References

1. www.icd10monitor.com/news-articles/48-icd10-enews/431-hccs-and-the-icd-10-revolution-the-transformation-awaits-for-medicare-parts-c-a-d?showall=&start=1

2. www.cdc.gov/nchs/data/icd/icd10cm_guidelines_2014.pdf

3. www.justcoding.com/270313/icd10cmpcs-codes-for-musculoskeletal-system-include-greater-level-of-specificity

4. www.bcbsm.com/content/dam/public/Providers/Documents/help/ faqs/icd10-tipsheet-rheumatology.pdf

5. www.medicalpracticeinsider.com

6. www.optumcoding.com/CodingCentralArticles/?id=927

7. www.codeitrightonline.com/ciri/understanding-icd-10-cm-episode-of- care-7th-character-extensions.html

8. www.dd3d-studio.com/human-anatomy/?lang=en

9. 2014, Draft ICD-10-CM *Official Guidelines for Coding and Reporting*.

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Disease, Disorders and Injuries from the Musculoskeletal System and Connective Tissue

ICD-10

Diseases, disorders and injuries from the musculoskeletal system are coded in ICD-10 within Chapter 13: Diseases of the Musculoskeletal System and Connective Tissue (M00-M99) and Chapter 19: Injury, Poisoning and Certain Other Consequences of External Causes (S00-T88). These chapters refer to both the muscles and bones (including diseases, fractures and injuries) within this body system.

Documenting and reporting

Additional documentation requires two designations: The majority of codes in Chapter 13 of ICD-10 have been expanded in some way. This is primarily due to the additional documentation that is required in regards to specificity of site and laterality.

1. Site: The site represents either the bone, muscle or joint involved.

   ■ There is an option for multiple sites when a diagnosis concerns more than one bone, muscle or joint (e.g., other juvenile arthritis, multiple sites [M08.89]).

   ■ When more than one bone, joint or muscle is involved and there is not a multiple site option or code, multiple codes must be used to indicate the sites involved (e.g., osteomyelitis of cervical and lumbar vertebra).

   ■ ICD-10: osteomyelitis of vertebra, cervical region (M46.22) and osteomyelitis of vertebra, lumbar region (M46.26).

2. Laterality: All codes that have laterality requirements need to have identified whether the disease, injury or diagnoses is located on the right or left region (e.g., diagnosis of an abscess of bursa of the right shoulder).

   ■ ICD-10: abscess of bursa, right shoulder (M71.011)

Reorganization of codes: Several codes from various chapters in ICD-9 were moved to Chapter 13 in ICD-10 because they were principally focused on the musculoskeletal system.

Example:

■ Gout in Chapter 3: Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders of ICD-9 was moved to Chapter 13 in ICD-10. Since Gout primarily involves joints that are a part of the musculoskeletal system, it was necessary to rearrange this disease to Chapter 13.

Combination codes for some conditions and associated symptoms: There are some codes that are comprised of various conditions, two diagnoses, or a diagnosis with an associated secondary process (manifestation) and a diagnosis with an associated complication.

Example:

■ Endocarditis in systemic lupus erythematosus (M32.11)

Expansion: Due to the necessity of greater detail, the musculoskeletal code system reflects an expansion to capture with accuracy the patient's health.

Example:

■ Rheumatoid arthritis and bursitis ICD-9 codes are mapped to several ICD-10 codes, which offer more elements identifying laterality and body sites.

About fractures

- Fractures in ICD-10 have gone through a substantial amount of changes that require:
  - Documentation and specific information regarding the type of fracture as displaced or nondisplaced. If not indicated, fractures are coded as displaced.
  - Precise site of the fracture.
  - Documentation supporting laterality.
  - Identification of episode of care.
  - Identification of open or closed: According to ICD-10 *Official Coding Guidelines* section I.C.19.c, a fracture not identified as open or closed is coded as closed. Fracture codes require a seventh character for the episode of care (some of which are based on whether the fracture is closed or open).
  - Use the Gustilo classification system for further classification of open fractures.

Example:

- A patient was diagnosed with a nonunion distal right humerus fracture. ICD-10: S42.401K
Rationale: The patient had a nonunion of a fracture of the lower end of right humerus. (The code includes the site and laterality.)

- The ICD-10 alphabetic index has two separate main entries for a fracture: one for pathological and one for traumatic fractures.

- Acute/traumatic versus chronic/recurrent: Many musculoskeletal conditions are a result of previous injury or trauma to a site or are recurrent conditions. If recurrent, they are usually found in Chapter 13. Any current, acute injury should be coded to the appropriate injury code from Chapter 19.

- If treatment is directed at the current injury, coders should not use the Z series of codes (aftercare). The injury code should be reported with a seventh-character extension to identify the subsequent encounter. The purpose of assigning the extension is to be able to track the continuity of care and the type of injury.

Causes for pathologic fractures

ICD-10 identifies three different causes for pathologic fractures:

1. **Neoplastic disease**: When an encounter is for a pathological fracture due to a neoplasm and the focus of treatment is the fracture, a code from subcategory M84.5-, pathological fracture in neoplastic disease, should be sequenced first followed by the code for the neoplasm. If the focus of treatment is the neoplasm with an associated pathological fracture, the neoplasm code should be sequenced first, followed by a code from M84.5 for the pathological fracture.

2. **Other specified disease**: Among others are osteomyelitis, Paget's disease, disuse atrophy, hyperparathyroidism, and nutritional or congenital disorders.

3. **Osteoporosis**: Osteoporosis is a systemic condition, signifying that all bones of the musculoskeletal system are affected. It is the most common type of bone disease. Regarding pathological fractures, osteoporosis has two categories:
   - **Osteoporosis without pathological fracture**:
     - Category M81.- is for use on patients with osteoporosis with no pathologic fracture due to the osteoporosis at this time even if they have had a fracture in the past. Site is not a component of the codes under category M81.-. For patients with a history of osteoporosis fractures, status code Z87.310, personal history of healed osteoporosis fracture, should follow the code from M81.-.
   - **Osteoporosis with current pathological fracture**:
     - Category M80 is for patients who have a current pathologic fracture at the time of an encounter. The codes under M80.- identify the site of the fracture, not the osteoporosis. A code from category M80.-, not a traumatic fracture code, should be used for any patient with known osteoporosis who suffers a fracture even if the patient had a minor fall or trauma if that fall or trauma would not usually break a healthy bone.

The seventh-character extension

In certain circumstances, it is necessary to assign a seventh character to codes in particular ICD-10 categories.

The seventh character always occupies the seventh-space data field even for codes that are less than six characters. That character refers to the episode of care and includes initial and subsequent encounter and sequela.

The episode of care for fractures is more complex than for other injuries because it demands supplementary information about the fracture: open or closed, healing phase, routine or with complications, nonunion or malunion.

Extension	Type of encounters	To be used
A	Initial encounter for closed fracture	When the patient is receiving active treatment for the injury (e.g., surgical treatment or emergency department encounter)
B	Initial encounter for open fracture	
D	Subsequent encounter for fracture with routine healing	For encounters that occur after the patient has received and completed active treatment of the injury and is receiving routine care for the injury during the healing or recovery phase (e.g., cast change or removal, medication adjustment, removal of external or internal fixation device or other aftercare and follow-up visits)
G	Subsequent encounter for fracture with delayed healing	
K	Subsequent encounter for fracture with nonunion	
P	Subsequent encounter for fracture with malunion	
S	Sequela	For complications or conditions that arise as a direct result of an injury (e.g., scar formation after a burn); when using extension S, code both the injury that caused the sequela and the sequela itself. Sequence the exact type of sequela (e.g., scar) first and follow this with the injury code (e.g., burn).

Injuries

ICD-10 has some significant coding changes related to the musculoskeletal system to allow the capture of the most specific injury code.

Codes are organized by the general site of the injury and then by type, beginning with the more superficial injuries and ending with injures involved in deeper body structures. It is also important to note, in addition for coding for the traumatic injury, ICD-10 also requires the use of secondary codes to identify the external cause of injury.

Examples:

- By anatomic location: displaced fracture of medial phalanx of right index finger; initial encounter for closed fracture (S62.620A)
- By type (like contusion, foreign body, wound): puncture wound with foreign body, right foot; initial encounter (S91.341A)
- Sequela (complication or condition that arises as a direct result of the injury): displaced subtrochanteric fracture of left femur; sequela (S72.22XS)

Classification for open fractures

There are available multiple classification systems for fractures including the Gustilo classification, the Tscherne, the *Mangled Extremity Severity Scale*, the *Hanover Scale*, and the *AO Classification of Fractures and Dislocations*.

ICD-10 codes for certain types of open fractures require a seventh character that categorizes open fractures using the Gustilo classification. This is the most widely used structure and is generally accepted as the primary classification system for open fractures. This classification is not for all bones or all types of fractures. Therefore, in addition to specifying the site of the fracture, the medical record must also provide the necessary specificity in the documentation to allow the coder to assign the correct seventh-character extension as this character is not optional.

Gustilo classification for open fracture of extremities

Type I
- Low-energy/velocity
- Clean wound
- Wound < 1 cm in length
- Intramedullary nailing, average time to union 21-28 weeks
- Soft tissue injury and fracture comminution is minimal

Type II
- Contamination and soft tissue damage (flaps, avulsion) is moderate
- Wound > 1 cm in length
- Intramedullary nailing, average time to union 26-28 weeks
- Minimal fracture comminution

Type III
- High energy/velocity or crushing (i.e., injuries due to farm accidents, gunshot, war, tornado, high-speed vehicle)
- Massive/highly contaminated wound
- Wound > 1 cm in length
- Extensive soft tissue damage/loss (flaps, avulsion, crush) requires vascular repair or has been open for eight hours priior to treatment
- Segmental or severly comminuted fracture with displacement, bone loss, tramatic amputation

Grade III A
- Wound < 10 cm with crushed tissue and contamination
- Intramedullary nailing, average time to union is 30-35 weeks
- Soft tissue coverage of bone is usually possible

Grade III B
- Wound > 10 cm with crushed tissue and contamination
- Intramedullary nailing; average time to union is 30-35 weeks
- Soft tissue is inadequate and requires regional or free flap

Grade III C
- Fracture with a major vascular injury, requiring repair for limb salvage
  - In some cases, it will be necessary to consider bicompartmental knee arthroplasty following tibial fracture