defined as high levels of uric acid in the urine. Direct causes of hyperuricosuria include dissolution of uric acid crystals in the kidneys or urinary bladder and hyperuricemia. Indirect causes include uricosuric drugs, rapid breakdown of bodily tissues containing large quantities of DNA and RNA, and a diet high in purine. Acute hyperuricosuria is a common complication of tumor lysis syndrome. Chronic hyperuricosuria is associated with gout and uric acid nephrolithiasis. This condition may be treated with dietary measures and possible treatment of an underlying condition.

Hypercalciuria (R82.994) – Patients with hypercalciuria have kidneys that put out higher levels of calcium than normal. Chronic hypercalciuria may lead to impairment of renal function, nephrocalcinosis, and renal insufficiency. These patients may be treated with thiazide diuretics.

Code R82.998 describes other abnormal findings in urine.

**Abnormal Findings on Diagnostic Imaging of Testis**

Patients sometimes have an abnormality of the testicle detected on an imaging study performed for genitourinary or non-genitourinary reasons, which may require further testing (i.e., further imaging, lab tests or surgery). Currently, there is no unique code for reporting abnormal findings on diagnostic imaging of the testis.

At the request of the American Urological Association (AUA) new codes were created to identify abnormal radiological findings on diagnostic imaging of the testis. These new codes identify abnormal findings of the right testicle (R93.811); left testicle (R93.812); bilateral testicles (R93.813); or unspecified testicle (R93.819).

In addition, code R93.89 was created to identify abnormal radiological findings on diagnostic imaging of other specified body structures.

**Poisoning by Ecstasy**

A new subcategory T43.64, Poisoning by ecstasy, was created and expanded with unique codes to identify ecstasy poisoning as follows: Poisoning by ecstasy, accidental (unintentional), (T43.641); intentional self-harm (T43.642); assault (T43.643); and undetermined (T43.644).
Ecstasy, 3, 4-methylenedioxymethamphetamine (MDMA), is a synthetic drug that has both hallucinogenic (psychedelic) and stimulant effects. It produces feelings of increased energy, pleasure, emotional warmth, and distorted sensory and time perception. This drug is used primarily as a recreational drug and is abused by millions of Americans, in a wide range of settings, and by diverse demographic subgroups. Although many users think it is safe, ecstasy can cause a number of problems, especially in cases of poisoning.

Ecstasy dependence, abuse, and use are currently classified in ICD-10-CM with hallucinogens, while at the same time, ecstasy poisoning is classified as an amphetamine derivative. In cases of poisoning, the effects are more related to its stimulant effects, which are due to its chemical structure being a substituted amphetamine. Symptoms of ecstasy poisoning or overdose can include elevated blood pressure, panic attacks, loss of consciousness, seizures, and potentially hyperthermia. Other potential adverse health effects include anxiety, irritability, aggression, sleep disturbance, reduced mental ability, nausea, muscle cramps, dehydration, arrhythmias, heart failure and kidney failure. Because the most significant effects of ecstasy poisoning are the stimulant effects, identifying and differentiating it from other amphetamines, will allow for better tracking of the effects of these different drugs.

**Question:**
A patient was admitted after losing consciousness and was subsequently diagnosed with overdosing on ecstasy. The patient eventually admitted to abusing ecstasy for years. What is the appropriate code for the ecstasy poisoning?

**Answer:**
Assign code T43.641, Poisoning by ecstasy, accidental (unintentional), as the principal diagnosis. Assign code F16.10, Hallucinogen abuse, uncomplicated, to show the ecstasy abuse. Assign also codes for any effects of the ecstasy poisoning as additional diagnoses.
Forced Labor and Sexual Exploitation

The following new subcategories were created to uniquely identify forced labor and sexual exploitation:

- T74.51- Adult forced sexual exploitation, confirmed
- T74.52- Child sexual exploitation, confirmed
- T74.61- Adult forced labor exploitation, confirmed
- T74.62- Child forced labor exploitation, confirmed
- T76.51- Adult forced sexual exploitation, suspected
- T76.52- Child sexual exploitation, suspected
- T76.61- Adult forced labor exploitation, suspected
- T76.62- Child forced labor exploitation, suspected

In addition, two new Z codes were created to identify an encounter for examination and observation of victim following forced sexual exploitation (Z04.81) or forced labor exploitation (Z04.82), as well as two new codes for personal history of forced labor or sexual exploitation (Z62.813 and Z91.42).

Category Y07, Perpetrator of assault, maltreatment and neglect, was expanded with new code Y07.6, Multiple perpetrators of maltreatment and neglect, to identify situations where multiple perpetrators are involved.

Human trafficking is a key concern for hospitals across the country as this is a public health concern. Human trafficking is modern day slavery, a human rights violation and criminal enterprise that affects millions of people across the globe including the United States. Common purposes of human trafficking in the United States are for forced sexual exploitation and/or forced labor exploitation, including domestic servitude.

The new codes are intended to help differentiate these patients from other victims of abuse. The effects of both sex and labor trafficking can be devastating for individuals, families, communities and the greater society. Those effects can include consequences for immediate and long term health and well-being. Trafficked persons can experience physical, psychological and social trauma leading to a broad spectrum of needs.

The International Labour Organization (ILO) estimates that 20.9 million people are trafficked worldwide. However, this is only an estimation and the ILO acknowledges challenges in accurately accounting for the prevalence and incidence of human trafficking due to its subversive nature, with many occurrences concealed in work sectors where exploited labor is disguised as conventional employment or invisible altogether.
Health care providers have a significant opportunity to identify and assist victims of human trafficking. Studies show that 50% - 87% of trafficking survivors reported being seen by a health care professional while they were being trafficked. Victims are treated in emergency departments, health clinics, physician offices, urgent care centers or other care settings.

There are efforts underway to train health care providers to identify and respond to victims of human trafficking who present for care. Providers will be made aware of the use of the terms “human trafficking” and “forced labor” and “forced sexual exploitation.”

Key terms related to human trafficking used in medical documentation include:

- Human trafficking
- Labor trafficking
- Sex trafficking
- Commercial sexual exploitation
- Forced commercial sexual exploitation
- Forced prostitution
- Forced sexual exploitation
- Forced labor exploitation
- Exploitation of manual labor
- Exploitation of sexual labor
- Exploitation for manual labor
- Exploitation for commercial sex
- Domestic servitude
- Labor exploitation for domestic work
- Force labor exploitation for domestic work

**Surgical Site Infection Following a Procedure**

Subcategory T81.4, Infection following a procedure, has been expanded and new codes created to identify surgical site infections according to depth. Six codes were created to describe infection following a procedure: unspecified (T81.40); infection following a procedure, superficial incisional surgical site (T81.41); infection following a procedure, deep incisional surgical site (T81.42); infection following a procedure, organ and space surgical site (T81.43); sepsis following a procedure (T81.44); and infection following a procedure, other surgical site (T81.49). These codes are assigned based on the provider’s documentation of a postsurgical wound infection (surgical site infection).
Surgical site infections are commonly classified according to their depth: superficial incisional, deep incisional, and organ/space infection. These categories are consistent with the Centers for Disease Control and Prevention criteria for defining a Surgical Site Infection (SSI). The Patient Assessment and Outcome Committee of the American Association for the Surgery of Trauma requested these code revisions in order to distinguish the severity of an infection following a procedure.

In addition, revisions were made to the *ICD-10-CM Official Guidelines for Coding and Reporting*, to clarify usage of the new codes.

**Question:**
The patient is a 55-year-old female, who was admitted to the hospital for treatment of cervical cancer, and underwent total abdominal hysterectomy. On postoperative day three, the patient’s abdominal incision was intact, but had purulent drainage and slight erythema and induration. A wound drainage specimen was sent to the laboratory for culture. The culture grew E. coli. The provider ordered intravenous antibiotics and documented postoperative wound infection of skin and subcutaneous tissue. What is the appropriate code assignment for the postoperative wound infection?

**Answer:**
Assign code T81.41XA, Infection following a procedure, superficial incisional surgical site, for the postoperative wound infection. Code B96.20, Unspecified Escherichia coli [E. coli] as the cause of disease classified elsewhere, is assigned as an additional diagnosis. The infection involved only skin and subcutaneous tissue of the surgical incision.
Z Code Update

New Z codes were created as noted below.

**Contact/Exposure**
Code Z20.82, Contact with and (suspected) exposure to other viral communicable diseases, was expanded and a new code created (Z20.821), to identify patients who have been in contact with or suspected to have been exposed to the Zika virus.

**Observation**
Two new observation codes are created to identify an encounter for examination and observation of victim following forced sexual exploitation (Z04.81) or forced labor exploitation (Z04.82). Please refer to pages 32-33 in this issue for additional information on forced sexual exploitation and forced labor exploitation.

In addition, code **Z04.89, Encounter for examination and observation for other specified reasons**, was created as a result of the expansion of code Z04.8.

**History (of)**
Two new family history codes are created by expanding code Z83.43, Family history of other disorder of lipoprotein metabolism and other lipidemia to identify family history of elevated lipoprotein (a) (Z83.430) and other disorder of lipoprotein metabolism and other lipidemia (Z83.438). Please refer to page 6 in this issue for additional information about elevated lipoprotein (a).

Two new personal history codes are created as noted below:

- **Z62.813  Personal history of forced labor or sexual exploitation in childhood**
- **Z91.42  Personal history of forced labor or sexual exploitation**

Please refer to pages 32-33 in this issue for additional information on forced sexual exploitation and forced labor exploitation.

**Screening**
Four new screening codes were created to identify screening for mental health and behavioral disorders, unspecified (Z13.30), screening for depression (Z13.31), screening for maternal depression (Z13.32), and other
The new codes will help facilitate reporting the rate of depression screening performed as part of the Healthcare Effectiveness Data and Information Set (HEDIS) measures. HEDIS is a tool used by more than 90 percent of America’s health plans to measure performance on important dimensions of care and service.

Code Z13.4, Encounter for screening for certain developmental disorders in childhood, was expanded and four new codes were created for screening as follows:

- **Z13.40** Encounter for screening for unspecified developmental delays
- **Z13.41** Encounter for autism screening
- **Z13.42** Encounter for screening for global developmental delay (milestones)
- **Z13.49** Encounter for screening for other developmental delays

The new codes will facilitate tracking developmental screening measures on the Medicaid Child Core Set that is required for patients receiving benefits through their State Medicaid program. Both developmental and autism screens are part of the American Academy of Pediatrics “recommendations for pediatric preventive health care,” so both services are provided for many pediatric patients at a variety of encounters, but typically the well-child or preventive medicine exam.

The new codes in subcategory Z13.4 may be reported when the developmental screening is the main (or only) reason for the encounter. They may also be assigned in conjunction with code Z00.12-, Encounter for routine child health examination, when the screening for developmental delays is performed during the same encounter as the routine well child exam.

**Miscellaneous**

New code **Z28.83, Immunization not carried out due to unavailability of vaccine**, was created to allow providers to track why a vaccine that would be expected to be administered as part of the Advisory Committee on Immunization Practices (ACIP) schedule, was not administered. The code may be used when the immunization could not be provided due to lack of availability of vaccine, delay in delivery of vaccine, manufacturer delay of vaccine, and other similar reasons.
ICD-10-PCS NEW/REVISED CODES

A summary of the Fiscal Year 2019 (FY 2019) ICD-10-PCS changes effective October 1, 2018 is provided below. The addenda changes demonstrating the specific revisions to the code titles are not included in the explanations below. The FY 2019 ICD-10-PCS updates, including the complete list of ICD-10-PCS code titles, addenda, and a conversion table showing changes from the previous year are available on the Centers for Medicare & Medicaid Services (CMS) website at https://www.cms.gov/Medicare/Coding/ICD10/2019-ICD-10-PCS.html

There are 392 new ICD-10-PCS codes effective October 1, 2018. In addition, there are eight revised codes and 216 codes deleted.

The majority of new codes are in Section 0-Medical and Surgical. There are also a small number of changes in Sections 1-Obstetrics, 3-Administration, 5-Systemic Assistance and Performance, and X-New Technology.

The specific changes are described below by section. Additions are shown as underlined text, deletions are shown as strikeouts in the excerpts from the ICD-10-PCS Tables below. The changes originate from public comments, CMS internal review, as well as questions submitted to Coding Clinic that were discussed by the Coding Clinic Editorial Advisory Board with recommendations for more specific values.

**Section 0-Medical and Surgical**

**Control of Epistaxis**

A new table 093, Ear, Nose and Sinus, Control, was created to add the root operation Control for the body part Nasal Mucosa and Soft Tissue. This will allow distinguishing procedures to control epistaxis from procedures to control bleeding elsewhere in the respiratory tract.

<table>
<thead>
<tr>
<th>Body System</th>
<th>Root Operation</th>
<th>Body Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Ear, Nose, Sinus</td>
<td>3 Control</td>
<td>K_Nasal Mucosa and Soft Tissue</td>
</tr>
</tbody>
</table>
Question:
The patient has intermittent epistaxis with a drop in hemoglobin. Rigid nasal endoscopic guidance is used to apply silver nitrate to a site of bleeding 4 centimeters back on the mid septum soft tissue next to the inferior turbinate. How should this be coded?

Answer:
Assign code R04.0, Epistaxis, for the intermittent epistaxis.

Assign the following ICD-10-PCS code for the application of silver nitrate to control the bleeding:

093K8ZZ  Control bleeding in nasal mucosa and soft tissue, via natural or artificial opening endoscopic

Question:
*Coding Clinic* Fourth Quarter 2017, page 106, advised to assign code 2Y41X5Z, Packing of nasal region using packing material, for the placement of nasal tamponade to control epistaxis. However, this advice was issued prior to the creation of the new body part value for nasal mucosa in the root operation Control (093). Would the root operation Control now be used for the placement of nasal packing to control nasal bleeding?

Answer:
The root operation Control does not apply and the advice previously published in *Coding Clinic* Fourth Quarter 2017 is still valid. Code 2Y41X5Z is the most appropriate code assignment for the placement of nasal packing to control epistaxis.
Extraction of Hepatobiliary and Pancreas Sites

The root operation Extraction was added to the Hepatobiliary System and Pancreas, creating a new table 0FD, Hepatobiliary System and Pancreas, Extraction. This will allow capturing additional detail for percutaneous aspiration biopsies and brush biopsies.

<table>
<thead>
<tr>
<th>Table</th>
<th>Body System</th>
</tr>
</thead>
<tbody>
<tr>
<td>0FD</td>
<td>Hepatobiliary System and Pancreas</td>
</tr>
</tbody>
</table>

Irreversible Electroporation

In code table 0F5, Hepatobiliary System and Pancreas, Destruction, a new qualifier for irreversible electroporation was created for the body part values noted below:

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Liver</td>
<td>F Irreversible Electroporation</td>
</tr>
<tr>
<td>1 Liver, Right Lobe</td>
<td></td>
</tr>
<tr>
<td>2 Liver, Left Lobe</td>
<td></td>
</tr>
<tr>
<td>G Pancreas</td>
<td></td>
</tr>
</tbody>
</table>

Irreversible electroporation (IRE) is a new non-thermal tissue ablative modality used to treat advanced hepatic and pancreatic cancer patients. IRE works by delivering micro to millisecond electrical pulses to cancer tissue to produce cell death through irreversible cell membrane permeabilization. IRE affects only the cell membrane and no other structure in the tissue. IRE is an alternative modality to thermal ablation procedures such as cryoablation and radiofrequency ablation procedures, which have been associated with destruction of adjacent tissue. IRE may be utilized via open procedure, laparoscopically or percutaneously.

**Question:**
A female patient with locally advanced, unresectable stage III cancer of the body of the pancreas underwent laparoscopic irreversible electroporation to ablate the pancreatic tumor. How should this be coded?
Answer:
Assign C25.1, Malignant neoplasm of body of pancreas, for the diagnosis of stage III cancer of the body of the pancreas.

Assign the following ICD-10-PCS code for the irreversible electroporation ablation of the pancreas:

**0F5G4ZF**  
Destruction of pancreas using irreversible electroporation, percutaneous endoscopic approach

Uterus Transplant

In code table 0UY, Female Reproductive System, Transplantation, the body part value Uterus was added to enable coding of uterus transplant procedures.

<table>
<thead>
<tr>
<th>Root Operation</th>
<th>Body Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplantation</td>
<td>9 Uterus</td>
</tr>
</tbody>
</table>

Uterine factor infertility refers to infertility resulting from either an abnormality of the uterus, or a complete lack of uterus. It is estimated to affect thousands of women worldwide and can be caused by congenital Müllerian malformations, such as in the Mayer–Rokitansky–Küster–Hauser (MRKH) syndrome. However, it is more commonly acquired as in the cases of women suffering from Asherman’s syndrome, pregnancy interfering myomas, or hysterectomies.

Uterus transplant is the surgical procedure where a healthy uterus is transplanted into a patient whose uterus may be absent due to congenital absence or because the uterus has been surgically removed due to disease. As of today, there have been a total of eleven cases of human uterus transplantations reported worldwide, conducted in three different countries.

Transfer of Prepuce

A new table 0VX, Male Reproductive System, Transfer, was created to add the root operation Transfer for the body part Prepuce. This will allow the coding of procedures where the prepuce is transferred to repair male urogenital congenital malformations.
Several types of extensive reconstruction and repair procedures utilize the penile foreskin (prepuce) to correct male urogenital congenital malformations. The new table will allow the reporting of procedures such as repair of hypospadias, repair of chordee, urethroplasty to reconstruct the penile urethra, or to form flap grafts (Byars’ flaps) to reconstruct and cover defects of the penile shaft skin.

### Spinal Canal Bypass Qualifiers

In code table 001, Central Nervous System and Cranial Nerves, Bypass, the qualifier value Atrium has been added for the body part value Spinal Canal. This change will enable capture of detail for bypass procedures from the spinal canal to additional sites, such as lumboatrial shunt procedures.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>U Spinal Canal</td>
<td>2 Atrium</td>
</tr>
</tbody>
</table>

In addition, the approach Value Percutaneous Endoscopic has been added for completeness.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>U Spinal Canal</td>
<td>4 Percutaneous Endoscopic</td>
</tr>
</tbody>
</table>

### Anatomical Regions Bypass Qualifiers

In code table 0W1, General Anatomical Regions, Bypass, the qualifier value Upper Vein was added to the body parts below. These changes enable the capture of detail for bypass procedures from various anatomical regions to upper vein vascular sites such as the Superior Vena Cava.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Pleural Cavity, Right</td>
<td>W Upper Vein</td>
</tr>
<tr>
<td>B Pleural Cavity, Left</td>
<td></td>
</tr>
<tr>
<td>G Peritoneal Cavity</td>
<td></td>
</tr>
<tr>
<td>J Pelvic Cavity</td>
<td></td>
</tr>
</tbody>
</table>
In addition, for completeness, the approach value Percutaneous was added to all applicable rows in table 0W1. This change has resulted in the deletion of a row in table 0W1 because the Percutaneous approach was previously only available with qualifier Cutaneous.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Pleural Cavity, Right</td>
<td>3 Percutaneous</td>
</tr>
<tr>
<td>B Pleural Cavity, Left</td>
<td></td>
</tr>
<tr>
<td>G Peritoneal Cavity</td>
<td></td>
</tr>
<tr>
<td>J Pelvic Cavity</td>
<td></td>
</tr>
</tbody>
</table>

**Question:**
A patient was admitted to undergo placement of a Denver shunt. In this case, the peritoneal portion of the shunt was tunneled and placed percutaneously. During the procedure, a deep pocket was created for the pump valve via an open approach and a subcutaneous track is created to tunnel the catheter. The system permits the fluid to flow in one direction. One end of the catheter is in the abdomen and the other end is in the cavoatrial junction. How would this procedure be coded in ICD-10-PCS?

**Answer:**
The objective of placing the Denver (peritoneovenous) shunt is to remove and recirculate ascitic fluid from the peritoneal cavity into the circulation, and involves continuous internal rerouting of fluid. This procedure is classified to the root operation “Bypass.” The root operation “Drainage” is not appropriate because it is not an intermittent procedure, but a continuous internal rerouting of the flow of ascitic fluid. “Drainage” is meant to provide intermittent relief of an abnormal collection of fluid. Assign the following ICD-10-PCS codes:

**0W1G3JW**
Bypass peritoneal cavity to upper vein with synthetic substitute, percutaneous approach
**0JHT0YZ**

Insertion of other device into trunk subcutaneous tissue and fascia, open approach, for the placement of the pump valve.

### Added and Revised Device Values

#### Joint Fusion Device Value

The device value “Z, No device” was deleted from the following tables:

- **0RG** Fusion of Upper Joints
- **0SG** Fusion of Lower Joints

This results in the deletion of 213 codes. The codes were clinically invalid because a fusion procedure always requires some type of device (for example, instrumentation with bone graft or bone graft alone) to facilitate the fusion of the joints.

**Question:**

Now that the device value “Z” has been deleted from the tables for the root operation Fusion, is there a default value for the device when the documentation does not identify a device?

**Answer:**

No, ICD-10-PCS does not provide a default for when a fusion is performed and the device is not specified. If the documentation is unclear about the device used to accomplish the fusion, query the provider for clarification. Facilities should work with the medical staff to improve physician documentation and address any documentation issues.

#### Articulating Spacer for Hip and Knee Joint

The device value Articulating Spacer was added to the following tables:

- **0SP** Removal of Lower Joints
- **0SR** Replacement of Lower Joints
The treatment for infected knee or hip arthroplasty requires removal of the implant and insertion of an antibiotic spacer for a period of months. This allows for more effective eradication of the infection.

Antibiotic spacers can be classified into static (nonarticulating) spacers and articulating spacers. Static spacers keep open the space between the bones, and are not designed to allow joint movement. Articulating spacers also keep open the space between bones, but are designed to allow joint movement. The choice of spacer depends on many factors, including degree of bone loss, state of the soft tissue and choice of antibiotics.

Both articulating and static spacers allow for greater intra-articular levels of antibiotics than with parenteral antibiotics. Static spacers are made of cement and are usually made on the back table during the procedure. Articulating spacers vary considerably, from fully manual spacers made in preformed molds to modular spacers, which include plastic and metal surfaces. They are more like an implant.

Static and articulating spacers are typically removed when the infection resolves, and a joint replacement implant is reinserted. In the case of articulating spacers, some patients tolerate them sufficiently enough for them to remain in place for several years if the patient prefers not to undergo further surgery to replace the spacer with an implant.

The existing device value “8, Spacer” is used to report static spacers, or when the documentation does not specify the type of spacer used. Please note that the placement of static spacers is coded to the root operation Insertion, while the placement of articulating spacers is coded to the root operation Replacement, since articulating spacers are able to physically take the place and/or function of the joint.

**Partial Knee Joint Replacements**

Three new device values for unicondylar synthetic substitutes were added for partial knee joint prosthesis to the following tables as noted below:
• 0SP  Removal of Lower Joints
• 0SR  Replacement of Lower Joints

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Knee Joint, Right</td>
<td>L Synthetic Substitute, Unicondylar Medial</td>
</tr>
<tr>
<td>D Knee Joint, Left</td>
<td>M Synthetic Substitute, Unicondylar Lateral</td>
</tr>
<tr>
<td></td>
<td>N Synthetic Substitute, Patellofemoral</td>
</tr>
</tbody>
</table>

These changes enable the capture of additional detail for partial knee arthroplasty procedures. The new values will allow tracking outcomes to differentiate medial unicompartmental, lateral unicompartmental and patellofemoral arthroplasty.

New Qualifier Values

**Descending Thoracic Aorta Bypass**

In code table 021, Heart and Great Vessels, Bypass, the qualifier value Abdominal Artery was created for the body part value Thoracic Aorta, Descending. The change will allow the capture of detail for bypass procedures from the thoracic aorta to abdominal artery sites such as the abdominal aorta, the celiac artery and the mesenteric arteries.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Thoracic Aorta, Descending</td>
<td>F Abdominal Artery</td>
</tr>
</tbody>
</table>

In addition, in code table 021, Heart and Great Vessels, Bypass, the qualifier value Lower Extremity Artery, was added for the body part value Thoracic Aorta, Descending. The change will allow the capture of detail for limb salvage procedures from the thoracic aorta to lower extremities arteries such as the femoral arteries.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Thoracic Aorta, Descending</td>
<td>V Lower Extremity Artery</td>
</tr>
</tbody>
</table>

In code table 021, Heart and Great Vessels, Bypass, the qualifier values Axillary Artery and Brachial Artery, were added for the body part value Thoracic Aorta, Descending and the device values Zooplastic Tissue, Autologous Venous Tissue, and Autologous Arterial Tissue. These changes complete the available device values for aorto-axillary and aorto-brachial bypass procedures.
Question:
A patient with life-limiting claudication due to perivisceral aortic occlusive disease was admitted for thoracic aorta-to-femoral bypass graft. A left thoracotomy was performed and a graft was sewn into the descending thoracic aorta. Next, an incision was made in the left groin longitudinally and taken down to fascia. The common femoral artery was dissected out down to the bifurcation. A tunnel was created between the left groin incision and the left thoracic cavity. A polytetrafluoroethylene bifurcation graft was passed, and the graft was beveled and sewn end-to-side onto the left common femoral artery. What are the ICD-10-PCS codes for this procedure?

Answer:
Assign the following ICD-10-PCS codes:

021W0JV  Bypass thoracic aorta, descending, to lower extremity artery with synthetic substitute, open approach.

Bypass Axillary Artery to Abdominal Artery

In code table 031, Upper Arteries, Bypass, the qualifier value Abdominal Artery was created for the body part values Axillary Artery, Right and Axillary Artery, Left. The changes allow the capture of detail for bypass procedures such as axillary artery to superior mesenteric artery bypass.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Thoracic Aorta, Descending</td>
<td>8 Zooplastic Tissue 9 Autologous Venous Tissue A Autologous Arterial Tissue</td>
<td>G Axillary Artery H Brachial Artery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Axillary Artery, Right</td>
<td>T Abdominal Artery</td>
</tr>
<tr>
<td>6 Axillary Artery, Left</td>
<td>T Abdominal Artery</td>
</tr>
</tbody>
</table>
**Bypass Common Carotid Artery to Other Upper Artery**

In code table 031, Upper Arteries, Bypass, the qualifier value Upper Artery was added for the body part values Common Carotid Artery, Right and Common Carotid Artery, Left. The changes will allow the capture of detail for bypass procedures from the common carotid artery to other upper arteries such as the subclavian artery.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>H Common Carotid Artery, Right</td>
<td>Y Upper Artery</td>
</tr>
<tr>
<td>J Common Carotid Artery, Left</td>
<td></td>
</tr>
</tbody>
</table>

**Endovascular Thrombectomy with Stent Retriever**

In code table 03C, Upper Arteries, Extirpation, the qualifier value Stent Retriever was added for the Intracranial and Extracranial Arteries body part values shown below.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>G Intracranial Artery</td>
<td>7 Stent Retriever</td>
</tr>
<tr>
<td>H Common Carotid Artery, Right</td>
<td></td>
</tr>
<tr>
<td>J Common Carotid Artery, Left</td>
<td></td>
</tr>
<tr>
<td>K Internal Carotid Artery, Right</td>
<td></td>
</tr>
<tr>
<td>L Internal Carotid Artery, Left</td>
<td></td>
</tr>
<tr>
<td>M External Carotid Artery, Right</td>
<td></td>
</tr>
<tr>
<td>N External Carotid Artery, Left</td>
<td></td>
</tr>
<tr>
<td>P Vertebral Artery, Right</td>
<td></td>
</tr>
<tr>
<td>Q Vertebral Artery, Left</td>
<td></td>
</tr>
</tbody>
</table>

The new codes will help distinguish endovascular thrombectomy using stent retriever from other interventional extirpation techniques used to treat occlusions and hyper-dense thrombi where tPA may not be effective in the treatment of ischemic strokes. The new Stent Retriever ICD-10-PCS qualifier is assigned whenever a stent retriever is used for a thrombectomy, either with local aspiration as an adjunctive part of the technique, or when a stent retriever is used together with direct aspiration.

*Stent retriever thrombectomy* utilizes a specialized catheter under angiographic guidance and assessment to advance through the vasculature into and through the thrombus. The stent component expands to engage the clot and trap the thrombus. The catheter is then slowly withdrawn while local aspiration is applied to help retain the clot within the stent. The procedural
steps are repeated as necessary to ensure the artery has been sufficiently reopened and revascularized. The thrombectomy instrument used to retrieve the clot may be referred to as a “stent” because of its appearance, but it differs from ordinary stents used to dilate a vessel in that no device remains in the body after the procedure is completed. Instead, this stent is used to trap and remove thrombi.

_Direct aspiration thrombectomy_ is also known as suction thrombectomy. Primary aspiration of the thrombus utilizes a large-bore catheter under angiographic guidance and assessment to directly engage and remove the clot. The procedural steps are repeated as necessary to ensure the artery has been sufficiently reopened and revascularized. In contrast to stent retriever thrombectomy, no stent is used to engage or remove the clot. The existing qualifier Z, No Qualifier, is assigned when direct aspiration alone is performed as the primary technique.

_Combined stent retriever/aspiration thrombectomy_ may be performed together during the same operative episode in some instances to extirpate the thrombus. This may be accomplished by placing the stent retriever adjacent to the aspiration catheter, or by passing the stent retriever through the aspiration catheter. The combination of both techniques may be used to reduce thrombus fragmentation which can lead to distal embolic complication. In other instances, if direct aspiration thrombectomy is not sufficiently effective in revascularizing the vessel, it may be immediately followed by a stent retriever thrombectomy during the same operative episode.

Only one Extirpation code should be assigned. The new qualifier value Stent retriever should be assigned whenever a stent retriever is used for thrombectomy, either with local aspiration as an adjunctive part of the technique or when a stent retriever is used together with direct aspiration. The existing qualifier Z, No Qualifier, would be assigned whenever direct aspiration alone is performed as the primary technique.

**Drug-Coated Balloon Angioplasty of Additional Sites**

In code table 037, Upper Arteries, Dilation, the qualifier value Drug-Coated Balloon was added to all upper extremity body part values except the hand, and the device values “D” Intraluminal Device and “Z” No Device. These changes enable capture of additional detail for procedures such as drug-coated balloon angioplasty of an arteriovenous dialysis fistula.
The same change was made at code table 057, Upper Veins, Dilation, for the qualifier value Drug-Coated Balloon as noted below:

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Innominate Vein, Right</td>
<td>1 Drug-Coated Balloon</td>
</tr>
<tr>
<td>4 Innominate Vein, Left</td>
<td></td>
</tr>
<tr>
<td>5 Subclavian Vein, Right</td>
<td></td>
</tr>
<tr>
<td>6 Subclavian Vein, Left</td>
<td></td>
</tr>
<tr>
<td>7 Axillary Vein, Right</td>
<td></td>
</tr>
<tr>
<td>8 Axillary Vein, Left</td>
<td></td>
</tr>
<tr>
<td>9 Brachial Vein, Right</td>
<td></td>
</tr>
<tr>
<td>A Brachial Vein, Left</td>
<td></td>
</tr>
<tr>
<td>B Basilic Vein, Right</td>
<td></td>
</tr>
<tr>
<td>C Basilic Vein, Left</td>
<td></td>
</tr>
<tr>
<td>D Cephalic Vein, Right</td>
<td></td>
</tr>
<tr>
<td>F Cephalic Vein, Left</td>
<td></td>
</tr>
</tbody>
</table>

**Section 1-Obstetrics**

A single change was made in the Obstetrics Section. Two qualifier values were revised in code table 10D, Extraction, Pregnancy, as noted below. The change will facilitate the appropriate classification of cesarean delivery procedures using existing codes by more closely aligning with the current clinical use of the terms associated with cesarean deliveries.
Three types of uterine incisions can be performed, during a cesarean section. The type of uterine incision would depend on the presentation of the infant and the existence of an obstetrical complication, such as placenta previa, or malposition of the infant.

The most common type of cesarean section is the low transverse, in which a side-to-side (horizontal) cut is made. This type of uterine incision is also called a bikini cut, and is less likely to rupture, because the incision is made in the lower, thinner part of the uterus. In a low vertical cesarean, an up-and-down cut is made in the lower, thinner part of the uterus.

A low vertical incision carries a higher risk for uterine rupture than a low transverse incision.

The high vertical or classical cesarean involves a vertical (up-and-down) incision in the upper part of the uterus. This surgery is typically performed in emergencies, such as placenta previa, extreme prematurity and malpresentation of the infant. The high vertical (classical) cesarean carries the greatest risk of uterine rupture.

When assigning codes for cesarean delivery, use the root operation Extraction with the qualifier value 0 (High) for a high vertical or classical cesarean delivery. For low transverse and low vertical cesarean delivery use the root operation Extraction with the qualifier value 1 (Low).

**Question:**
A primary low vertical cesarean section was performed for complex fetal lie in the second stage with spontaneous rupture of membranes. A midline incision of a low vertical type was carried down to the uterine cavity; the cavity was entered and extended with digital traction. On reaching down into the pelvis, the baby was retrieved in a quasi-transverse lie. What is the code assignment for the primary low vertical cesarean section?
Answer:
Report code 10D00Z1, Extraction of products of conception, low, open approach, for a cesarean delivery procedure documented as “low vertical.”

Question:
The patient is a 32-year-old female, gravida 3, para 2, who presents for delivery at 41 weeks of gestation. She is morbidly obese and received insufficient prenatal care. The provider documents “High risk pregnancy secondary to transverse lie. Because of these concerns, a high T incision cesarean section is performed. What is the appropriate procedure code assignment for high T incision cesarean delivery?

Answer:
Report code 10D00Z0, Extraction of products of conception, high, open approach, for the high T incision cesarean delivery.

Section 3-Administration

Influenza Vaccine Administration

A single change was made in the Administration Section in code table 3E0, Physiologic Systems and Anatomical Regions, Introduction. A qualifier value was added for Influenza Vaccine in the body system/region Muscle as shown below. The changes will enable facilities to capture information on intramuscular injection of influenza vaccine, if desired.

<table>
<thead>
<tr>
<th>Body System/Region</th>
<th>Substance</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Muscle</td>
<td>4 Serum, Toxoid and Vaccine</td>
<td>0 Influenza Vaccine</td>
</tr>
</tbody>
</table>
Section 5-Extracorporeal or Systemic Assistance and Performance

Percutaneous Extracorporeal Membrane Oxygenation

New qualifiers were created in table 5A1, Physiological Systems, Performance, to capture percutaneous Extracorporeal Membrane Oxygenation (ECMO). The new codes enable additional detail to distinguish the different ECMO procedures that have grown over time with different indications, technical details and equipment designs.

The unspecified qualifier value “Membrane (3)” used only in a single ECMO code did not distinguish different ECMO procedures; therefore, code 5A15223 Extracorporeal Membrane Oxygenation, Continuous, has been deleted from ICD-10-PCS.

<table>
<thead>
<tr>
<th>Body System</th>
<th>Duration</th>
<th>Function</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Circulatory</td>
<td>2 Continuous</td>
<td>2 Oxygenation</td>
<td>F Membrane, Central</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>G Membrane, Peripheral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Veno-arterial</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H Membrane, Peripheral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Veno-venous</td>
</tr>
</tbody>
</table>

ECMO is a bypass technique to support patients with reversible cardiopulmonary insufficiency unresponsive to conventional management. ECMO involves passing a patient’s blood through an extracorporeal membrane oxygenator, which pumps and oxygenates the blood outside the patient’s body, removing carbon dioxide. The goal of ECMO is to provide organ and tissue oxygenation during cessation of cardiac activity.

ECMO may be indicated for

- Refractory cardiogenic shock
- Fulminant myocarditis
- Patients recovering from heart failure, lung failure or heart surgery.
- As a bridge to further treatment, such as placement of a heart assist device, heart transplantation, or lung transplantation.
- For support during high-risk procedures in the cardiac catheterization lab.

There are three types of ECMO that correspond to the new ICD-10-PCS qualifiers: Central, Venous-Arterial (VA) Peripheral and Venous-Venous (VV) Peripheral.
Central ECMO cannulation is an open-chest procedure with direct surgical cannulation of the right atrium and aorta. It involves two open insertions, arterial and venous, and provides cardiorespiratory support. In the past, central ECMO was more commonly used; however, peripheral ECMO is more common now. For central ECMO, assign code 5A1522F, Extracorporeal oxygenation, membrane, central.

VA peripheral ECMO cannulation involves two femoral percutaneous insertions: arterial and venous. The VA ECMO is used when there are problems with both the heart and lungs. This type of ECMO provides respiratory and circulatory support. Code 5A1522G, Extracorporeal oxygenation, membrane, peripheral veno-arterial, is used for VA peripheral ECMO.

VV ECMO involves two venous insertions, one in the upper veins and one in the lower veins. It is used when the problem is only in the lungs. Code 5A1522H, Extracorporeal oxygenation, membrane, peripheral veno-venous, is used for VV peripheral ECMO.

**Question:**
A patient with a history of cirrhosis secondary to alcohol dependence was admitted for liver transplant surgery. The hepatectomy was performed on veno-venous bypass. Cannulas were placed in the right femoral vein and the portal vein. The cannulas were connected to the circuit and veno-venous bypass was instituted at 2.5L per minute. What is the procedure code assignment for veno-venous bypass?

**Answer:**
Assign the following procedure code:

5A1522H  Extracorporeal oxygenation, membrane, peripheral veno-venous, for veno-venous bypass used during surgery.

**Question:**
The patient presented with cardiogenic shock and ECMO support was provided at the bedside in the intensive care unit. The central jugular vein and the left femoral artery were cannulated and ECMO
support initiated. What is the appropriate ICD-10-PCS code for this type of ECMO support?

**Answer:**
Assign the following procedure code:

5A1522G Extracorporeal oxygenation, membrane, peripheral veno-arterial

The cannulations of both the jugular vein and the femoral artery indicate VA ECMO support.

**Question:**
A patient was transferred to our facility on Impella support and required ECMO for respiratory support upon arrival to the intensive care unit. The provider placed two cannulas into the femoral veins and ECMO support was started. She was eventually weaned from both the Impella and ECMO after two days. How should the continued Impella assistance and removal be coded? What is the appropriate code assignment for the ECMO support?

**Answer:**
Assign the following procedure codes:

5A1522H Extracorporeal oxygenation, membrane, peripheral veno-venous, for the VV ECMO

02PA3RZ Removal of external heart assist system from heart, percutaneous approach, for the removal of the Impella

As previously stated in *Coding Clinic* Fourth Quarter 2016, pages 139: “Only a code to identify the removal of the device should be reported. The code for Assistance is only reported when the initial insertion of an external heart assist system occurs.”
Section X-New Technology

A new code table was created in Section X, and device/substance/technology values were added to code table XW0, New Technology, Introduction Anatomical Regions.

Robotic Waterjet Ablation


<table>
<thead>
<tr>
<th>Device/Substance/Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Robotic Waterjet Ablation</td>
</tr>
</tbody>
</table>

Also referred to as “aquablation therapy,” the procedure uses a robotically controlled high-velocity saline stream to ablate the obstructive prostate tissue. The procedure enables targeted, controlled, heat-free and immediate removal of prostate tissue. Aquablation therapy requires external ultrasound image guidance and incorporates endoscopic visualization to identify the prostatic adenoma and plan the ablation of the treatment area. The system’s robot then uses the planning inputs from the surgeon to deliver the therapy.

Question:
A 70-year-old male patient undergoes aquablation therapy for treatment of benign prostatic hypertrophy with urinary retention. How should this be coded?

Answer:
Assign code N40.1, Benign prostatic hyperplasia with lower urinary tract symptoms, followed by code R33.8, Other retention of urine, for the diagnosis of benign prostatic hypertrophy with urinary retention.

Assign the following code for the aquablation therapy:

XV508A4 Destruction of prostate using robotic waterjet ablation, via natural or artificial opening endoscopic, new technology group 4
New Therapeutic Substances

Two new Substance values were added to code table XW0, Anatomical Regions, Introduction, as follows:

<table>
<thead>
<tr>
<th>Device/Substance/Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>G Plazomicin Anti-Infective</td>
</tr>
<tr>
<td>H Synthetic Human Angiotensin II</td>
</tr>
</tbody>
</table>

**Plazomicin**

Plazomicin is a next-generation aminoglycoside antibiotic developed to treat serious bacterial infections due to multidrug-resistant (MDR) gram-negative Enterobacteriaceae including carbapenem-resistant Enterobacteriaceae (CRE). Two indications are being sought for plazomicin: complicated urinary tract infection, including pyelonephritis, and bloodstream infections due to certain MDR Enterobacteriaceae. Plazomicin is expected to be reserved for use in the treatment of patients diagnosed with these types of infections who have limited or no alternative treatment options, and would be used only to treat infections that are proven or strongly suspected to be caused by susceptible microorganisms.

Patients most at risk for CRE infections are those with CRE colonization, recent hospitalization or stay in a long-term care or skilled-nursing facility, an extensive history of antibacterial use, and whose care requires invasive devices like urinary catheters, intravenous catheters, or ventilators.

**Synthetic Human Angiotensin II**

Synthetic human angiotensin II, also known by the brand name GIAPREZA, is a synthetic human angiotensin vasoconstrictor administered through intravenous infusion to raise blood pressure in adult patients diagnosed with septic or other distributive shock. Shock is a life-threatening critical condition characterized by the inability to maintain blood flow to vital tissues due to dangerously low blood pressure (hypotension). Shock can result in organ failure and imminent death.
Changes to the ICD-10-CM Official Guidelines for Coding and Reporting

A summary of the modifications to the ICD-10-CM Official Guidelines for Coding and Reporting are included below. The complete guidelines may be downloaded by visiting http://www.cdc.gov/nchs/icd/icd10cm.htm.

The modifications are published below using the following format:

Narrative changes appear in bold text (e.g., severe sepsis)
Items underlined were moved within the guidelines since October 1, 2018 (e.g., severe sepsis)
Deletions are shown as strikeouts (e.g., severe sepsis)

Section I.  Conventions, general coding guidelines and chapter specific guidelines . . .

A. Conventions for the ICD-10-CM . . .

15. “With”
The word “with” or “in” should be interpreted to mean “associated with” or “due to” when it appears in a code title, the Alphabetic Index, (either under a main term or subterm) or an instructional note in the Tabular List. . . .

B. General Coding Guidelines . . .

14. Documentation for BMI, Depth of Non-pressure Ulcers, Pressure Ulcer Stages, Coma Scale, and NIH Stroke Scale by Clinicians Other than the Patient’s Provider

Code assignment is based on the documentation by patient’s provider (i.e. physician or other qualified healthcare practitioner legally accountable for establishing the patient’s diagnosis). There are a few exceptions, such as codes for the Body Mass Index (BMI), depth of non-pressure chronic ulcers, pressure ulcer stage, coma scale, and NIH stroke scale (NIHSS) codes, code assignment may be based on medical record documentation from clinicians who are not the patient’s provider (i.e., physician or other qualified healthcare practitioner legally accountable for
establishing the patient’s diagnosis), since this information is typically documented by other clinicians involved in the care of the patient (e.g., a dietitian often documents the BMI, a nurse often documents the pressure ulcer stages, and an emergency medical technician often documents the coma scale). However, the associated diagnosis (such as overweight, obesity, acute stroke, or pressure ulcer) must be documented by the patient’s provider. If there is conflicting medical record documentation, either from the same clinician or different clinicians, the patient’s attending provider should be queried for clarification.

For social determinants of health, such as information found in categories Z55-Z65, Persons with potential health hazards related to socioeconomic and psychosocial circumstances, code assignment may be based on medical record documentation from clinicians involved in the care of the patient who are not the patient’s provider since this information represents social information, rather than medical diagnoses.

The BMI, coma scale, and NIHSS codes and categories Z55-Z65 should only be reported as secondary diagnoses.

19. Coding for Healthcare Encounters in Hurricane Aftermath

a. Use of External Cause of Morbidity Codes
An external cause of morbidity code should be assigned to identify the cause of the injury(ies) incurred as a result of the hurricane. The use of external cause of morbidity codes is supplemental to the application of ICD-10-CM codes. External cause of morbidity codes are never to be recorded as a principal diagnosis (first-listed in non-inpatient settings). The appropriate injury code should be sequenced before any
external cause codes. The external cause of morbidity codes capture how the injury or health condition happened (cause), the intent (unintentional or accidental; or intentional, such as suicide or assault), the place where the event occurred, the activity of the patient at the time of the event, and the person’s status (e.g., civilian, military). They should not be assigned for encounters to treat hurricane victims’ medical conditions when no injury, adverse effect or poisoning is involved. External cause of morbidity codes should be assigned for each encounter for care and treatment of the injury. External cause of morbidity codes may be assigned in all health care settings. For the purpose of capturing complete and accurate ICD-10-CM data in the aftermath of the hurricane, a healthcare setting should be considered as any location where medical care is provided by licensed healthcare professionals.

b. Sequencing of External Causes of Morbidity Codes
Codes for cataclysmic events, such as a hurricane, take priority over all other external cause codes except child and adult abuse and terrorism and should be sequenced before other external cause of injury codes. Assign as many external cause of morbidity codes as necessary to fully explain each cause. For example, if an injury occurs as a result of a building collapse during the hurricane, external cause codes for both the hurricane and the building collapse should be assigned, with the external causes code for hurricane being sequenced as the first external cause code. For injuries incurred as a direct result of the hurricane, assign the appropriate code(s) for the injuries, followed by the code X37.0-, Hurricane (with the appropriate 7th character), and any other applicable external cause of
injury codes. Code X37.0- also should be assigned when an injury is incurred as a result of flooding caused by a levee breaking related to the hurricane. Code X38.-, Flood (with the appropriate 7th character), should be assigned when an injury is from flooding resulting directly from the storm. Code X36.0-., Collapse of dam or man-made structure, should not be assigned when the cause of the collapse is due to the hurricane. Use of code X36.0- is limited to collapses of man-made structures due to earth surface movements, not due to storm surges directly from a hurricane.

c. Other External Causes of Morbidity Code Issues
For injuries that are not a direct result of the hurricane, such as an evacuee that has incurred an injury as a result of a motor vehicle accident, assign the appropriate external cause of morbidity code(s) to describe the cause of the injury, but do not assign code X37.0-, Hurricane. If it is not clear whether the injury was a direct result of the hurricane, assume the injury is due to the hurricane and assign code X37.0-, Hurricane, as well as any other applicable external cause of morbidity codes. In addition to code X37.0-, Hurricane, other possible applicable external cause of morbidity codes include:

- W54.0-, Bitten by dog
- X30-, Exposure to excessive natural heat
- X31-, Exposure to excessive natural cold
- X38-, Flood

d. Use of Z codes
Z codes (other reasons for healthcare encounters) may be assigned as appropriate to further explain the reasons for presenting for healthcare services, including transfers
between healthcare facilities. The *ICD-10-CM Official Guidelines for Coding and Reporting* identify which codes maybe assigned as principal or first-listed diagnosis only, secondary diagnosis only, or principal/first-listed or secondary (depending on the circumstances). Possible applicable Z codes include:

- **Z59.0**, Homelessness
- **Z59.1**, Inadequate housing
- **Z59.5**, Extreme poverty
- **Z75.1**, Person awaiting admission to adequate facility elsewhere
- **Z75.3**, Unavailability and inaccessibility of health-care facilities
- **Z75.4**, Unavailability and inaccessibility of other helping agencies
- **Z76.2**, Encounter for health supervision and care of other healthy infant and child
- **Z99.12**, Encounter for respirator [ventilator] dependence during power failure

The external cause of morbidity codes and the Z codes listed above are not an all-inclusive list. Other codes may be applicable to the encounter based upon the documentation. Assign as many codes as necessary to fully explain each healthcare encounter. Since patient history information may be very limited, use any available documentation to assign the appropriate external cause of morbidity and Z codes.
C. Chapter Specific Coding Guidelines . . .

1. Chapter 1: Certain Infectious and Parasitic Diseases . . .
   d. Sepsis, Severe Sepsis, and Septic Shock

5) Sepsis due to a postprocedural infection...

   (b) Sepsis due to a postprocedural infection
   For such cases, the postprocedural infection infections following a procedure, a code such as T80.2, Infections following infusion, transfusion, and therapeutic injection from T81.40, to T81.43 Infection following a procedure, T88.0, Infection following immunization, or a code from O86.00 to O86.03, Infection of obstetrical surgical wound, that identifies the site of the infection should be coded first, followed by the if known. Assign an additional code for sepsis following a procedure (T81.44) or sepsis following an obstetrical procedure (O86.04). Use an additional code to identify the specific infection infectious agent. If the patient has severe sepsis, the appropriate code from subcategory R65.2 should also be assigned with the additional code(s) for any acute organ dysfunction.

   For infections following infusion, transfusion, therapeutic injection, or immunization, a code from subcategory T80.2, Infections following infusion, transfusion, and therapeutic injection, or code T88.0-, Infection following immunization, should be coded first, followed by the code for the specific infection. If the patient has severe sepsis, the appropriate code from
subcategory R65.2 should also be assigned, with the additional codes(s) for any acute organ dysfunction.

(c) Postprocedural infection and postprocedural septic shock

In cases where a postprocedural infection has occurred and has resulted in severe sepsis, the code for the precipitating complication such as code T81.4, Infection following a procedure, or O86.0, Infection of obstetrical surgical wound should be coded first followed by code R65.20, Severe sepsis without septic shock. A code for the systemic infection should also be assigned.

If a postprocedural infection has resulted in postprocedural septic shock, the code for the precipitating complication such as code T81.4, Infection following a procedure, or O86.0, Infection of obstetrical surgical wound should be coded first. Assign the codes indicated above for sepsis due to a postprocedural infection, followed by code T81.12-, Postprocedural septic shock. A do not assign code for the systemic infection R65.21, Severe sepsis with septic shock. Additional code(s) should also be assigned for any acute organ dysfunction.

e. Zika virus infections . . .

1) Code only confirmed cases . . .

If the provider documents “suspected”, “possible” or “probable” Zika, do not assign code A92.5. Assign a code(s) explaining the reason for encounter (such as fever,
rash, or joint pain) or Z20.828821, Contact with and (suspected) exposure to other viral communicable diseases Zika virus.

2. Chapter 2: Neoplasms (C00-D49)

General guidelines . . .

m. Current malignancy versus personal history of malignancy . . .
   When a primary malignancy has been previously excised or eradicated from its site, there is no further treatment (of the malignancy) directed to that site, and there is no evidence of any existing primary malignancy at that site, a code from category Z85, Personal history of malignant neoplasm, should be used to indicate the former site of the malignancy.

Subcategories Z85.0 – Z85.7 should only be assigned for the former site of a primary malignancy, not the site of a secondary malignancy. Codes from subcategory Z85.8-, may be assigned for the former site(s) of either a primary or secondary malignancy included in this subcategory.

5. Chapter 5: Mental, Behavioral and Neurodevelopmental disorders (F01 – F99) . . .

b. Mental and behavioral disorders due to psychoactive substance use

3) Psychoactive Substance Use, Disorders Unspecified
   As with all other unspecified diagnoses, the codes for unspecified psychoactive substance use (F10.9-, F11.9-, F12.9-, F13.9-, F14.9-, F15.9-, F16.9-, F18.9-, F19.9-) should only be assigned based on provider documentation and when they meet the definition of a reportable diagnosis (see Section III, Reporting
Additional Diagnoses). These codes are to be used only when the psychoactive substance use is associated with a physical, mental or behavioral disorder, and such a relationship is documented by the provider.

c. Factitious Disorder
Factitious disorder imposed on self or Munchausen’s syndrome is a disorder in which a person falsely reports or causes his or her own physical or psychological signs or symptoms. For patients with documented factitious disorder on self or Munchausen’s syndrome, assign the appropriate code from subcategory F68.1-, Factitious disorder imposed on self.

Munchausen’s syndrome by proxy (MSBP) is a disorder in which a caregiver (perpetrator) falsely reports or causes an illness or injury in another person (victim) under his or her care, such as a child, an elderly adult, or a person who has a disability. The condition is also referred to as “factitious disorder imposed on another” or “factitious disorder by proxy.” The perpetrator, not the victim, receives this diagnosis. Assign code F68.A, Factitious disorder imposed on another, to the perpetrator’s record. For the victim of a patient suffering from MSBP, assign the appropriate code from categories T74, Adult and child abuse, neglect and other maltreatment, confirmed, or T76, Adult and child abuse, neglect and other maltreatment, suspected.

See Section I.C.19.f. Adult and child abuse, neglect and other maltreatment
7. Chapter 7: Diseases of the Eye and Adnexa (H00-H59)

a. Glaucoma . . .

2) Bilateral glaucoma with same type and stage
When a patient has bilateral glaucoma and both eyes are documented as being the same type and stage, and there is a code for bilateral glaucoma, report only the code for the type of glaucoma, bilateral, with the seventh character for the stage.

When a patient has bilateral glaucoma and both eyes are documented as being the same type and stage, and the classification does not provide a code for bilateral glaucoma (i.e. subcategories H40.10, H40.11 and H40.20) report only one code for the type of glaucoma with the appropriate seventh character for the stage.

3) Bilateral glaucoma stage with different types or stages
When a patient has bilateral glaucoma and each eye is documented as having a different type or stage, and the classification distinguishes laterality, assign the appropriate code for each eye rather than the code for bilateral glaucoma.

When a patient has bilateral glaucoma and each eye is documented as having a different type, and the classification does not distinguish laterality (i.e., subcategories H40.10, H40.11 and H40.20), assign one code for each type of glaucoma with the appropriate seventh character for the stage.

When a patient has bilateral glaucoma and each eye is documented as having the same type, but different stage, and the classification does not distinguish laterality
(i.e., subcategories H40.10, H40.11 and H40.20), assign a code for the type of glaucoma for each eye with the seventh character for the specific glaucoma stage documented for each eye.

9. Chapter 9: Diseases of the Circulatory System (I00-I99)

a. Hypertension

1) Hypertension with Heart Disease
Hypertension with heart conditions classified to I50.- or I51.4-I51.7, I51.89, I51.9, are assigned to a code from category I11, Hypertensive heart disease. Use additional code(s) from category I50, Heart failure, to identify the type(s) of heart failure in those patients with heart failure.

The same heart conditions (I50.-, I51.4-I51.7, I51.89, I51.9) with hypertension are coded separately if the provider has specifically documented a different cause they are unrelated to the hypertension. Sequence according to the circumstances of the admission/encounter.

2) Hypertensive Chronic Kidney Disease
Assign codes from category I12, Hypertensive chronic kidney disease, when both hypertension and a condition classifiable to category N18, Chronic kidney disease (CKD), are present. CKD should not be coded as hypertensive if the physician has specifically documented a different cause the provider indicates the CKD is not related to the hypertension.

11) Pulmonary Hypertension
Pulmonary hypertension is classified to category I27, Other pulmonary heart diseases. For secondary pulmonary
hypertension (I27.1, I27.2-), code also any associated conditions or adverse effects of drugs or toxins. The sequencing is based on the reason for the encounter, except for adverse effects of drugs (See Section I.C.19.e.) . . .

e. Acute myocardial infarction (AMI) . . .

4) Subsequent acute myocardial infarction . . .

Do not assign code I22 for subsequent myocardial infarctions other than type 1 or unspecified. For subsequent type 2 AMI assign only code I21.A1. For subsequent type 4 or type 5 AMI, assign only code I21.A9.

If a subsequent myocardial infarction of one type occurs within 4 weeks of a myocardial infarction of a different type, assign the appropriate codes from category I21 to identify each type. Do not assign a code from I22. Codes from category I22 should only be assigned if both the initial and subsequent myocardial infarctions are type 1 or unspecified.

5) Other Types of Myocardial Infarction

The ICD-10-CM provides codes for different types of myocardial infarction. Type 1 myocardial infarctions are assigned to codes I21.0-I21.4 and I21.9.

Type 2 myocardial infarction (myocardial infarction due to demand ischemia or secondary to ischemic balance) is assigned to code I21.A1, Myocardial infarction type 2 with a code for the underlying cause.
12. Chapter 12: Diseases of the Skin and Subcutaneous Tissue (L00-L99)

a. **Pressure ulcer stage codes**

1) Pressure ulcer stages . . .
   Assign as many codes from category L89 as needed to identify all the pressure ulcers the patient has, if applicable.

   *See Section I.B.14 for pressure ulcer stage documentation by clinicians other than patient’s provider.*

b. **Non-Pressure Chronic Ulcers . . .**

3) Patient admitted with non-pressure ulcer that progresses to another severity level during the admission
   If a patient is admitted to an inpatient hospital with a non-pressure ulcer at one severity level and it progresses to a higher severity level, two separate codes should be assigned: one code for the site and severity level of the ulcer on admission and a second code for the same ulcer site and the highest severity level reported during the stay.

   *See Section I.B.14 for pressure ulcer stage documentation by clinicians other than patient’s provider . . .*

15. Chapter 15: Pregnancy, Childbirth, and the Puerperium (O00-O9A) . . .

l. **Alcohol and tobacco and drug use during pregnancy, childbirth and the puerperium . . .**

3) **Drug use during pregnancy, childbirth and the puerperium**
   Codes under subcategory O99.32, Drug use complicating pregnancy, childbirth, and the puerperium, should be assigned for any pregnancy case when a mother
uses drugs during the pregnancy or postpartum. This can involve illegal drugs, or inappropriate use or abuse of prescription drugs. Secondary code(s) from categories F11-F16 and F18-F19 should also be assigned to identify manifestations of the drug use.

18. Chapter 18: Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)

e. Coma scale

Assign code R40.24, Glasgow coma scale, total score, when only the total score is documented in the medical record and not the individual score(s).

Do not report codes for individual or total Glasgow coma scale scores for a patient with a medically induced coma or a sedated patient.

*See Section I.B.14 for coma scale documentation by clinicians other than patient’s provider.*

i. NIHSS Stroke Scale

At a minimum, report the initial score documented. If desired, a facility may choose to capture multiple stroke scale scores.

*See Section I.B.14 for information concerning the medical record NIHSS stroke scale documentation that may be used for assignment of the NIHSS codes by clinicians other than patient’s provider.*

19. Chapter 19: Injury, poisoning, and certain other consequences of external causes (S00-T88)
d. Coding of Burns and Corrosions . . .

2) Burns of the same *local anatomic site*
Classify burns of the same *local anatomic site* (three character category level, T20-T28) and on the same side but of different degrees to the subcategory identifying the highest degree recorded in the diagnosis (e.g., for second and third degree burns of right thigh, assign only code T24.311-). . . .

5) Assign separate codes for each burn site
When coding burns, assign separate codes for each burn site. Category T30, Burn and corrosion, body region unspecified is extremely vague and should rarely be used.

Codes for burns of “multiple sites” should only be assigned when the medical record documentation does not specify the individual sites.

e. Adverse Effects, Poisoning, Underdosing and Toxic Effects . . .

5) The occurrence of drug toxicity is classified in ICD-10-CM as follows:

c) Underdosing
Underdosing refers to taking less of a medication than is prescribed by a provider or a manufacturer’s instruction. Discontinuing the use of a prescribed medication on the patient’s own initiative (not directed by the patient’s provider) is also classified as an underdosing. For underdosing, assign the code from categories T36-T50 (fifth or sixth character “6”).
Codes for underdosing should never be assigned as principal or first-listed codes. If a patient has a relapse or exacerbation of the medical condition for which the drug is prescribed because of the reduction in dose, then the medical condition itself should be coded.

Noncompliance (Z91.12-, Z91.13- and Z91.14-) or complication of care (Y63.6-Y63.9) codes are to be used with an underdosing code to indicate intent, if known.

f. Adult and child abuse, neglect and other maltreatment . . .

If a suspected case of alleged rape or sexual abuse is ruled out during an encounter code Z04.41, Encounter for examination and observation following alleged adult rape or code Z04.42, Encounter for examination and observation following alleged child rape, should be used, not a code from T76.

If a suspected case of forced sexual exploitation or forced labor exploitation is ruled out during an encounter, code Z04.81, Encounter for examination and observation of victim following forced sexual exploitation, or code Z04.82, Encounter for examination and observation of victim following forced labor exploitation, should be used, not a code from T76. . . .

21. Chapter 21: Factors influencing health status and contact with health services (Z00-Z99) . . .

c. Categories of Z Codes . . .

3) Status . . .
Z68  Body mass index (BMI)
As with all other secondary
diagnosis codes, the BMI codes
should only be assigned when
they meet the associated diagnosis
(such as overweight or obesity)
meets the definition of a reportable
diagnosis (see Section III,
Reporting Additional Diagnoses).
Do not assign BMI codes during
pregnancy. See Section I.B.14 for
BMI documentation by clinicians
other than the patient’s provider.

14) Miscellaneous Z codes . . .
Miscellaneous Z codes/categories: . . .
Z91.89  Other specified personal risk factors,
not elsewhere classified

See Section I.B.14 for Z55-Z65 Persons
with potential health hazards related
to socioeconomic and psychosocial
circumstances, documentation by clinicians
other than the patient’s provider
Appendix I

Present on Admission Reporting Guidelines

Introduction . . .

Please see the CDC website for the detailed list of ICD-10-CM codes that do not require the use of a POA indicator (ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/ICD10CM/2018/) (https://www.cdc.gov/nchs/icd/icd10cm.htm). The codes and categories on this exempt list are for circumstances regarding the healthcare encounter or factors influencing health status that do not represent a current disease or injury or that describe conditions that are always present on admission.
Changes to the ICD-10-PCS Official Guidelines for Coding and Reporting

A summary of the modifications to the ICD-10-PCS Official Guidelines for Coding and Reporting is included below. The complete guidelines may be downloaded by visiting https://www.cms.gov/Medicare/Coding/ICD10/2019-ICD-10-PCS.html

The modifications are published below using the following format:

- **Narrative changes** appear in bold text (e.g. a more definitive root operation)
- **Items underlined** were moved within the guidelines since October 1, 2018 (e.g., control of acute bleeding). Deletions are shown as strikeouts (e.g., any of the definitive root operations)

Conventions . . .

A10
“And,” when used in a code description, means “and/or,” except when used to describe a combination of multiple body parts for which separate values exist for each body part (e.g., Skin and Subcutaneous Tissue used as a qualifier, where there are separate body part values for “Skin” and “Subcutaneous Tissue”).

*Example:* Lower Arm and Wrist Muscle means lower arm and/or wrist muscle.

B3. Root Operation . . .

*Control vs. more definitive root operations*

B3.7
The root operation Control is defined as, “Stopping, or attempting to stop, postprocedural or other acute bleeding.” If an attempt to stop postprocedural or other acute bleeding is initially unsuccessful, and to stop the bleeding requires performing a more definitive root operation, such as Bypass, Detachment, Excision, Extraction, Reposition, Replacement, or Resection, then the more definitive root operation is coded instead of Control.

*Example:* Resection of spleen to stop bleeding is coded to Resection instead of Control.
Transfer procedures using multiple tissue layers
B3.17
The root operation Transfer contains qualifiers that can be used to specify when a transfer flap is composed of more than one tissue layer, such as a musculocutaneous flap. For procedures involving transfer of multiple tissue layers including skin, subcutaneous tissue, fascia or muscle, the procedure is coded to the body part value that describes the deepest tissue layer in the flap, and the qualifier can be used to describe the other tissue layer(s) in the transfer flap.

Example: A musculocutaneous flap transfer is coded to the appropriate body part value in the body system Muscles, and the qualifier is used to describe the additional tissue layer(s) in the transfer flap.

B6. Device

General guidelines
B6.1a . . .
In limited root operations, the classification provides the qualifier values Temporary and Intraoperative, for specific procedures involving clinically significant devices, where the purpose of the device is to be utilized for a brief duration during the procedure or current inpatient stay. If a device that is intended to remain after the procedure is completed requires removal before the end of the operative episode in which it was inserted (for example, the device size is inadequate or a complication occurs), both the insertion and removal of the device should be coded.
Body Mass Index

The AHA Central Office has received many questions about assigning body mass index (BMI) codes. The following questions and answers are being published in response to many requests for assistance and to clear up any confusion.

Question:
Is there a list of diagnosis codes that are associated with the body mass index (BMI) measurement codes? Can BMI codes be assigned without a corresponding documented diagnosis of overweight, obesity or morbid obesity from the provider?

Answer:
No, the provider must provide documentation of a clinical condition, such as overweight, obesity or morbid obesity, to justify reporting a code for the body mass index. As stated in the Official Guidelines for Coding and Reporting, Section I.B.14, the associated diagnosis (such as overweight or obesity) must be documented by the patient’s provider. If the linkage between the BMI and a clinical condition is not clearly documented, query the provider for clarification. ICD-10-CM does not provide definitions or a list of diagnosis codes associated with BMI.

Question:
If the provider documents obesity or morbid obesity in the history and physical and/or discharge summary only, without any additional documentation to support the clinical significance of this condition, can it be coded? There is no other documentation to support clinical significance for this condition such as evaluation, treatment, increased monitoring, or increased nursing care, etc.

Answer:
Obesity and morbid obesity are always clinically significant and reportable when documented by the provider. In addition, if documented, the body mass index (BMI) code may be coded in addition to the obesity or morbid obesity code.
**Question:**
If the provider documents “overweight” in the history and physical and/or discharge summary only, without additional documentation to support the clinical significance of this condition, can it be coded? There is no other documentation to support clinical significance. Can we also assign the BMI code?

**Answer:**
No, neither the code for overweight nor the BMI code is assigned if there is no documentation that the diagnosis of “overweight” meets the definition of a reportable secondary diagnosis. While “overweight” may place a patient at increased risk for certain medical conditions, it does not automatically meet the definition of a reportable diagnosis.

For inpatient reporting purposes, the definition for “other diagnoses” is interpreted as additional conditions that affect patient care in terms of requiring:

- clinical evaluation; or
- therapeutic treatment; or
- diagnostic procedures; or
- extended length of hospital stay; or
- increased nursing care and/or monitoring.

For outpatient reporting purposes, as stated in the *Official Guidelines for Coding and Reporting*, Section IV.J. “Code all documented conditions that coexist at the time of the encounter/visit, and require or affect patient care treatment or management.”

**Question:**
Our hospital is receiving denials regarding the coding of BMI and some payors are requiring that it must meet the definition of reportable additional diagnosis and clinically validated regarding body mass. We have interpreted that to mean that something should be documented in the chart regarding weight loss, a special diet, a
Hoyer lift, nutrition involved, something regarding loss or gain of weight, and advice to improve the situation revolving around weight. Other sample documentation we use to clinically validate include general weight loss/lifestyle modification strategies discussed (elicit support from others; identify saboteurs; non-food rewards, etc.), or informal exercise measures discussed, e.g. taking stairs instead of elevator. Would these be valid examples to warrant the reporting of BMI as a secondary diagnosis?

**Answer:**
BMI codes may be assigned whenever an associated diagnosis (such as overweight or obesity) is documented and meets the definition of a reportable diagnosis.

**Question:**
When a patient has a BMI below 40, but morbid obesity is documented by the anesthesiologist (no other documentation regarding the patient’s obesity is recorded in the health record), is it appropriate to code morbid obesity or is a query recommended?

**Answer:**
Codes for overweight, obesity or morbid obesity are assigned based on the provider’s documentation of these conditions. Therefore, if morbid obesity is documented, assign code E66.01, Morbid (severe) obesity due to excess calories. While the BMI is used as a screening tool for patients who are overweight or obese, there is no coding rule that defines what BMI values correspond to obesity or morbid obesity, since the conditions are coded only when diagnosed and documented by the provider or another physician involved in the patient’s care.

As noted in the *Official Guidelines for Coding and Reporting*, Section I.A.19, “The assignment of a diagnosis code is based on the provider’s diagnostic statement that the condition exists. The provider’s statement that the patient has a particular condition...
is sufficient. Code assignment is not based on clinical criteria used by the provider to establish the diagnosis.” Please refer to Coding Clinic, Fourth Quarter 2016, pages 147-149, for additional information regarding this guideline.

Documentation from physicians other than the attending physician (i.e., consultants, residents, anesthesiologists, etc.) is acceptable, as long as there is no conflicting information from the attending physician.

**Question:**
When a patient has obesity related conditions such as diabetes mellitus, obstructive sleep apnea or hypertension, does that affect which code to assign (morbid obesity vs. obesity)?

**Answer:**
Code assignment for obesity or morbid obesity is based on the provider’s explicit documentation of the condition.

**Question:**
The physician documents a diagnosis of obesity as a pregnancy complication and the patient’s BMI is noted in the record. Is it appropriate to assign a code for the BMI documented on the delivery record?

**Answer:**
No, do not assign codes for the body mass index (BMI) during pregnancy. Assign only code O99.214, Obesity complicating childbirth, with the specific obesity code from category E66-, Overweight and obesity, for obesity complicating delivery. Weight gain during pregnancy is evaluated differently, and is based on the mother’s BMI before the pregnancy. Please note that effective October 1, 2018, the Official Guidelines for Coding and Reporting for BMI codes have been revised. The revised guideline states, “Do not assign BMI codes during pregnancy.”
**Question:**
There appears to be a discrepancy in the age range for pediatric BMI between the ICD-10-CM classification and the CDC’s growth charts. The note at category Z68, Body mass index [BMI], indicates “BMI adult codes are for use for persons 21 years of age or older. BMI pediatric codes are for use for persons 2-20 years of age. These percentiles are based on the growth charts published by the Centers for Disease Control and Prevention (CDC).” However, the CDC’s pediatric BMI calculator instructs to use the adult BMI calculator for adults, 20 years old or older and the pediatric calculator for children and teens, aged 2 through 19 years old. For a 20-year-old patient with documented obesity, which BMI codes should be used?

**Answer:**
Follow the instructions in the ICD-10-CM and assign the appropriate code from subcategory Z68.5, Body mass index (BMI) pediatric, for a 20-year-old patient.

**Question:**
Please clarify whether BMI codes may be reported when documented by a physician in his/her office note with or without documentation of an associated diagnosis. The *Official Guidelines for Coding and Reporting* for codes at category Z68 indicates that these codes should only be assigned when they meet the definition of a reportable diagnosis, which is an inpatient concept. Since there is great interest in collecting BMI data for quality reporting measures, we believe that BMI codes should be reportable if documented as part of the physician/provider authenticated note whether there is an associated condition or not. For example, “The US Preventive Health Services Task Force (USPSTF) recommends that clinicians screen all adults (aged 18 years and older) for obesity.” (Reference: CMS 2016 Group Practice Reporting Option (GPRO) Web Interface Narrative Measure Specifications).
**Answer:**
No, BMI codes are not intended for routine capture of BMI unless there is provider documentation of an associated diagnosis (such as overweight, obesity or underweight). As stated in the *Official Guidelines for Coding and Reporting*, Section I.B.14, the associated diagnosis (such as overweight or obesity) must be documented by the patient’s provider. Please refer to the *Official Guidelines for Coding and Reporting* Section III and Section IV.J for information on reportable diagnoses.

**Question:**
A three-year-old is admitted to the hospital with physical signs of undernutrition and growth rate that was less than the 5th percentile for his age. The physician diagnosed failure to thrive. Would it be appropriate to assign the BMI as an additional code? How should this case be coded?

**Answer:**
Yes, it is appropriate to assign the BMI code when the patient has an associated diagnosis, such as failure to thrive. Assign code R62.51, Failure to thrive (child), as the principal diagnosis. Code Z68.51, body mass index (BMI) pediatric, less than 5th percentile for age, should be assigned as an additional diagnosis.

**Question:**
Is the BMI measurement assigned as an additional code with diagnoses, such as malnutrition, anorexia nervosa or other eating disorders, cachexia, and abnormal weight loss/gain, when there is no instruction in the Tabular list to use an additional code to identify body mass index?

**Answer:**
Yes, it would be appropriate to assign the BMI as a secondary code with associated diagnoses such as malnutrition, anorexia nervosa or other eating disorders, cachexia, and abnormal weight loss/gain.
Question:
If the provider documents “underweight,” can we assign the appropriate Z code for BMI?

Answer:
If the provider documents “underweight,” the Z code for the documented BMI may be assigned. As stated in the Official Guidelines for Coding and Reporting, Section I.B.14, the associated diagnosis (such as overweight or obesity) must be documented by the patient’s provider. The guideline was not intended to limit the reporting of the Z code for BMI to only overweight and obesity.
Ask the Editor

Question:
_Coding Clinic_, Fourth Quarter 2017, page 41, stated that the addition of the root operation Extraction to multiple body systems will allow the capture of additional detail, “including percutaneous aspiration biopsies and brush biopsies for the respiratory, gastrointestinal, and lymphatic body systems.” However, previous issues of _Coding Clinic_ state that the root operation Excision should be used for aspiration biopsy of lymph node tissue. Additionally, the Index still directs users to Drainage for fine needle aspiration (FNA) of fluid or gas and Excision for fine needle aspiration of tissue. Can you please clarify the correct root operation for fine needle aspiration biopsy of lymphatic tissue?

Answer:
When reporting fine needle aspiration of tissue, such as lymph tissue, report “Extraction” of the body part for the tissue aspirated when available in the appropriate PCS table. If the appropriate body part value is not available under “Extraction,” then the root operation “Excision” should be reported for fine needle aspiration of tissue. FNA procedures of gas or fluid should be reported to the root operation “Drainage.”

Please note that the Alphabetic Index has been revised to read as follows:

_Aspiration, fine needle_
Fluid or gas _see_ Drainage
Tissue biopsy
   _see_ Extraction
   _see_ Excision

The advice in _Coding Clinic_ First Quarter 2014, page 26, and First Quarter 2016, page 23, was correct at the time of publication because there were no available body part values for the lymph nodes or common bile duct with the root operation
“Extraction.” The advice provided on page 41 of the Fourth Quarter 2017 issue of Coding Clinic was to make coding professionals aware that body part value additions to certain Extraction tables were now available for capturing FNA procedures of the listed body part values.

It is important to remember that coding professionals should not assign ICD-10-PCS procedure codes based only on where the Index directs without further confirmation of the ICD-10-PCS root operation definitions and the ICD-10-PCS tables.

**Question:**
A patient underwent externalization of his lumboatrial (LA) shunt, due to positive blood cultures. At surgery, the vascular portion of the shunt was removed from the blood vessel, and the spinal canal portion of the shunt was converted from a completely internal bypass conduit to an external drain. The conversion of the lumboatrial shunt to an external drain is intended to be temporary, while the patient’s infection that occurred in the vascular portion of the lumboatrial shunt is being treated. The patient will return to the operative suite later in the admission, for shunt reinternalization. What are the correct root operation and body part value for the externalization of the LA shunt?

Assign the following ICD-10-PCS codes:

- **009U00Z** Drainage of spinal canal with drainage device, open approach, for temporary externalization of the spinal canal portion of the lumboatrial shunt
- **02PY3JZ** Removal of synthetic substitute from great vessel, percutaneous approach, for the removal of the infected shunt from the blood vessel
**Question:**
The same patient whose shunt was externalized due to infection presented with negative cultures, and for internalization of the shunt (placement of lumboatrial shunt). The previous incision along the abdominal scar was opened, revealing the external drainage system, which was cut, disconnected and removed. A second incision was made in the left infraclavicular region, and a new atrial catheter was passed and placed at the superior vena cava cardiac junction, over a guidewire. The subcutaneous tunnel was made from the chest to the abdominal incision. Shunt tubing was passed through and connected to the proximal system. The tubing was cut proximally and superiorly, connected to the atrial catheter, and secured to the subcutaneous tissue. Is “Revision” the correct root operation for the internalization/insertion of the lumboatrial shunt?

**Answer:**
Assign the following ICD-10-PCS codes:

- **001U0J2**  
  Bypass, spinal canal to atrium with synthetic substitute, open approach, for the lumboatrial shunt

- **0JPT3JZ**  
  Removal of synthetic substitute from trunk subcutaneous tissue and fascia, percutaneous approach, for the removal of the external drainage system

The previously placed external drainage system was removed, a subcutaneous tunnel was made from the chest to the abdomen, and a new lumboatrial shunt was placed. Therefore, the correct root operation is “Bypass” rather than “Revision.” A new qualifier value Atrium was added in code table 001, Central Nervous System and Cranial Nerves, Bypass for the body part value Spinal Canal.
**Question:**
What is the correct ICD-10-CM code for acute myeloid leukemia (AML) that is not further specified?

**Answer:**
Assign a code from subcategory C92.0-, Acute myeloblastic leukemia, for AML not further specified. Effective October 1, 2018, the Alphabetical Index has been revised to provide a default as follows:

**Leukemia, leukemic C95.9-**
acute myeloid, NOS C92.0-

**Question:**
We understand that the *Official Guidelines for Coding and Reporting* provide that “an Excludes1 note indicates that the code excluded should never be used at the same time as the code above the Excludes1 note.” However, we have not been able to locate official guidance as to which code should be assigned out of the two codes. Can you help?

**Answer:**
Assign only the code referenced in the Excludes1 note. For example, when peripheral vascular disease and gangrene are documented, the Alphabetical Index will provide the following references:

**Disease**
peripheral
vascular NOS 173.9

**Gangrene, gangrenous** (connective tissue)
(dropsical) (dry) (moist) (skin) (ulcer) (see also Necrosis) I96

Referencing the corresponding Tabular List, code I96, Gangrene, not elsewhere classified, has an Excludes1 note below that excludes “gangrene in other peripheral vascular diseases (I73.-).” This
note should be interpreted to mean “not coded here” and that code I73.- should be assigned for gangrene in other peripheral vascular disease.

**Question:**
Both code D53.9, Nutritional anemia, unspecified, and code D64.9, Anemia, unspecified, are nonspecific codes. Code D53.9 has an Excludes1 note in the Tabular List for “anemia NOS (D64.9).” How should the Excludes1 notes be interpreted, and when both conditions are documented in the medical record, which condition should be coded?

**Answer:**
If provider documentation indicates both nutritional anemia and anemia, assign only code D53.9, Nutritional anemia, unspecified. Code D53.9 indicates a type of anemia and code D64.9, Anemia, unspecified, does not provide any additional information about the patient. It would be contradictory to have a code for unspecified and another specified code for the same condition.

**Question:**
Since ICD-10-CM presumes a relationship between both chronic kidney disease (CKD) and hypertension as well as diabetes mellitus and CKD, what are the appropriate code assignments when the provider documents type 2 diabetic mellitus with chronic kidney disease and the patient also has a diagnosis of hypertension?

**Answer:**
Assign codes E11.22, Type 2 diabetes mellitus with diabetic chronic kidney disease, I12.9, Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease, and N18.9, Chronic kidney disease, unspecified. The classification presumes a cause-and-effect relationship between both diabetes and CKD and hypertension and CKD. CKD is most likely related to both hypertension and diabetes when the patient has all three conditions. Both high
blood sugar and high pressure in the blood vessels will cause the vessels to deteriorate, which can then damage the kidneys.

As of October 1, 2018, the ICD-10-CM Official Guidelines for Coding and Reporting have been revised to read “Assign codes from category I12, Hypertensive chronic kidney disease, when both hypertension and a condition classifiable to category N18, Chronic kidney disease (CKD), are present. CKD should not be coded as hypertensive if the provider indicates the CKD is not related to the hypertension.”

**Question:**
How is streptococcal Group B sepsis due to a hemodialysis central venous catheter classified in ICD-10-CM? Which is more appropriate, assigning a code for the type of catheter (central venous) or assigning a code based on its use in hemodialysis?

**Answer:**
Assign code T80.211A, Bloodstream infection due to central venous catheter, initial encounter, as the principal or first listed diagnosis. Assign code A40.1, Sepsis due to streptococcus, group B, as an additional diagnosis, when a centrally inserted hemodialysis catheter is the cause of sepsis. A code from subcategory T80.21-, Infection due to central venous catheter, specifies a central venous catheter, distinguishing it from other dialysis catheters, which are classified to subcategory T82.7xx-, Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts. Code assignment is based on the location of the catheter, rather than function.

The Official Guidelines for Coding and Reporting sepsis due to a postprocedural infection state, “For infections following infusion, transfusion, therapeutic injection, or immunization, a code from subcategory T80.2, Infections following infusion, transfusion, and therapeutic injection, or
code T88.0-, Infection following immunization, should be coded first, followed by the code for the specific infection. If the patient has severe sepsis, the appropriate code from subcategory R65.2 should also be assigned, with the additional codes(s) for any acute organ dysfunction.”

**Question:**
When advice published in *Coding Clinic* conflicts with the *Official Guidelines for Coding and Reporting* or the ICD-10-CM/PCS classification, should coding professionals still follow the published advice or adhere to the instructions in the guidelines and/or the classification?

**Answer:**
The Cooperating Parties for ICD-10-CM/PCS and the Editorial Advisory Board make every effort to ensure that advice published in *Coding Clinic* is consistent with the classification and the guidelines. They consult with an expert panel of physicians and coding professionals to affirm that the advice is clinically accurate and the uniformity of the coded data is maintained. When there is a discrepancy between the conventions in the classification, the guidelines and/or advice published in *Coding Clinic*, coding professionals should adhere to the following hierarchy: Conventions in the ICD-10-CM and ICD-10-PCS classification take precedence over the *Official Guidelines for Coding and Reporting*, and both the classification and guidelines take precedence over *Coding Clinic* advice.

The advice published in *Coding Clinic* is not intended to replace the instructions in the classification nor the *Official Guidelines for Coding and Reporting*. The advice is meant to be used when the ICD-10-CM/PCS classification and the guidelines do not provide direction. For example, when the index is confusing, and leads to an inappropriate code, a basic rule is that further research is required if the title of the code suggested
by the index clearly does not identify the condition correctly. *Coding Clinic* has previously published advice on this topic, and that advice does not conflict with conventions in the classification nor the guidelines.

If coding professionals feel that published advice is in conflict with coding guidelines or the ICD-10-CM/PCS classification, please submit a specific case example to the AHA Central Office, with potential for submission to the *Coding Clinic* Editorial Advisory Board for review.

**Question:**
What is the appropriate course of action when an individual, such as a coding educator or consultant, advises other coding professionals to disregard *Coding Clinic* because he or she personally disagrees with the advice, or states that the published advice conflicts with their understanding or interpretation of this advice?

**Answer:**
The Cooperating Parties for ICD-10-CM/PCS and the Editorial Advisory Board have final approval on the advice published in *Coding Clinic*. As such, *Coding Clinic* is official advice that must be followed by coding professionals to ensure the uniformity of coded data. The Cooperating Parties represent a long-standing public and private sector collaboration between the American Hospital Association (AHA), American Health Information Management Association (AHIMA), Centers for Medicare and Medicaid Services (CMS), and the Centers for Disease Control’s National Center for Health Statistics (NCHS). CMS and NCHS are the official maintainers of the ICD-10-CM and ICD-10-PCS code sets. The Cooperating Parties work together in the development of the *Official Guidelines for Coding and Reporting* and the publication of *Coding Clinic*. 
Coding professionals should abide by the AHIMA’s Standards of Ethical Coding. Among several standards, the standards specify that “Coding professionals shall adhere to the ICD coding conventions, official coding and reporting guidelines approved by the Cooperating Parties, the CPT rules established by the American Medical Association, and any other official coding rules and guidelines established for use with mandated standard code sets.

Advising coders to disregard Coding Clinic because of differences in understanding or personal interpretation may be construed as an ethical issue.

**Question:**
A patient diagnosed with “right elbow terrible triad” had a radial head arthroplasty and lateral collateral ligament repair. At surgery, the surgeon opened the joint, revealing a subluxed radial head that was comminuted and not repairable. The subluxed radial head was cut at its neck, and removed. The radial head was then replaced with a prosthetic implant. In Coding Clinic, Third Quarter 2015, “Shoulder Joint” was assigned as the body part value for a patient who underwent removal of the articular head surface during a shoulder joint replacement. Would that advice be unique to the shoulder, or could the logic be applied to the elbow joint as well? What is the appropriate body part value for the radial head arthroplasty?

**Answer:**
Assign the following ICD-10-PCS code:

0PRH0JZ Replacement of right radius with synthetic substitute, open approach for the right radial head arthroplasty

Radial head arthroplasty is typically performed for severe fractures or in older patients with poor bone quality. It is common to replace only the
radial head bone, especially for fractures. Radial head replacement surgery involves resecting damaged bone and replacing the radial head with a prosthesis. Radial head arthroplasty and total elbow replacement surgery are different, and the ICD-10-PCS did not previously distinguish between the different elbow joint portions being replaced. Effective October 1, 2018, the following entries were added to the ICD-10-PCS Index:

**Arthroplasty, radial head**
- see Replacement, radius, right 0PRH
- see Replacement, radius, left 0PRJ
Clarification

Watchman Device Insertion and Removal

Question:
_Coding Clinic_, Fourth Quarter 2017, pages 104-105, advised the assignment of code 02H73DZ, Insertion of intraluminal device into left atrium, percutaneous approach, for transcatheter insertion of the Watchman device. Since the Watchman device was used to occlude the left atrial appendage, shouldn’t the correct code be 02L73DK, Occlusion of left atrial appendage with intraluminal device, percutaneous approach, instead?

Answer:
It is correct that a successful insertion of a Watchman device into the left atrial appendage would be assigned code 02L73DK, Occlusion of left atrial appendage with intraluminal device, percutaneous approach.

However, in the case published in _Coding Clinic_, Fourth Quarter 2017, pages 104-105, the device was removed prior to the completion of the procedure when it was ultimately found to be inadequate. As such, the root operation Occlusion is not appropriate since the definition of the root operation was not accomplished. In the published case, both the Insertion code 02H73DZ and the Removal code 02PA3DZ are assigned.

Please refer to the 2019 revisions of the _ICD-10-PCS Official Guidelines for Coding and Reporting_, on page 76 of this issue. Guideline B6.1.a. has been revised to indicate “If a device that is intended to remain after the procedure is completed requires removal before the end of the operative episode in which it was inserted (for example, the device size is inadequate or a complication occurs), both the insertion and removal of the device should be coded.”