



# Effective Health Care

## Physical Therapy for Low Bone Density Nomination Summary Document

### Results of Topic Selection Process & Next Steps

- Physical therapy for low bone density is not feasible for a full systematic review due to the limited data available for a review at this time.

### Topic Description

**Nominator:** Individual

**Nomination Summary:** The nominator questions the effectiveness of the addition of physical therapy protocols (e.g., load bearing and gait/balance training exercises) to medical treatment of low bone density. He expresses an interest in the following subpopulations: ethnic groups, patients with early dementia, patients with “joint pain/stiffness” or “arthritic pain/stiffness”, and low-income patients.

#### Staff-Generated PICO

**Population(s):** Patients aged 50-70 with low bone mineral density

**Intervention(s):** Physical therapy (measured load bearing techniques, gait/balance movement training exercises) in addition to standard medical treatments

**Comparator(s):** Standard medical treatment without physical therapy

**Outcome(s):** Changes in bone density, incidence of fractures or falls, changes in balance/gait measures predictive of falls (e.g., single leg stance), quality of life, cost

**Key Questions from Nominator:**

- For 50- to 70-year-old patients with low bone density, what is the comparative effectiveness of Licensed Physical Therapist specified protocols (measured load bearing techniques and specific gait/balance movement training exercise treatment sessions) vs. no exercise training with both groups receiving the same specified drug therapy (preferably the most recognized drug therapy product being prescribed currently)?

### Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)

- While a high volume of literature was identified addressing the impact of exercise/physical therapy on low bone density or osteoporosis outcomes, we did not identify any systematic reviews or meta-analyses that address the nominator's interest in the added value of exercise to pharmacotherapy. Very few studies have been conducted that address a comparison of patients undergoing medical treatment with and without physical therapy/exercise interventions. Therefore, this topic is not feasible for a full systematic review due to the limited data available for a review at this time.