



Effective Health Care

Vibration Therapy for Osteoporosis Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Vibration therapy for osteoporosis is not feasible for a full systematic review due to the limited data available for a review at this time; however, it will be considered for a potential technical brief by the Effective Health Care (EHC) Program.
- To see a description of a technical brief, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/research-for-policymakers-researchers-and-others/>.
- If this topic is developed into a technical brief, key questions will be drafted and posted on the AHRQ Web site. To sign up for notification when this and other EHC Program topics are posted, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>.

Topic Description

Nominator: Individual

Nomination Summary: The nominator questions the benefits and harms of vibration therapy for treating osteoporosis.

Population(s): Patients of any age or sex with osteoporosis or low bone mass

Intervention(s): Vibration platforms including the Juvent 1000

Comparator(s): None

Outcomes(s): Benefits and harms of vibration therapy for osteoporosis or low bone mass

Key Questions from Nominator:

1. What is the efficacy of the Juvent 1000 vibration platform in treating osteoporosis or in those with low bone mass
2. What harms are associated with its use?

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/>.)

- Whole-body vibration is a new type of exercise that has been increasingly tested for its ability to prevent bone fractures and osteoporosis. Recent studies have shown a positive effect of controlled therapy on gait, body balance, and motor capacity; however, the treatment has to follow specific safety guidelines to prevent exercise-related injuries. Currently, no vibration platforms have received FDA approval for the treatment or management of osteoporosis; however, phase 2 and 3 trials are currently underway for these devices. One of these devices is the Juvent 1000, which was specifically mentioned by the nominator.

- A small number of published studies and several ongoing trials on the effectiveness and harms of vibration therapy were identified; therefore, this topic may be appropriate for a technical brief.