Medical Coverage Policy | Vertebral Fracture Assessment

EFFECTIVE DATE: 10|01|2015
POLICY LAST UPDATED: 12|06|2016

OVERVIEW
Vertebral fracture assessment (VFA) with densitometry (bone density study) is a technique in which vertebral fractures are assessed at the same time as bone mineral density (BMD), by use of dual-energy X-ray absorptiometry (DXA). The addition of vertebral fractures to BMD may provide additional useful information on a subject's risk of fracture.

This policy addresses VFA **without** densitometry.

MEDICAL CRITERIA
Not applicable

PRIOR AUTHORIZATION
Not applicable

POLICY STATEMENT
Commercial Products
Screening for vertebral fractures using dual-energy X-ray absorptiometry (DXA or DEXA), **without bone density study**, is considered not medically necessary due to insufficient peer-reviewed literature that the service is effective.

BlueCHiP for Medicare
Screening for vertebral fractures using dual-energy X-ray absorptiometry (DXA or DEXA), **without bone density study**, is covered, but not separately reimbursed.

COVERAGE
Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

BACKGROUND
Vertebral fractures are highly prevalent in the elderly population, and epidemiologic studies have found that these fractures are associated with an increased risk of future spine or hip fractures independent of BMD. Only 20% to 30% of vertebral fractures are recognized clinically; the rest are discovered incidentally on lateral spine radiographs. Lateral spine radiographs have not been recommended as a component of risk assessment for osteoporosis because of the cost, radiation exposure, and the fact that the radiograph would require a separate procedure in addition to the BMD study using DXA. However, several densitometers with specialized software are able to perform VFA in conjunction with DXA. The lateral spine scan is performed by using a rotating arm; depending on the densitometer used, the patient can either stay in the supine position after the bone density study or is required to move onto the left decubitus position.

VFA differs from radiologic detection of fractures, as VFA uses a lower radiation exposure and can detect only fractures, while traditional radiograph images can detect other bone and soft tissue abnormalities in addition to spinal fractures. Manufacturers have also referred to this procedure as instant vertebral

assessment, radiographic vertebral assessment, dual-energy vertebral assessment, or lateral vertebral assessment.

For both lateral spine radiographs and images with densitometry, vertebral fractures are assessed visually. While a number of grading systems have been proposed, the Genant semiquantitative method is commonly used. This system grades the deformities from I to III, with grade I (mild) representing a 20% to 24% reduction in vertebral height, grade II (moderate) representing a 25% to 39% reduction in height, and grade III (severe) representing a 40% or greater reduction in height. The location of the deformity within the vertebrae may also be noted. For example, if only the mid height of the vertebrae is affected, the deformity is defined as an endplate deformity; if both the anterior and mid heights are deformed, it is a wedge deformity; and if the entire vertebrae is deformed, it is classed as a crush deformity. A vertebral deformity of at least 20% loss in height is typically considered a fracture. Accurate interpretation of both lateral spine radiographs and VFA imaging is dependent on radiologic training. Thus, device location and availability of appropriately trained personnel may influence diagnostic accuracy.

There is a lack of direct evidence from screening trials the use of densitometry with and without VFA improves health outcomes. Thus, screening for vertebral fractures using VFA with DXA, without densitometry is considered not medically necessary.

CODING

The following CPT code is covered, but not separately reimbursed for BlueCHiP for Medicare and is considered not medically necessary for Commercial Products:
77086

RELATED POLICIES

Bone Mineral Density Studies

PUBLISHED

Provider Update, January 2017
Provider Update, November 2015

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