Kansas Medical Assistance Program
Drug Utilization Review Bulletin

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Evolving Treatment Options for Osteoporosis

Osteoporosis is a health concern for an estimated 44 million Americans. Of the 10 million who are diagnosed, 8 million are women and 2 million are men. Osteoporosis is characterized by low done mass and structural weakening of bone tissue and can lead to increased risk of fractures. Because osteoporosis is often undiagnosed due to absence of symptoms, it is important for healthcare professionals to recognize prevention, diagnosis, and treatment recommendations. Based upon a 24 month review of pharmacy and medical claims for the Kansas Medical Assistance Program, the following opportunities to improve patient care were found:

Osteoporosis Clinical Indicators: Kansas Medical Assistance Program*

Clinical Issue	Patients Meeting Criteria	# Patients	Incidence (%)
Underuse of BMD testing in females with an osteoporosis diagnosis or history of fracture	1,706	3,324	51
Men and women with claims for osteoporosis therapy in the past year who lack claims for that therapy in the past 90 days	64	291	22
Women age ≥ 45 who received less than 60 days of osteoporosis therapy in the past 90 days	129	749	17
Underuse of osteoporosis treatment in men and women with a diagnosis of osteoporosis	410	704	58
Underuse of calcium in men and women with a diagnosis of osteoporosis	605	704	86
Underuse of osteoporosis treatment in men with history of vertebral or hip fracture	61	66	92
Underuse of osteoporosis treatment in women with history of vertebral or hip fracture	65	93	70

*Based on data through March 2008.

Prevention

Osteoporosis prevention includes recognizing risk factors and making healthy lifestyle choices. At least 30-60 minutes of aerobic exercise each day is essential, along with smoking cessation, alcohol moderation and adequate calcium intake. Adults should consume at least 1000mg of elemental calcium per day. Postmenopausal women and men over age 50 should receive at least 1200mg of elemental calcium per day, coupled with 800-1000IU per day of vitamin D_3. Adults less than age 50 need 400-800IU per day of vitamin D_3. Risk factors for osteoporosis include: Caucasian or Asian race, postmenopausal women, advanced age, poor health or being underweight, history of fracture as an adult, inadequate physical activity, excessive alcohol intake, current cigarette smoking, skeletal disorders, endocrine and metabolic disorders, chronic diseases such as hepatic and renal insufficiency, and certain medications (E.g. corticosteroids, phenytoin, loop diuretics, methotrexate, cyclosporine).

Diagnosis

The National Osteoporosis Foundation recommends all women over the age of 65 and men 70 years and older receive bone mineral density (BMD) screening. Screening is also recommended for women and men aged 50 to 70 with risk factors, and in patients who have sustained a fracture. A BMD test should be performed every 2 years to monitor bone loss, and at a frequency of every 2 years after starting therapy. If a patient is on chronic corticosteroid use (over 3 months) the patient should have a baseline BMD and a follow up BMD scan performed at least every 6-12 months for the duration of treatment.

Treatment

Candidates for osteoporosis treatment include those with a hip or vertebral fracture, those with a BMD T-score less than -2.5, postmenopausal women and in men 50 years and older who have low bone mass or osteopenia with a T-score of -1 to -2.5, and lastly those at significant risk for osteoporosis. Several classes of drugs are available for the treatment/prevention of osteoporosis including: the bisphosphonates (Actonel, Boniva, Fosamax), estrogen/hormone replacement, raloxifene (Evista), calcitonin-salmon (Fortical and Miacalcin), and teriparatide (Forteo). The bisphosphonates are the most common treatments for osteoporosis and they are effective at reducing fractures by up to 50% over 3 years (alendronate=50% reduction in fractures of the spine, hip, and wrist; ibandronate=50% reduction in spine fractures; risedronate=41%-49% reduction in spine fractures and 36% reduction in non-spine fractures). Many treatment options are available including oral and injectable routes of administration, and daily, weekly, and monthly dosing regimens.

The KMAP Preferred Drug List

Unless otherwise indicated, the chemical name includes branded products

Osteoporosis Medications

Bisphosphonates			
Preferred Drug Covered		**Non-preferred Prior Authorization Required**	
Alendronate	Fosamax®	Risedronate/Calcium	Actonel® with Calcium
Alendronate/Cholecalciferol	Fosamax Plus D®	Risedronate	Actonel®
		Non-preferred	
		Ibandronate	Boniva®

For the complete PDL list:
http://www.khpa.ks.gov/MedicalAssistanceProgram/PharmacyInformation/PreferredDrugList.html

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