1. **Purpose**

   The purpose of this policy is to establish the criteria for when kyphoplasty and vertebroplasty may be considered medically necessary.

2. **Definitions**

   2.1. Vertebroplasty (also known as Percutaneous Polymethylmethacrylate Vertebroplasty (PPV)) is a minimally invasive procedure, which has been developed to restore bone height lost due to painful vertebral compression fractures. The procedure consists of the injection of bone cement (usually polymethylmethacrylate) into a thoracic or lumbar vertebral body of the affected vertebra for relief of pain and the strengthening of bone.

   2.2. Kyphoplasty (also known as balloon-assisted vertebroplasty) is a minimally invasive procedure, which has been developed to restore bone height lost due to painful compression fractures. This procedure involves the insertion of one or two balloon devices into the fractured vertebral body. Once inserted, the physician inflates the balloon(s) to create a cavity and to compact the deteriorated bone with the intent to restore vertebral height. The balloon(s) are then removed and the newly created cavity is filled with a bone cement, creating an internal cast for the fractured area.

3. **Statement of Policy**

   3.1. The determination of medical necessity of kyphoplasty or vertebroplasty is always made on a case-by-case basis.

   3.2. The use of kyphoplasty or vertebroplasty may be considered medically necessary when the following criteria have been met:

   - Patient has experienced a compression fracture due to osteoporosis, trauma, or pathological lesion of the vertebral body; and
   - Patient is experiencing severe debilitating pain and loss of mobility or function related to the patient’s ability to carry out their activities of daily living that cannot be relieved by a reasonable course of care (e.g., medications, braces, therapy); and
   - Other causes of pain such as herniated intervertebral disk have been ruled out; and
• The vertebral body height is at such a level to allow the procedure to be safely performed.

3.3. The procedure **may be considered medically necessary** in patients who have experienced an acute compression fracture with intractable pain and an inability to carry out their activities of daily living and/or ambulation which requires a hospital admission for this condition.

3.4. The use of kyphoplasty or vertebroplasty **may be considered medically necessary** in patients whose compression fracture results in persistent pain over three (3) months and demonstrates correlating edema (MR imaging).

3.5. Based on the lack of evidence of long-term efficacy and safety for the use of percutaneous sacroplasty, use of this procedure for all indications is **considered investigational**.

4. References

4.1. Scientific:

The following scientific references were utilized in the formulation of this medical policy. Triad Healthcare, Inc. will continue to review clinical evidence surrounding kyphoplasty and vertebroplasty and may modify this policy at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the list, please forward the reference(s) to Triad Healthcare, Inc. so the information can be reviewed by the Academic Advisory Committee (AAC) and the Medical Quality Improvement Committee (MQIC) to determine if a modification of the policy is in order.


4.2. Related Triad Medical Policies:

- *TMMP 18 – Medical Necessity*

**CPT Codes**

This policy relates to the use of the following CPT Codes:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description (AMA CPT Guide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22520</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, thoracic</td>
</tr>
<tr>
<td>22521</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, lumbar</td>
</tr>
<tr>
<td>22522</td>
<td>Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral</td>
</tr>
<tr>
<td>CPT Code</td>
<td>Description (AMA CPT Guide)</td>
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<tr>
<td>----------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>body, unilateral or bilateral injection, each additional thoracic or lumbar vertebral body (List separately in addition to code for the primary procedure)</td>
</tr>
<tr>
<td>22523</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral</td>
</tr>
<tr>
<td></td>
<td>body, unilateral or bilateral cannulation (e.g., kyphoplasty), thoracic</td>
</tr>
<tr>
<td>22524</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral</td>
</tr>
<tr>
<td></td>
<td>body, unilateral or bilateral cannulation (e.g., kyphoplasty), lumbar</td>
</tr>
<tr>
<td>22525</td>
<td>Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral</td>
</tr>
<tr>
<td></td>
<td>body, unilateral or bilateral cannulation (e.g., kyphoplasty), each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure).</td>
</tr>
<tr>
<td>72291</td>
<td>Radiographical supervision and interpretation, percutaneous vertebroplasty, vertebral augmentation, or sacral augmentation (sacroplasty). Including cavity</td>
</tr>
<tr>
<td></td>
<td>creation, per vertebral body or sacrum, under fluoroscopic guidance</td>
</tr>
<tr>
<td>72292</td>
<td>Radiographical supervision and interpretation, percutaneous vertebroplasty, vertebral augmentation, or sacral augmentation (sacroplasty). Including cavity</td>
</tr>
<tr>
<td></td>
<td>creation, per vertebral body or sacrum, under CT guidance</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</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</td>
</tr>
</tbody>
</table>

This list may not be all inclusive and is not intended to be used for coding/billing purposes.
### Table of Revisions

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Modified By</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>O6/23/2014</td>
<td>Level 1, 2, 3</td>
<td>§3.5. new text added: “Based on the lack of evidence of long-term efficacy and safety for the use of percutaneous sacroplasty, use of this procedure for all indications is considered investigational.” §4.1 Scientific references added. CPT Code &amp; Descriptions updated.</td>
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<tr>
<td>12/09/2013</td>
<td>Level 1, 2, 3</td>
<td>Annual Review. §3.4., removed “uptake (bone scan imaging).”</td>
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<tr>
<td>11/16/2012</td>
<td>Level 1, 2, 3</td>
<td>Annual Review. Added CPT code table.</td>
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<tr>
<td>05/20/2011</td>
<td>Level 1, 2, 3</td>
<td>Annual Review. No changes</td>
</tr>
<tr>
<td>05/07/2010</td>
<td>Level 1, 2, 3</td>
<td>Annual Review. No changes.</td>
</tr>
<tr>
<td>03/14/2009</td>
<td>Level 1, 2, 3</td>
<td>New medical policy.</td>
</tr>
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</table>

**Triad’s Medical Policies** are not recommendations for treatment and providers are expected to exercise their clinical judgment in providing the most appropriate care. Health care providers and patients should not rely on these Medical Policies in making health care decisions. These Medical Policies are guidelines and do not constitute an authorization, certification, explanation of benefits or guarantee of payment. Applications of Triad’s Medical Policies are determined by the enrollee’s benefit documents and contracts and as such individual benefits must be verified. Determinations of medical necessity apply only if the benefit exists and no contract exclusions are applicable. In the event of a conflict, a participant’s benefit plan document shall supersede the information contained in Triad’s Medical Policies.