Clinical Policy: Kyphoplasty and Vertebroplasty - Vertebral Augmentation

Reference Number: PA.CP.MP.OR.1024
Effective Date: 04/01/2020
Last Review Date: NEW POLICY

See Important Reminder at the end of this policy for important regulatory and legal information.

Common Name: Kyphoplasty and Vertebroplasty

Definition: Kyphoplasty and vertebroplasty are vertebral augmentation procedures involving therapeutic injection of bone cement in the vertebra to relieve pain and disability.

I. Criteria for Inclusion
   A. Kyphoplasty or vertebroplasty is considered medically appropriate for severe pain or disability associated with any of the following indications of the T5-L5 spine:
      1. Malignancy involving destruction of the vertebra where chemotherapy and/or radiation therapy has been unsuccessful in relieving symptoms
      2. Severe pain or nerve compression related to vertebral hemangiomas where radiation therapy has been unsuccessful in relieving symptoms
      3. Osteoporotic collapse or steroid induced fractures in no more than 3 symptomatic vertebrae when all the following criteria are met:
         a. Other reasonable causes of pain, such as herniation, have been ruled out by radiographic imaging
         b. Presence of severe pain or disability that has not been relieved by conservative therapy
         c. Osteoporosis is being medically treated to prevent additional osteoporotic fractures
      4. Vertebral compression fracture when all of the following are met:
         a. Acute or subacute fracture confirmed by MRI (edema present) or bone scan (brightness), with intact posterior wall/no burst component to fracture
         b. Tenderness present over spinous process of affected vertebra on exam
         c. Failure of at least 6 weeks conservative treatment to relieve symptoms, unless progressive kyphosis or Kummel’s osteonecrosis is present
      5. Vertebral eosinophilic granuloma with instability

II. Criteria for Exclusion
   A. Kyphoplasty and vertebroplasty is considered not medically necessary if the above criteria are not met, including but not limited to prophylactic treatment for osteoporosis of the spine.
   B. Kyphoplasty or vertebroplasty is contraindicated if any of the following are present:
      1. Uncorrected coagulation disorders
      2. Active spinal infection
      3. Spinal compression causing neurological symptoms
      4. Hypersensitivity to bone cement or opacification agent
      5. Burst fracture, flexion-/distraction or rotational injuries
   C. Percutaneous sacroplasty is not considered to be medically necessary for all indications.
   D. For persons with significant co-morbidities or complications, the medical record must detail the risk/benefit of vertebral augmentation.
III. Surgical Considerations
A. Pre-Operative Considerations:
   1. Preoperative care planning needs may include:
      a. Routine preoperative evaluation
      b. Diagnostic test scheduling, including:
         i. Imaging (eg, x-rays, MRI, CT myelogram)
         ii. Electromyography
      c. Preoperative treatment, procedures, and stabilization, including:
         i. Physical and occupational therapy consultation for development of rehabilitation plan, including progressive exercises, muscle strengthening, and activity pacing
      d. Preoperative discharge planning as appropriate
B. Pre-Operative Considerations:
   1. Preoperative care planning needs may include:
      a. Routine preoperative evaluation
      b. Diagnostic test scheduling, including:
         i. Imaging (eg, MRI, CT myelogram)
         ii. Electromyography
      c. Preoperative treatment, procedures, and stabilization, including:
         i. Physical and occupational therapy consultation for development of rehabilitation plan, including progressive exercises, muscle strengthening, and activity pacing
      d. Preoperative discharge planning as appropriate
C. Intra-Operative Considerations:
   1. Antibacterial wipes
   2. Antibacterial nasal swab
D. Post-Operative & Inpatient Considerations:
   1. Hospital evaluation and care needs may include:
      a. Treatment and procedure scheduling and completion, including:
         i. IV antibiotics
         ii. Transfusion
      b. Consultation, assessment, and other services scheduling and completion, including:
         i. Physical therapy
         ii. Occupational therapy
      c. Monitoring patient's status for deterioration and comorbid conditions; key items include:
         i. Neurovascular status of lower extremities
         ii. Pain management
         iii. New-onset headache suspicious for dural tear and cerebrospinal fluid leak
         iv. Urinary retention
         v. Hemodynamic stability
         vi. Wound management, observing for healing at spine
E. Discharge Planning & Considerations
   1. Discharge planning includes:
      a. Assessment of needs and planning for care, including:
         i. Develop treatment plan (involving multiple providers as needed).
         ii. Evaluate and address preadmission functioning as needed.
         iii. Evaluate and address patient or caregiver preferences as indicated.
         iv. Identify skilled services needed at next level of care, with specific attention to:
            ➢ Neurologic status assessment
            ➢ Pain management
            ➢ Wound or dressing management
         v. Evaluate and address psychosocial status issues as indicated
b. Early identification of anticipated discharge destination; options include:
   i. Home, considerations include:
      ➢ Access to follow-up care
      ➢ Home safety assessment
      ➢ Self-care ability, if appropriate
      ➢ Caregiver need, ability, and availability
   ii. Post-acute skilled care or custodial care, as indicated

c. Transition of care plan complete, which may include:
   i. Patient and caregiver education complete
   iii. Medication reconciliation completion includes:
      ➢ Compare patient's discharge list of medications (prescribed and over-the-counter) against physician's admission or transfer orders.
      ➢ Assess each medication for correlation to disease state or medical condition.
      ➢ Report medication discrepancies to prescribing physician, attending physician, and primary care provider, and ensure accurate medication order is identified.
      ➢ Provide reconciled medication list to all treating providers.
      ➢ Confirm that patient, family, or caregiver can acquire medication.
      ➢ Educate patient, family, and caregiver.
         1. Provide complete medication list to patient, family, or caregiver.
         2. Confirm that patient, family, or caregiver understands importance of presenting personal medication list to all providers at each care transition, including all physician appointments.
         3. Confirm that patient, family, or caregiver understands reason, dosage, and timing of medication (eg, use "teach-back" techniques).
   iv. Plan communicated to patient, caregiver, and all members of care team, including:
      ➢ Inpatient care and service providers
      ➢ Primary care provider
      ➢ All post-discharge care and service providers
   v. Post-discharge appointment plans made as needed, which may include:
      ➢ Primary care provider
      ➢ Neurosurgeon
      ➢ Orthopedic surgeon
      ➢ Rehabilitation therapy services
      ➢ Specialists for management of comorbid conditions
   vi. Post-discharge testing and procedure plans made, which may include:
   vii. Referrals made for assistance or support, which may include:
      ➢ Financial, for follow-up care, medication, and transportation
      ➢ Smoking cessation counseling or treatment
      ➢ Vocational rehabilitation
   viii. Medical equipment and supplies coordinated (ie, delivered or delivery confirmed) which may include:
      ➢ Ambulation devices (eg, cane, crutches, walker)
      ➢ Wound care supplies

IV. Length of Stay Considerations
   A. Goal length of stay: Not available
   B. Facility type criteria: Not available

V. Coding
   A. CPT
## CLINICAL POLICY
### Kyphoplasty and Vertebroplasty - Vertebral Augmentation

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>22510</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; cervicothoracic</td>
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<tr>
<td>22511</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; lumbosacral</td>
</tr>
<tr>
<td>22512</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; each additional cervicothoracic or lumbosacral vertebral body (List separately in addition to code for primary procedure)</td>
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<tr>
<td>22513</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; thoracic</td>
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<tr>
<td>22514</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; lumbar</td>
</tr>
<tr>
<td>22515</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>0200T</td>
<td>Percutaneous sacral augmentation (sacroplasty), unilateral injection(s), including the use of a balloon or mechanical device, when used, 1 or more needles, includes imaging guidance and bone biopsy, when performed</td>
</tr>
<tr>
<td>0201T</td>
<td>Percutaneous sacral augmentation (sacroplasty), bilateral injections, including the use of a balloon or mechanical device, when used, 2 or more needles, includes imaging guidance and bone biopsy, when performed</td>
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### B. HCPCS

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<th>Description</th>
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<tr>
<td>S2360</td>
<td>Percutaneous vertebroplasty, one vertebral body, unilateral or bilateral injection; cervical</td>
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<tr>
<td>S2361</td>
<td>Each additional cervical vertebral body (list separately in addition to code for primary procedure)</td>
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### C. ICD-10 Procedure

*No ICD-10 Procedure codes*

### D. ICD-10 Diagnosis

*All associated ICD-10 Diagnosis codes*
References


Regulatory Data

<table>
<thead>
<tr>
<th>Policy Number/Name:</th>
<th>PA.CP.MP.OR.1024 Kyphoplasty and Vertebroplasty</th>
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<tbody>
<tr>
<td>Initial Approval and Effective Date:</td>
<td>02/05/2015</td>
</tr>
<tr>
<td>All Approval Dates:</td>
<td>02/05/2015; 1/8/2016; 3/3/2017; 1/29/2018; 3/1/2019</td>
</tr>
<tr>
<td>Approval Authority:</td>
<td>Utilization Management Committee</td>
</tr>
<tr>
<td>Business Owner:</td>
<td>Utilization Management</td>
</tr>
<tr>
<td>Applicable lines of business:</td>
<td>All</td>
</tr>
<tr>
<td>Board approval, if appropriate:</td>
<td>N/A</td>
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<tr>
<td>Approval Signature:</td>
<td>On file</td>
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URAC Standards:

State Requirements:

CMS/Federal Requirements:

Corresponding policies:

Reviews, Revisions, and Approvals

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<th>Date</th>
<th>Approval Date</th>
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<tr>
<td>03/20</td>
<td>6/29/2020</td>
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• New Policy created.
• Policy administered by Turning Point Healthcare Solutions

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by PA Health & Wellness, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.
This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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**Note: For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

**Note: For Medicare members**, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at [http://www.cms.gov](http://www.cms.gov) for additional information.

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