



BlueCross BlueShield  
of Alabama

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**Name of Policy:**

**Vertebral Fracture Assessment with Dual X-Ray Absorptiometry  
(DEXA)**

Policy #: 202  
Category: Radiology

Latest Review Date: June 2014  
Policy Grade: D

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**Background/Definitions:**

*As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.*

*The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:*

- 1. The technology must have final approval from the appropriate government regulatory bodies;*
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;*
- 3. The technology must improve the net health outcome;*
- 4. The technology must be as beneficial as any established alternatives;*
- 5. The improvement must be attainable outside the investigational setting.*

*Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:*

- 1. In accordance with generally accepted standards of medical practice; and*
- 2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient's illness, injury or disease; and*
- 3. Not primarily for the convenience of the patient, physician or other health care provider; and*
- 4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.*

## **Description of Procedure or Service:**

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

Osteoporosis is a disease characterized by low bone density leading to an increase in risk for fracture. In the early phase of osteoporosis it is most easily detected by a bone mineral density exam. As the disease progresses it most often will present clinically as a low trauma fracture of the spine, hip, forearm, or ribs. If left untreated and undetected until a fracture occurs, the opportunity to prevent the first clinical consequences is lost. The risk for subsequent fracture increases dramatically once an osteoporotic fracture occurs.

Vertebral fractures are highly prevalent in the elderly population and epidemiological studies have found that these fractures are associated with an increased risk of future spine or hip fractures independent of bone mineral density. Only 20-30% of vertebral fractures are recognized clinically and the rest are discovered incidentally on lateral spine radiographs. Lateral spine x-rays have not been recommended as a component of risk assessment for osteoporosis, because of the cost, radiation exposure and the fact that the x-ray would require a separate procedure in add to the bone mineral density study using dual x-ray absorptiometry (DEXA). However, several densitometers with specialized software are able to perform vertebral fractures assessment (VFA) in conjunction with DEXA. 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 x-ray 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 (IVA), radiographic vertebral assessment (RVA), dual energy vertebral assessment (DVA), or lateral vertebral assessment (LVA).

For both lateral spine x-rays and DEXA, vertebral fractures are assessed visually. While a number of grading systems have been proposed, the semiquantitative system of Genant is commonly used. This system grades the deformities from I to III, with grade one representing a 20-24% reduction in vertebral height ranging up to grade III, which is a 40% 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 wedge 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 x-rays and VFA imaging is dependent on radiologic training. Thus, device location and availability of appropriately trained personnel may influence diagnostic accuracy.

For additional information regarding bone mineral density (BMD) as a screening for osteoporosis see Blue Cross and Blue Shield of Alabama's medical policy #191 on Bone Mineral Density Testing.

### **Policy:**

**Screening for vertebral fractures using dual x-ray absorptiometry (DEXA or DXA) or morphometric absorptiometry (MXA) does not meet** Blue Cross and Blue Shield of Alabama's medical criteria for coverage and is considered **investigational**.

*Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administer benefits based on the member's contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.*

### **Key Points:**

This policy addresses whether screening for vertebral fracture assessment (VFA) using densitometry improves the net health outcome. The ideal study would be a randomized controlled trial (RCT) comparing health outcomes in individuals screened with VFA in addition to dual x-ray absorptiometry (DEXA) compared to those screened with DEXA alone. Since no RCTs of this type have been published, an alternative strategy is to examine a chain of indirect evidence. This chain of evidence involves searching for: a) evidence that VFA is accurate, b) evidence that VFA identifies appropriate candidates for treatment who would not otherwise be identified, and c) that treatment in this population is actually beneficial.

The National Osteoporosis Foundation (NOF) 2013 Clinician's Guide to Prevention and Treatment of Osteoporosis recommends considering FDA-approved medical treatment for the following groups of patients:

- “Vertebral fracture (clinical or asymptomatic) or hip fracture
- Hip DXA (femoral neck or total hip) or lumbar spine T-score  $\leq -2.5$
- Low bone mass (osteopenia) and a U.S.-adapted (World Health Organization) WHO 10-year probability of a hip fracture  $\geq 3\%$  or 10-year probability of any major osteoporosis-related fracture  $\geq 20\%$
- Patient preferences may indicate treatment for people with 10-year fracture probabilities above or below these levels”

(For WHO algorithm, see [www.shef.ac.uk/FRAX](http://www.shef.ac.uk/FRAX))

Because patients with osteoporosis (T-score  $-2.5$  or less) diagnosed by DEXA and patients with low bone mass and other risk factors for fracture would be treated regardless of vertebral fractures, any incremental benefit using a VFA-inclusive strategy would accrue in the population

without osteoporosis. Thus, the literature review will focus on individuals who do not have osteoporosis.

**In patients without osteoporosis, what is the diagnostic accuracy of VFA with DEXA in identifying vertebral fractures, compared to standard x-rays?**

Several recent studies have compared the diagnostic accuracy of VFA and standard radiography. None of these reported findings separately for osteoporotic and non-osteoporotic individuals, so conclusions cannot be drawn about diagnostic accuracy of VFA in patients without osteoporosis. Moreover, studies tended to use radiography as the reference standard and did not evaluate potential false-positives or false-negatives associated with radiography.

In 2013, Domiciano and colleagues reported on 429 adults at least 65 years old who had VFA with densitometry and spine radiography on the same day. On VFA, vertebral fractures were identified in 77 of 259 women (29.7%) and 48 of 170 men (28.2%). Comparable numbers on spine radiographs were 74 of 259 (28.6%) in women and 52 of 170 (30.6%) in men. Compared to spine radiography, the sensitivity of VFA was 81.7% (95% CI: 73.9 to 88.1%) and the specificity was 92.7% (95% CI: 89.2 to 95.4%). In 2012, Diacinti and colleagues in Italy published two studies comparing the diagnostic accuracy of VFA to standard x-rays. Neither study, however, reported rates of osteoporosis or reported diagnostic accuracy data in patients without osteoporosis. Both studies found that VFA had high diagnostic accuracy, using conventional radiography as the reference standard. In one study, conducted with 930 post-menopausal women, the overall sensitivity and specificity of VFA on a *per patient* level was 97.23% and 98.86%, respectively. The other study included 350 patients; peri- and post-menopausal women, men referred for diagnosis of osteoporosis and patients enrolled in a study of HIV-related osteoporosis. When analyzed on a *per patient* level, VFA was found to have 96.83% sensitivity and 98.66% specificity compared to conventional radiography. The high overall diagnostic accuracy of VFA in these studies suggests that it has high diagnostic accuracy for all BMD levels. However, results were not reported separately for non-osteoporotic individuals so conclusions cannot be drawn about diagnostic accuracy of VFA in this population.

In the newer studies, especially those by Diacinti and colleagues, the accuracy of VFA in the Diacinti studies was higher than its performance in earlier studies. For example, in 2007 Ferrar and colleagues evaluated the performance of vertebral assessment using a visual algorithm-based approach. Subjects in the low-risk group were women age 55-79 years and were randomly selected from their general practitioners' offices. Most of them had normal BMD or were osteopenic. Subjects in the high-risk group were recruited after a low-trauma fracture to the hip, forearm, or humerus. Most of the high-risk patients had osteopenia or osteoporosis. In per-patient analysis and including all poor or unreadable images, the sensitivity of VFA was 60% in the low-risk group and 81% in the high-risk group; specificity was 97% in both groups. In addition, a 2005 study by Binkley and colleagues compared VFA (GE Lunar densitometer) to radiography in 27 osteoporotic, 38 osteopenic, and 15 normal women. Blinded analysis found correct identification for 17 of 18 radiographically evident grade two to three fractures (a false-negative rate of 6%). The study did not describe whether the Grade 2 and 3 fractures were found in women with osteoporosis, osteopenia, or normal BMD. Also, only 11 of 22 (50%) Grade 1 fractures were identified. Thirty vertebrae were classified as fractured when no fractures were present (38% false-positive), 29 of these were Grade 1 fractures by VFA with normal

radiography. In addition, VFA identified a total of 40 Grade 1 fractures but only 11 (28%) were true-positive results. Also problematic is that results were compared only in vertebrae evaluable by VFA; one patient could not be evaluated due to poor image quality, and 66% of T4-T6 vertebrae in other subjects could not be adequately visualized.

#### Section summary:

Several studies have compared VFA to radiography. The sensitivity of VFA compared to standard radiography reported in these studies was variable. Studies published in 2012 and 2013 reported higher diagnostic accuracy than older studies i.e., sensitivities in the 80-99% range and specificities over 90%. However, these recent studies did not present diagnostic accuracy rates separately for individuals without osteoporosis. Due to the lack of stratified analyses, it is not possible to determine the sensitivity and specificity of VFA for vertebral fractures with certainty for the subset of patients without osteoporosis.

#### **Does vertebral assessment identify candidates for treatment who would not otherwise be identified?**

As previously stated, the 2013 NOF guidelines recommend treating patients with osteoporosis, with osteopenia and other risk factors and those with hip or vertebral fractures (clinical or asymptomatic). Vertebral fracture assessment could identify additional candidates for treatment if individuals with vertebral fractures did not fall into one of the other categories eligible for treatment. No studies were identified that specifically dealt with the question of whether VFA would identify candidates for medication treatment who would not otherwise have been identified, but several studies addressed this issue to some extent. Representative studies are described below.

A 2014 study by Kanterewicz et al in Spain collected data on a population-based cohort of 2968 postmenopausal women between the ages of 59 and 70 years. A total of 127 women (4.3%) had a vertebral fracture according to VFA. Among these, 48.0% had osteoporosis and 42.5% had osteopenia. Moreover, 42.5% had previous fragility fractures and 34.6% had a first-degree family history of fractures. Thus, VFA could potentially identify additional women who would be eligible for fracture prevention therapy according to NOF guidelines (i.e., women who did not have osteoporosis, osteopenia plus a 10-year fracture risk, or other risk factors). The authors did not attempt to define this subgroup e.g., they did not report data on women with normal BMD and other risk factors.

In 2013, Mrgan and colleagues in Denmark published a retrospective study evaluating VFA with BMD in 3275 patients presenting for osteoporosis screening or evaluation of anti-osteoporotic medication; 85% were female. Vertebral fractures were found on VFA in 260 patients (7.9%). Of these, 156 patients (4.8% of the total sample) had osteoporosis (i.e., BMD at least -2.5) and 104 (3.2% of the total sample) did not have osteoporosis according to BMD. The data suggest that up to 40% (104 of 250) patients with vertebral fractures identified would be eligible for treatment according to NOF guidelines, and might not have been identified if DEXA alone were used. The proportion is likely lower than 40% because some of the patients may have had osteopenia and other risk factors that would lead to their eligibility for treatment.

In 2011, Jager and colleagues reported on 2,424 consecutive individuals (65% were female) referred for BMD for a variety of reasons at a single center in the Netherlands. Participants underwent VFA with BMD during the same session. Vertebral fractures (reduction in height of at least 20%) were detected in a total of 541 (22%) of patients. The prevalence of vertebral fractures was 14% (97/678) in individuals with normal BMD and 21% (229/1,100) in patients with osteopenia. Thus, 60.5% (326/541) of the patients with vertebral fracture did not have osteoporosis and could be eligible for treatment based on the 2013 NOF guidelines if they did not fall into another eligibility category e.g., osteopenia with other risk factors. Most of the fractures had not been identified in the past. The vertebral fractures were previously unknown in 74% of patients with normal BMD and 71% of patients with osteopenia.

A 2011 study from the Netherlands included 566 women aged 50 years and older with clinical risk factors for fracture who were not being treated for osteoporosis and had not previously been diagnosed with a vertebral fracture. Women underwent DEXA and VFA screening. A total of 174 (31%) had one or more moderate or severe vertebral fractures (height reduction of 25% or more). Mild vertebral fractures were not reported. Of the 174 women with vertebral fractures, 44 (25%) were found to have osteoporosis and therefore would have been eligible for treatment based on their BMD alone. However, the remaining 130 (75%) women with vertebral fractures had normal BMD (n=32) or osteopenia (n=43). It is not known how many of the women with osteopenia would have otherwise been considered potential candidates for treatment due to the combination of low bone mass and other risk factors. Among women with vertebral fractures, 17 (10%) used glucocorticoids, 91 (52%) had a previous fracture before age 50 years, and 39 (22%) had a first-degree relative with a hip fracture.

#### Section summary:

Routine use of VFA with DEXA will identify substantial numbers of individuals with previously unrecognized vertebral fractures. Many of these vertebral fractures are found in individuals without osteoporosis. Data are not available on how many of the vertebral fractures in non-osteoporotic individuals were in individuals who would not otherwise be eligible for treatment i.e., those with osteopenia and other risk factors for fracture.

#### **Does pharmacologic treatment in patients with vertebral fracture and low bone mass improve health outcomes?**

Bisphosphonates decrease bone resorption and are the major class of drugs now used to treat osteoporosis.

Several subgroup analyses of large randomized controlled trials (RCTs) evaluating the efficacy of bisphosphonates in patients with low bone mass and/or baseline vertebral fractures have been published. The trials were not designed *a priori* to assess efficacy according to baseline vertebral fracture status or BMD categories. The Fracture Intervention Trial (FIT) study groups was the first large multicenter study comparing the effects of treatment between osteoporotic women and women with low bone mass without existing vertebral fractures using the revised National Health and Nutrition Examination Survey (NHANES) cutoffs. This trial randomly assigned 4,432 women to alendronate or placebo and analyzed the treatment group in three BMD categories (less than a -2.5 standard deviation [SD]; -2.0 to -2.5 SD; and -1.6 to -2.0 SD below the mean). Women with a BMD less than -2.5 SD had a statistically significant reduction in

clinical and vertebral fractures over four years. The relative risk (RR) for all clinical fractures among patients with a BMD less than -2.5 SD was 0.6 (95% confidence interval [CI]: 0.5–0.8). There was no significant reduction in all clinical fractures for women with higher BMD values (RR: 1.1, 95% CI: 0.9–1.4), suggesting no benefit among patients with low bone mass or normal BMD.

Quandt et al reanalyzed the FIT study analyzing data for the outcome of both clinical vertebral fractures (symptomatic and diagnosed by physician) and radiographically detected (assessed at surveillance intervals) vertebral fractures. A total of 3,737 women at least two years' postmenopausal with low bone mass (T-score between -1.6 and -2.5) were included in the analysis. Among the women with low bone mass and existing radiographically detected vertebral fractures (n=940), the rate of subsequent clinical vertebral fractures were six (a rate of 43 per 10,000 person-years of risk) in the alendronate group and 16 (124 per 10,000 person-years of risk) in the placebo group. Alendronate treatment compared to placebo was accompanied by a RR of 0.3 (95% CI: 0.1–0.8) for clinical vertebral fractures and a RR of 0.5 (95% CI: 0.3–0.8) for radiographically detected fractures. Similar RR estimates were found for women having low bone mass without vertebral fractures, but absolute risks were lower (12 versus 81 fractures/10,000 person-years for those without and with baseline fractures, respectively).

Kanis et al reanalyzed data on 1,802 women at least five years' postmenopausal from the Vertebral Efficacy with Risedronate Therapy (VERT) trials who were identified on the basis of a prior radiographically detected vertebral fracture regardless of BMD and had radiographs available at baseline and three years. Overall, there was a significantly lower rate of a new vertebral fracture in women with prior vertebral fracture randomly assigned to treatment with risedronate compared to placebo (14.5% vs. 22.3%, respectively;  $p < 0.001$ ). In the group with a T-score greater than -2.5, the rate of new femoral neck fractures was 50 of 519 (11%) in the risedronate group and 71 of 537 (15.5%) in the placebo group ( $p = 0.049$ ). In the osteoporotic group, those with a T-score -2.5 or lower, the rate of new femoral neck fracture was 53 of 355 (18.7%) in the risedronate group and 92 of 318 (33.4%) in the placebo group ( $p < 0.001$ ). Findings were similar when the T-score at the most severe skeletal site (femoral neck or lumbar spine) was used for stratification.

#### Section summary:

Evidence from the FIT and VERT studies suggests that treatment of patients with low bone mass (but not osteoporosis) reduces further fractures. However, a limitation of the FIT and VERT studies is that they are post-hoc subgroup analyses, which are generally considered to be exploratory. In addition, vertebral fracture screening was done using radiography rather than VFA software. Advantages of the studies are that the two sub-analyses had large sample sizes and used data from well-conducted randomized trials. This evidence is insufficient to determine whether treatment of patients with low bone density and vertebral fractures improves outcomes.

#### **Does VFA improve outcomes in men who are being evaluated for osteoporosis?**

No RCTs were identified that evaluated the efficacy of bisphosphonate treatment in men with vertebral fractures and low bone density. Several trials have evaluated whether bisphosphonate treatment increases BMD in men at risk for bone loss e.g., on androgen deprivation therapy.

However, vertebral fractures were not assessed and therefore conclusions cannot be drawn about the potential added benefit of VFA in addition to densitometry in at-risk men.

## **Summary**

There is a lack of direct evidence from screening trials comparing densitometry with and without vertebral fracture assessment (VFA) that VFA improves health outcomes. Since direct evidence was not available, a causal chain of indirect evidence was examined. Evidence was examined on the diagnostic accuracy of VFA in non-osteoporotic patients, the ability of VFA to identify patients for treatment who would not otherwise be identified, and the effectiveness of treatment in this population. Diagnostic accuracy studies had variable findings; recent studies suggest higher diagnostic accuracy of VFA overall compared to standard x-rays. Even in recent studies, however, diagnostic accuracy data in individuals without osteoporosis was not reported separately.

Studies have found that vertebral fracture assessment can identify individuals without osteoporosis who may be appropriate candidates for treatment according to recommendations from the National Osteoporosis Foundation (NOF). However, there is limited evidence on the effectiveness of treatment in this population. No trials have been published that were designed to evaluate whether treating patients with vertebral fracture and without osteoporosis reduces risk of future fracture. The available data on treatment are two post-hoc sub-analyses from larger trials that included patients with low bone density and baseline vertebral fractures with medication versus placebo; both found a benefit of treatment. Baseline vertebral fracture was defined differently in the two analyses; clinical or radiographically detected vertebral fracture in one study and radiographically detected vertebral fracture-only in the other. No treatment data have been published in patients whose vertebral fracture had been identified using VFA software with densitometry. Moreover, data on clinical utility are only available on postmenopausal women. In addition, clinical input was not uniformly in support of VFA. Thus, screening for vertebral fractures using VFA with DEXA is considered investigational.

## **Practice Guidelines and Position Statements**

### National Osteoporosis Foundation (NOF):

Their 2013 Clinician's Guide to Prevention and Treatment of Osteoporosis stated: "A vertebral fracture is consistent with a diagnosis of osteoporosis, even in the absence of a bone density diagnosis, and is an indication for pharmacologic treatment with osteoporosis medication to reduce fracture risk. Most vertebral fractures are asymptomatic when they first occur and often are undiagnosed for many years. Proactive vertebral imaging is the only way to diagnose these fractures. The finding of a previously unrecognized vertebral fracture may change the diagnostic classification, alters future fracture risk and subsequent treatment decisions."

The guide recommends that vertebral imaging tests be considered in the following individuals

- All women age 70 and older and all men age 80 and older.
- Women age 65 to 69 and men age 75 to 79 when BMD T-score is -1.5 or below.
- Postmenopausal women age 50 to 64 and men age 50 to 69 with specific risk factors  
These include:
  - Low trauma fracture
  - Historical height loss of 1.5 inches or more (4 cm)

- Prospective height loss of 0.8 inches or more (2 cm)
- Recent or ongoing long-term glucocorticoid treatment

International Society for Clinical Densitometry (ISCD):

In 2013, the ISCD issued updated recommendations for selecting patients for vertebral fracture assessment. The new recommendations were simpler compared to the 2007 recommendations and were intended to be easier to use in clinical practice. Lateral spine imaging with either standard radiography or densitometric VFA is indicated for individuals with a T-score of less than -1.0 when at least one of the following factors are present:

- At least 70 years old for women and at least 80 years old for men
- Historical height loss of at least 4cm (at least 1.5 inches)
- Self-reported but undocumented prior vertebral fracture
- Glucocorticoid therapy equivalent to at least 5mg of prednisone per day for at least 3 months.

A 2012 Task Force of the Endocrine Society recommended pharmacological therapy for men at high-risk for fracture. Risk includes but is not limited to the following criteria:

- Men who have had a hip or vertebral fracture without major trauma.
- Men who have not experienced a spine or hip fracture but whose BMD of the spine, femoral neck, and/or total hip is 2.5 standard deviations (SD) or more below the mean of normal young white males.
- In the United States, men who have a T-score between -1.0 and -2.5 in the spine, femoral neck, or total hip plus a 10-yr risk of experiencing any fracture  $\geq 20\%$  or 10-yr risk of hip fracture  $\geq 3\%$  using FRAX; further studies will be needed to determine appropriate intervention levels using other fracture risk assessment algorithms.
- Men who are receiving long-term glucocorticoid therapy in pharmacological doses (e.g., prednisone or equivalent  $>7.5$  mg/d), according to the 2010 guidelines of the American Society of Rheumatology.

North American Menopause Society:

Their 2010 position statement on management of osteoporosis does not include a recommendation for or against vertebral fracture assessment as part of the screening process. The statement states that vertebral fracture must be confirmed by lateral spine radiographs or VFA visualization of fracture at the time of BMD testing.

U.S. Preventive Services Task Force (USPSTF):

In January 2011, the USPSTF updated their recommendations for osteoporosis screening. The recommendations state that “current diagnostic and treatment criteria rely on dual-energy x-ray absorptiometry of the hip and lumbar spine”. Vertebral fracture assessment was not specifically mentioned.

**Key Words:**

Dual x-ray absorptiometry, DEXA, vertebral fracture, osteoporosis, morphometric x-ray absorptiometry, MXA, Instant vertebral assessment, IVA, Lateral Vertebral Assessment, LVA,

bone mineral density, BMD, vertebral fracture assessment (VFA), dual energy vertebral assessment (DVA)

### **Approved by Governing Bodies:**

To perform vertebral fracture assessment with a densitometer, additional software is needed, and it must have 510(k) marketing clearance from the U.S. Food and Drug Administration (FDA). Products that have received FDA clearance include Lunar Dual Energy Vertebral Assessment (DVA™) (General Electric Medical Systems) and Hologic Instant Vertebral Assessment™ (IVA™) software. Product Code KGI.

Hologic Inc. received 510k clearance for marketing Instant Vertebral Assessment, March 17, 2000.

GE Medical Systems received 510k clearance for marketing Lunar Dual Energy Vertebral Assessment, December 20, 2002

### **Benefit Application:**

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply

FEP contracts: FEP does not consider investigational if FDA approved and will be reviewed for medical necessity.

### **Current Coding:**

CPT codes:

**77082**

Dual-energy x-ray absorptiometry (DXA), bone density study, 1 or more sites; vertebral fracture assessment

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## **Policy History:**

Medical Policy Group, August 2004 (1)

Medical Policy Administration Committee, August 2004

Available for comment August 24-October 7, 2004

Medical Policy Group, August 2005 (1)

Medical Policy Group, August 2006 (1)

Medical Policy Group, August 2007 (1)

Medical Policy Administration Committee, August 2007

Available for comment July 27-September 10, 2007

Medical Policy Group, February 2009 (1)

Medical Policy Group, August 2010 (1): Key Points updated, no change in policy statement

Medical Policy Group, January 2012 (1): Update to Key Points and Governing Bodies related to MPP update; no change in policy statement

Medical Policy Panel, January 2013

Medical Policy Group, February 2013 (1): Update to Title, Description, Key Points, Key Words, and References; no change to policy statement

Medical Policy Panel, January 2014

Medical Policy Group, January 2014 (1): Update to Key Points and References; no change to policy statement

Medical Policy Panel, May 2014

Medical Policy Group, June 2014 (1): Update to Key Points and References; no change to policy statement.

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*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.*

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.*