

## Rocky Mountain Health Plans Guideline

### *Management and Prevention of Osteoporosis*

The following guideline recommends assessment and management of patients with osteopenia and osteoporosis.

Eligible Population	Key Components	Recommendation and Level of Evidence	Frequency
Patients at potential risk for osteoporosis	Assessment	<ul style="list-style-type: none"> <li>Assess for loss of height (&gt;1.5 inches) and back pain</li> <li>Assess other risk factors:               <ul style="list-style-type: none"> <li>Current cigarette smoking</li> <li>Low body weight (&lt;127 lbs or BMI &lt;20)</li> <li>Female gender</li> <li>Menopause (premature/surgical)</li> <li>Endocrine disorders</li> <li>Chronic                   <ul style="list-style-type: none"> <li>Corticosteroid/Estrogen</li> <li>Testosterone deficiency</li> <li>Excessive thyroid hormone replacement</li> <li>Calcium or vitamin D deficiency</li> <li>Depo-Provera use</li> </ul> </li> <li>Family History of osteoporosis</li> <li>Caucasian or Asian race</li> <li>Advanced Age (&gt; age 65)</li> <li>History of atraumatic fracture</li> <li>Organ transplant or pending organ transplant</li> <li>Drugs to treat malignancy</li> <li>Inadequate physical activity</li> <li>Excessive alcohol intake (more than two drinks a day)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Adult height assessments at periodic well exams</li> </ul>
	Core Principles of Treatment and Prevention	<p><b>Regardless of risk factors:</b></p> <ul style="list-style-type: none"> <li>Dietary calcium 1200 mg/d and 800 - 1000 IU vitamin D 3 <b>[B]</b></li> <li>Weight-bearing exercise <b>[A]</b></li> <li>Address modifiable risk factors above</li> </ul>	<ul style="list-style-type: none"> <li>BMD testing more often than every two years is generally not useful.</li> <li>Consider rechecking BMD after at least two years of pharmacologic treatment to monitor effectiveness. (D)</li> </ul>
Patients with history of atraumatic fracture	Patient selection based on diagnosis	<ul style="list-style-type: none"> <li>BMD testing to determine degree of disease severity               <ul style="list-style-type: none"> <li>Initiate appropriate treatment (Osteopenia associated with atraumatic fracture should be treated as osteoporosis <b>[D]</b>).</li> </ul> </li> </ul>	
Patients requiring therapy to reduce high risk of fracture	Patient Selection for Pharmacological Management Based on DEXA	<ul style="list-style-type: none"> <li>Treatment to prevent fractures in osteopenia [T-score between -1 and -2.0] without risk factors is not useful. <b>[D]</b></li> <li>Treat patients on corticosteroid therapy with a T-score &lt; -1.0. <b>[A]</b></li> <li>Treat patients with osteopenia and a T-score between -2.0 and -2.5 at increased risk. <b>[D]</b></li> <li>Patients with osteoporosis [T-score &lt; -2.5] (Osteopenia associated with atraumatic fracture should be treated as osteoporosis <b>[D]</b>).</li> </ul>	<ul style="list-style-type: none"> <li>Recheck BMD after 2 years of pharmacological treatment to monitor effectiveness of treatment (D)</li> </ul>
	Pharmacological Management	<ul style="list-style-type: none"> <li>Consider oral biphosphonate, generic if available<sup>1</sup>.</li> <li>Use caution in patients with active upper GI disorders. Take medication on an empty stomach with water, remain upright, no food or beverage for 30 minutes to 60 minutes.               <ul style="list-style-type: none"> <li>Consider referral to endocrine or bone and mineral metabolism specialist if patient does not tolerate treatment or shows progression or recurrent fracture after 2 years on treatment.</li> </ul> </li> </ul>	

Levels of Evidence for the most significant recommendations: A= randomized controlled trials; B= controlled trials, no randomization; C= observational studies; D = opinion of expert panel

This guideline represents core management steps. It is based on The Guide to Clinical Preventive Services 2007, Clinician's Guide developed by National Osteoporosis foundation on January 2010, Recommendations of the U.S. Preventive Services Task Force ([www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov)) and the Diagnosis and Treatment of Osteoporosis Guideline, Institute for Clinical Systems Improvement, 2008 ([www.icsi.org](http://www.icsi.org)). Individual patient considerations and advances in medical science may supersede or modify these recommendations.