Kyphoplasty (CPT® 22514)

Clinical, Coding & Documentation Playbook

A Hybrid Reference for Interventional Pain & Spine Practices

Version: 1.0
Last Updated: March 2025
Intended Audience: Interventional Pain Physicians, Spine Specialists, Coding & Compliance Teams

IMPORTANT USE NOTICE

This playbook is intended for **educational and operational guidance only**. While it reflects current CPT® definitions and commonly applied payer medical-necessity standards, **coverage and prior authorization requirements vary by payer, Medicare Administrative Contractor (MAC), and plan**.

Providers and billing teams must confirm:

- Applicable **Local Coverage Determinations (LCDs)**
- Commercial payer medical policies
- Prior authorization and documentation thresholds

Use of this playbook does **not guarantee reimbursement**.

Clinical Purpose

Percutaneous lumbar vertebral augmentation is performed to stabilize **painful vertebral compression fractures (VCFs)** and improve function in appropriately selected patients. Common goals include:

- Pain reduction
- Functional improvement
- Prevention of progressive vertebral collapse
- Avoidance of open surgical intervention when not indicated

Most procedures are performed for fractures related to **osteoporosis, malignancy, or select traumatic mechanisms** .

Anatomy Focus — Lumbar Vertebra

Kyphoplasty targets the **vertebral body** via transpedicular or parapedicular access. Key anatomic considerations include:

- Pedicles (access corridor)
- Vertebral body (cement containment)
- Posterior wall integrity (safety consideration)
- Adjacent neural structures

Note: Schematic diagrams referenced in this section are intended for orientation and procedural planning and should be retained in customized versions of this playbook .

CPT® Definition | CPT® 22514

CPT® 22514
Percutaneous vertebral augmentation, including cavity creation using balloon or mechanical device, unilateral or bilateral cannulation, including all imaging guidance; lumbar.

Key Coding Principles

- Reported **once per lumbar vertebral body**
- Represents the **first lumbar level treated in a session**
- Unilateral vs bilateral cannulation does **not** alter reporting
- Imaging guidance is **bundled**

CPT® Code Family & Reporting

Region	Primary Code	Add-On Code
Thoracic	22513	22515
Lumbar	**22514**	**22515**

Coding Clarification

- CPT® 22513–22515 are reported **per vertebral body**, not per pedicle. Fluoroscopic or CT guidance and cavity creation are included and should not be separately reported unless a payer policy explicitly allows it.

Patient Selection — Who Is an Appropriate Candidate?

Appropriate candidates typically meet **all** of the following criteria :

- Symptomatic lumbar VCF with **focal pain matching imaging findings**
- Persistent pain despite **adequate conservative therapy** (analgesics, bracing, activity modification), unless:
    - Malignancy is present, or
    - Severe functional loss justifies earlier intervention
- Etiology includes:
    - Osteoporosis
    - Osteolytic metastasis
    - Multiple myeloma
    - Select traumatic fractures **without burst pattern**
- **No** spinal canal compromise
- **No** neurologic deficit requiring decompression
- **No** active infection (local or systemic)

Imaging Requirements

Preferred Imaging

- **MRI**: Confirms acuity via marrow edema and correlates pain with fracture level
- **CT**: Evaluates posterior wall integrity and excludes burst morphology

Required Documentation Elements

- Level(s) involved (e.g., L2, L3)
- Degree of vertebral height loss (wedge, biconcave)
- Evidence of acute or subacute fracture
- Absence of retropulsed fragments
- Absence of infection or destructive contraindications

Payer Note: Imaging modality and acuity definitions vary by policy. Verify coverage criteria prior to submission.

Kyphoplasty-Type Vertebral Augmentation — Procedural Stages

Kyphoplasty consists of **two core stages** :

Stage 1 — Cavity Creation

- Balloon or mechanical device introduced
- Vertebral body cavity formed under imaging guidance

Stage 2 — Cement Augmentation

- Controlled PMMA cement fill
- Goal: stabilization while minimizing leakage risk

Vertical and horizontal workflow diagrams should remain paired with this section during customization.

Quick Prior Authorization & Documentation Checklist (Clinical View)

Domain	**Clinical Requirement**
Diagnosis	Clear osteoporotic, malignant, or traumatic VCF with level and acuity
Imaging	MRI/CT confirming fracture, edema (if acute), no burst
Conservative Care	Dates and types documented unless malignancy/severe loss
Symptoms	Localized pain, functional limitation, ADL impact
Procedure Plan	Level(s), cavity creation, cement augmentation
Risk Discussion	Cement leakage, adjacent fracture, infection, embolic risk

Common ICD-10-CM Pairings (High-Level)

- **Osteoporotic fracture:** M80.0xxA family
- **Pathologic fracture due to neoplasm:** M84.5xxA
- **Secondary malignant neoplasm of bone:** C79.51
- **Multiple myeloma:** C90.00

Document **mechanism and encounter type** (initial, subsequent, sequela) clearly to ensure ICD-10 compliance .

WISeR & Medical Necessity — Clinical Perspective

Under programs such as **Wasteful and Inappropriate Service Reduction (WISeR)**, vertebral augmentation may be subject to increased review. Medical-necessity determinations expect documentation showing :

- Direct correlation between fracture, symptoms, and function
- Appropriate conservative management when reasonable

- Use as part of a **structured care plan**, not reflexive treatment

Strong clinical documentation remains the **primary defense** against denials and post-payment review.