Vertebral compression fractures ICD-9-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 8 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.

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."

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- 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:
  - Clearly document the cause of the vertebral compression fracture. Use all applicable descriptors (traumatic, non-traumatic, pathologic, acute, chronic, collapsed, etc.).
    - 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.
  - Specify the site (cervical, thoracic, lumbar, sacrum and coccyx).
  - When vertebral fracture includes spinal cord injury, specify the site/level, particular type of spinal cord injury (complete or incomplete transverse lesion, anterior cord syndrome, etc.), or residual effect (paraplegia, quadriplegia, etc.).
  - Document the current status (improving, stable, healed, etc.).
- Clearly document the episode of care – i.e., initial visit for evaluation, diagnosis and treatment of the vertebral fracture versus follow-up visit for a vertebral fracture – for which you, the same provider, previously rendered initial care. An office visit for follow-up aftercare should document the date of your initial evaluation, diagnosis and treatment of the fracture and should state this visit is for aftercare.
- Document a specific and concise treatment plan for vertebral compression fracture.
  - 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.
  - Document when you plan to see the patient again.

ICD-9-CM tips and resources for coders

Accurate coding of vertebral compression fractures requires two steps:

1. Determine whether the medical record documents vertebral compression fracture as traumatic or pathologic.
2. Determine whether the vertebral compression fracture is documented as active (acute) care, aftercare, complication, chronic, late effect or historical.

Step 1: Traumatic versus pathologic

Traumatic vertebral compression fractures

A vertebral compression fracture is coded as traumatic when the medical record specifically describes the fracture as traumatic or due to an injury or trauma. Further, in the alphabetic index of ICD-9-CM, vertebral compression fracture defaults to traumatic when the record does not describe the vertebral compression fracture with any of the descriptors that code to pathologic fracture.

Acute traumatic fractures of the spinal column without mention of spinal cord injury are classified to category 805. Fourth and fifth digits are required to specify the location of the vertebral fracture and whether the fracture is open or closed.

Acute traumatic fractures of the spinal column with spinal cord injury are classified to category 806. Fourth and fifth digits are required to specify the location of the vertebral fracture, whether the fracture is open or closed and the specific type of injury.

Instructional notes at the beginning of Chapter 17 of ICD-9-CM advise a fracture not indicated as closed or open should be classified as closed.

Pathologic vertebral compression fractures

A newly diagnosed acute pathologic fracture of the vertebrae classifies to code 733.13. A vertebral compression fracture is coded as pathologic when:

- The record states the fracture is pathologic; OR
- The record describes the vertebral fracture using terms that classify to the pathologic code (for example, the fracture is described as chronic, collapsed, not due to trauma, nontraumatic, pathologic, etc.); OR
- The documentation clearly links the vertebral fracture to a disease process as the cause, as in "T12 compression fracture due to osteoporosis." (Note: The fact that the record documents a current diagnosis of vertebral compression fracture that co-exists with a disease process such as osteoporosis does not necessarily mean the fracture was caused by the disease process. The medical record documentation must specifically link the two in a cause-and-effect relationship.)

AHA Coding Clinic guideline for Pathologic fractures, Fourth Quarter 1993, pages 25-26, defines pathologic fracture and advises that only the physician can determine if a traumatic fracture is pathologic in nature, including making the determination that the fracture is out of proportion to the degree of trauma but occurred due to disease in the bone. If the physician determines the fracture is due to trauma only, a code from the traumatic fracture series 800-829 is assigned.

Step 2: Active (acute) care, aftercare, complications, chronic, late effect or historical

Vertebral fracture active care: Codes 805.00-806.9 and 733.13

- Traumatic vertebral compression fractures are coded using the acute fracture codes (categories 805 and 806) when the patient is receiving active treatment for a newly diagnosed acute traumatic fracture.
- Pathologic vertebral fractures are assigned to code 733.13 during the active treatment phase of a newly diagnosed pathologic fracture.
- Examples of active treatment are surgical treatment, emergency department encounter and evaluation and treatment by a new physician. (Note: A "new physician" as it relates to fracture coding, is a physician who has not previously evaluated or treated the patient *for the fracture*. This is not a new physician in the true sense – i.e., a physician who has never evaluated or treated the patient for *any* problem.)
- Active care is the initial phase of fracture treatment in which the fracture diagnosis is confirmed and the initial treatment plan is created and implemented.

Vertebral fracture aftercare: codes V54.17 and V54.27

- Traumatic and pathologic vertebral compression fractures are coded using the aftercare codes (V54.17 and V54.27, respectively) for encounters after the patient has completed the active treatment of a newly diagnosed fracture and is now receiving routine follow-up care during the healing or recovery phase.
- Examples of vertebral fracture aftercare include brace changes or removal, medication adjustment and follow-up visits following fracture treatment.
- Aftercare is the phase of fracture treatment:
  - after the fracture diagnosis has been confirmed
  - after the initial treatment plan was created and implemented
  - when the fracture treatment plan is being monitored and adjusted as needed during the healing or recovery phase

Complications of vertebral fractures

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 fractures, such as malunion and nonunion, should be reported with codes 733.81, Malunion of fracture and 733.82, Nonunion of fracture.

Chronic vertebral fracture: 733.13

- A vertebral compression fracture described as current and chronic classifies to code 733.13.
- The aftercare codes are not applicable when a medical record clearly documents a current, chronic vertebral fracture. The aftercare codes are limited to follow-up care during the healing or recovery phase of an *acute* vertebral fracture. (AHA Coding Clinic guideline for Chronic vertebral pathological fracture, Third Quarter 2008, page 4)
- When a medical record documents follow-up evaluation and management for a chronic pathologic vertebral compression fracture due to osteoporosis, but ONLY the underlying osteoporosis is evaluated and treated, assign a code ONLY for osteoporosis (733.00, Osteoporosis, unspecified). Since the chronic pathologic vertebral compression fracture itself received no attention or treatment, a code is not assigned for the fracture.

Late effect of vertebral fracture: code 905.1

Current residual problems or symptoms related to a past vertebral fracture that is now healed classify to code 905.1.

- Example: A lumbar compression fracture occurred 8 months ago is being managed conservatively, but low back pain has become progressively worse. A lumbar MRI is performed and, based on the results, the physician diagnoses severe lumbar spinal stenosis due to past lumbar compression fracture. In this example, the following codes are assigned:
  - 724.02 Spinal stenosis of lumbar region, without neurogenic claudication
  - 905.1 Late effect of fracture of spine and trunk without mention of spinal cord lesion

History of vertebral fracture codes: V13.51 and V15.51

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

- V13.51 Personal history of pathologic fracture
- V15.51 Personal history of traumatic fracture

NOTE: When a record documents follow-up evaluation of a fracture for which active care and aftercare has been completed and the fracture is noted as completely healed (and therefore the fracture no longer exists), assign code V67.4, Treatment of healed fracture follow-up examination.

Coding examples

Example 1	
Medical record documentation	80-year-old female presents with complaints of low back pain for one week. She has a history of osteoporosis. Patient states the pain is mild to moderate but seems to be getting better. Lumbar X-ray in the office today shows compression fracture at L1-L2.
Final Impression	1. Osteoporosis 2. Lumbar compression fracture
Plan	Advised to take OTC ibuprofen three tablets every 4-6 hours for low back pain. Return to the office for re-evaluation in two weeks if symptoms do not continue to improve.
ICD-9-CM code(s)	1. 733.00 2. 805.4
Comments	The record documents lumbar compression fracture and osteoporosis, but does not clearly link the two conditions in a cause-and-effect relationship or describe the lumbar compression fracture as pathologic in nature. The ICD-9-CM manual defaults to the traumatic code for lumbar compression fracture (805.4).

Example 2	
Medical record documentation	Patient comes in today for routine follow-up. No new complaints. Continues to wear back brace for chronic spinal compression fractures diagnosed at last visit three weeks ago. States pain level has decreased and she is doing better.
Final Impression	Chronic spinal compression fractures
Plan	Continue back brace and pain meds. Refilled Fosamax.
ICD-9-CM code(s)	733.13
Comments	The record describes spinal compression fractures as chronic. With this descriptor, the ICD-9-CM manual leads to the pathologic code 733.13. The AHA Coding Clinic guideline for Chronic vertebral pathological fracture (Third Quarter 2008, page 4) indicates the aftercare codes are not applicable when a medical record clearly documents a current, chronic vertebral fracture; and advises the aftercare codes are limited to follow-up care during the healing or recovery phase of an *acute* vertebral fracture.

Example 3	
Medical record documentation	Presents today for follow-up from ER visit 5 days ago for chest congestion and cough. States much improved and no longer coughing up green mucus. Continues on antibiotic given in ER. Lungs clear to auscultation. Remainder of physical exam within normal limits. Chest X-ray report received from ER negative, except a lumbar compression fracture is noted.
Final Impression	Acute URI, resolving
Plan	Finish antibiotic. Stop smoking. Return to office next month for annual exam as planned.
ICD-9-CM code(s)	465.9
Comments	There is mention of lumbar compression fracture noted on the chest X-ray that was performed in the ER, but the record does not state whether it is current or old and does not address this condition in the final Impression or Plan. Therefore, no code is assigned for lumbar compression fracture.

Example 4	
Medical record documentation	Patient presents to her primary care physician's (PCP's) office for a one-week follow-up related to an emergency room visit in which she was assigned a diagnosis of T9 compression fracture of the spine after a minor fall at home. The PCP performed an evaluation and management service and refilled pain medications.
Final Impression	T9 compression fracture, stable, most likely related to her osteoporosis
Plan	Decrease pain medication to every 8 hours and follow up in one month.
ICD-9-CM code(s)	805.2
Comments	This record documents the initial evaluation and treatment by the PCP for a T9 compression fracture; therefore, the active fracture code is assigned. The final impression states the T9 compression fracture is most likely related to her osteoporosis. Use of the terms "most likely" indicates uncertainty regarding whether the fracture

	is due to osteoporosis and, therefore, pathologic in nature; thus, the condition is not coded as pathologic.

Example 5	
Medical record documentation	78-year-old female presents for follow-up of long-standing osteoporosis. Diagnosed last year with chronic lumbar vertebral compression fractures due to osteoporosis. Reports she is doing okay and able to complete ADLs with minimal assistance. Voices concerns about risk of future spinal compression fractures. Until now, she has resisted going back on bisphosphonates after a difficult time from one dose of Boniva. Exam reveals full range of motion in back; non-tender to palpation.
Final Impression	Osteoporosis with history of chronic lumbar vertebral compression fractures
Plan	She agrees to try alendronate 70 mg once weekly for osteoporosis. Follow-up call in 1 week to make sure she tolerates it.
ICD-9-CM code(s)	733.00, V13.51
Comments	The Final Impression documents osteoporosis as current with treatment focused on this condition. Chronic lumbar vertebral compression fractures are described as historical. There is no documentation of any attention or treatment directed to chronic lumbar vertebral compression fractures.

References: American Hospital Association (AHA) Coding Clinic; ICD-9-CM Official Guidelines for Coding and Reporting; MedlinePlus