Vertebral compression fractures

ICD-10-CM

Definition
Vertebral compression fractures are fractures in the bones of the spine (vertebrae) in which the bone’s tissue collapses within itself, becoming squashed or compressed. More than one vertebra may be affected.

Causes
Vertebral compression fractures can be traumatic, pathologic or both.

- **Traumatic** – caused by trauma or injury (for example, a patient falls and lands on his feet or buttocks – this causes downward pressure on the spinal column; the downward compressive force on the spine may be too great for the vertebrae to handle, causing one or more of the vertebrae to fracture)
- **Pathologic** – caused by a disease process that weakens the bone, for example:
  - Osteoporosis – the most pathologic common cause
  - Tumors or cancers that started in the bones of the spine or tumors or cancers that started in other parts of the body and spread to the bones of the spine
  - Other disease processes that weaken the bones of the spinal column
- **Both** – occurs when the bones of the spine are weakened by a disease process to the point that even minor injury or trauma causes a compression fracture (Only the physician can determine that a fracture is out of proportion to the degree of trauma and is therefore considered pathologic.)

Symptoms
- Back pain with sudden or chronic onset
- Loss of height
- Hunchback (kyphosis), which can occur with multiple fractures (Kyphosis can cause pressure on the spinal cord that can rarely cause neurological symptoms, such as numbness, tingling or weakness; problems with walking; or problems with bowel or bladder function.)

Note: There may be no symptoms.

Diagnostic tools
- Medical history and physical exam
- Spine X-ray
- Bone density testing for osteoporosis
- CT scan or MRI

Treatment
- Pain medications
- Bed rest
- Back bracing (sometimes used)
- Physical therapy
- Surgery (rarely used)
- Treatment of underlying condition, if pathologic fracture

Prognosis
Most traumatic compression fractures heal in eight to 10 weeks with conservative treatment. Healing time will be slower if surgery is performed. Fractures related to osteoporosis usually become less painful with conservative management, but sometimes chronic pain and disability occur. The prognosis for vertebral compression fractures due to tumors depends on the type of tumor involved.
Vertebral compression fractures, continued

ICD-10-CM

Documentation tips for providers

• The subjective section of the office note should document any current symptoms related to vertebral compression fracture.

• The objective section of the office note should include any current associated physical exam findings and results of any related diagnostic testing.

• Do not use the descriptor “history of” to describe a current vertebral compression fracture. In diagnosis coding, the descriptor “history of” implies the condition occurred in the past and no longer exists as a current problem.

• A past vertebral compression fracture that has healed and no longer exists should not be documented in the final impression as if it is still current. In this scenario, it is appropriate to use the descriptor “history of.”

• Do not document a suspected vertebral compression fracture as if it were confirmed. Rather, document the signs and symptoms in the absence of a confirmed diagnosis.

• For a confirmed current diagnosis of vertebral compression fracture, do not use descriptors that imply uncertainty (such as “probable,” “apparently,” “likely” or “consistent with”).

• In the final assessment or impression:
  o Clearly document the cause of vertebral compression fracture, if known.
    ▪ If traumatic, specify the type of injury or trauma, and when the injury occurred, if known.
    ▪ If pathologic, clearly link the fracture to the underlying disease process in a cause-and-effect relationship.
  o Use all applicable descriptors, such as:
    ▪ the specific site/level
    ▪ traumatic
    ▪ non-traumatic
    ▪ pathologic
    ▪ acute
    ▪ chronic
    ▪ wedge compression
    ▪ collapsed
    ▪ displaced
    ▪ nondisplaced
    ▪ open
    ▪ closed
    ▪ stable burst
    ▪ unstable burst
  o Document the current status (improving, unchanged, healed, etc.; or with complications such as delayed healing, nonunion or malunion).

• The office note should clearly show the episode of care (i.e., initial, subsequent or sequela). See seventh-character descriptions on the following pages. Best practice for documentation of an office visit for subsequent fracture aftercare would include the date of your initial evaluation, diagnosis and treatment of the fracture.

• Document a specific and concise treatment plan for vertebral compression fracture.
  o If referrals are made or consultations requested, the office note should indicate to whom or where the referral or consultation is made or from whom consultation advice is requested.
  o Document when you plan to see the patient again.

ICD-10-CM tips and resources for coders

The principles of multiple coding of injuries should be followed in coding fractures.

A fracture not indicated as open or closed should be coded to closed. A fracture not indicated whether displaced or not displaced should be coded to displaced.

Multiple fractures are sequenced in accordance with the severity of the fracture.
Vertebral compression fractures, continued

Traumatic Vertebral Fractures

Traumatic vertebral fractures are coded in accordance with the provisions within categories S12, S22 and S32 and the level of detail documented in the medical record. Traumatic vertebral fractures classify as follows:

- Traumatic cervical vertebral fracture  subcategories S12.0 — S12.6
- Traumatic thoracic vertebral fracture  subcategories S22.00 — S22.08
- Traumatic lumbar vertebral fracture  subcategories S32.00 — S32.05
- Traumatic sacral vertebral fracture  subcategories S32.10 — S32.19
- Traumatic fracture of the coccyx  subcategory S32.2

These subcategories include multiple instructional notes that must be carefully reviewed and applied. Fifth and sixth characters further specify the fractures, including the particular site within each vertebral region of the spinal column and the particular type of fracture. There are many descriptors within each subcategory.

All of these subcategories require a seventh character to specify the encounter:
- A: initial encounter for closed fracture
- B: initial encounter for open fracture
- D: subsequent encounter for fracture with routine healing
- G: subsequent encounter for fracture with delayed healing
- K: subsequent encounter for fracture with nonunion
- S: sequela

Initial encounter – active treatment

- Traumatic vertebral fractures are coded using the appropriate seventh character for initial encounter (A for closed fracture and B for open fracture) while the patient is receiving active treatment for the fracture.
- Examples of active treatment include surgical treatment, emergency department encounter and evaluation and continuing (ongoing) active treatment by the same or a different physician. (Note: The ICD-10-CM Official Guidelines for Coding and Reporting advise that while a patient may be seen by a new or different provider over the course of treatment for an injury, assignment of the seventh character is based on whether the patient is undergoing active treatment and not whether the provider is seeing the patient for the first time.)
- The appropriate seventh character for initial encounter should also be assigned for a patient who delayed seeking treatment for the fracture or nonunion.

Subsequent encounter – aftercare – seventh character D

- Traumatic vertebral fracture aftercare is coded using the seventh character for subsequent care (D) for encounters after the patient has completed active treatment of the fracture and is receiving routine care for the fracture during the healing or recovery phase.
- Examples of fracture aftercare include cast change or removal, an X-ray to check healing status of fracture, removal of external or internal fixation device, medication adjustment, other aftercare and follow-up visits following initial active fracture treatment.
- The aftercare Z codes should not be used for aftercare for traumatic fractures. As noted above, for aftercare with routine healing of traumatic fractures, assign the acute fracture code with seventh character (D) for subsequent care.

Complications – seventh characters G and K

- Care for complications of surgical treatment for vertebral fracture repairs during the healing or recovery phase should be coded with the appropriate complication codes.
- Care of complications of traumatic vertebral fractures, such as delayed union and nonunion, should be reported with the appropriate seventh character for subsequent care with delayed union (G) or subsequent care with nonunion (K).
- For complication codes, active treatment refers to treatment for the condition described by the code, even though it may be related to an earlier vertebral fracture. For example, code T84.63XA, Infection and inflammatory
Vertebral compression fractures, continued

reaction due to internal fixation device of spine, initial encounter, is used when active treatment is provided for
the infection, even though the condition relates to the internal fixation device of the spine that was placed at a
previous encounter.

Sequela of traumatic vertebral fracture – seventh character S
- Seventh character S, sequela, is for use for complications or conditions that arise as a direct result of a past
traumatic vertebral fracture; for example, kyphosis that develops after past vertebral compression fractures. The
kyphosis represents sequelae of the vertebral compression fractures.
- When using seventh character S, it is necessary to use both the injury code that precipitated the sequela and the
code for the sequela itself.
- The S is added only to the injury code, not the sequela code.
- The seventh character S identifies the injury responsible for the sequela. The specific type of sequela (e.g.,
kyphosis) is sequenced first, followed by the injury code.

Pathological Vertebral Fractures

Pathological vertebral fractures are coded in accordance with the provisions within the following subcategories and the
level of detail documented in the medical record.
- M80.08 Age-related osteoporosis with current pathological fracture, vertebra(e) x seventh
- M80.88 Other osteoporosis with current pathological fracture, vertebra(e) x seventh
- M84.48 Pathological fracture, other site x seventh
- M84.58 Pathological fracture in neoplastic disease, other site x seventh (code also underlying neoplasm)
- M84.68 Pathological fracture in other disease, other site x seventh (code also underlying condition)
- As noted above, each of these subcategories requires a sixth-character placeholder (x) plus a seventh character to
specify the encounter as follows:
  A: Initial encounter for fracture
  D: Subsequent encounter for fracture with routine healing
  G: Subsequent encounter for fracture with delayed healing
  K: Subsequent encounter for fracture with nonunion
  P: Subsequent encounter for fracture with malunion
  S: Sequela

Pathologic fracture due to a neoplasm
- For pathological fracture due to a neoplasm, when 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.
- When 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.

Initial encounter – active treatment – seventh character A
- Seventh character A is for use as long as the patient is receiving active treatment for the fracture.
- Examples of active treatment include surgical treatment, emergency department encounter, evaluation and
continuing treatment by the same or a different physician. While the patient may be seen by a new or different
provider over the course of treatment for a pathological fracture, assignment of the seventh character is based on
whether the patient is undergoing active treatment and not whether the provider is seeing the patient for the first
time.

Subsequent encounter – aftercare – seventh character D
- Pathological vertebral fracture aftercare is coded using the seventh character for subsequent care (D) for
encounters after the patient has completed active treatment of the fracture and is receiving routine care for the
fracture during the healing or recovery phase.
Complications of pathologic vertebral fractures – seventh characters G, K and P

- Care for complications of surgical treatment for fracture repairs during the healing or recovery phase should be coded with the appropriate complication codes.
- Care of complications of pathologic fractures are reported with the appropriate seventh character for subsequent care with delayed union (G), subsequent care with nonunion (K) or subsequent care with malunion (P).

Sequela of pathological vertebral fracture – seventh character S

- “Sequela” means the residual effect (condition produced) after the acute phase of an illness or injury has ended. Current residual problems or symptoms related to a past vertebral fracture that is healed is coded using the seventh character S.

**History of Vertebral Fractures**

A vertebral compression fracture that occurred in the past and for which there are no current symptoms, treatment, complications or sequelae is coded as follows:

- Z87.310 Personal history of (healed) osteoporosis fracture
- Z87.311 Personal history of (healed) other pathological fracture
- Z87.81 Personal history of (healed) traumatic fracture

**Coding examples**

**Example 1**

<table>
<thead>
<tr>
<th>Final diagnosis</th>
<th>Age-related osteoporosis with newly diagnosed L1 and L2 lumbar wedge compression fractures</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-10-CM code(s)</td>
<td>M80.08XA Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture</td>
</tr>
</tbody>
</table>

**Example 2**

<table>
<thead>
<tr>
<th>Final diagnosis</th>
<th>Routine healing of previously diagnosed chronic spinal compression fractures. Condition improving.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-10-CM code(s)</td>
<td>M84.48XD Pathological fracture, other site, subsequent encounter for fracture with routine healing</td>
</tr>
</tbody>
</table>

**Example 3**

<table>
<thead>
<tr>
<th>Final diagnosis</th>
<th>Severe lumbar spinal stenosis due to history of wedge compression fractures of fourth and fifth lumbar vertebrae</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-10-CM code(s)</td>
<td>M48.06 Spinal stenosis, lumbar region S32.040S Wedge compression fracture of fourth lumbar vertebra, sequela S32.050S Wedge compression fracture of fifth lumbar vertebra, sequela</td>
</tr>
</tbody>
</table>

**Example 4**

<table>
<thead>
<tr>
<th>Final diagnosis</th>
<th>Severe thoracolumbar kyphosis due to past thoracic and lumbar vertebral compression fractures</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-10-CM code(s)</td>
<td>M40.15 Other secondary kyphosis, thoracolumbar region S22.009S Unspecified fracture of unspecified thoracic vertebra, sequela S32.009S Unspecified fracture of unspecified lumbar vertebra, sequela</td>
</tr>
</tbody>
</table>

**References:** American Hospital Association Coding Clinic; ICD-10-CM Official Guidelines for Coding and Reporting; MedlinePlus