

Osteoporosis Risk Assessment Using Osteoporosis Self-Assessment Tool and other Interventions at Rural Facilities

This model of care shows promise to increase rural Veterans' access to care and services, and is recommended for replication at other facilities.

Medical Issue

Osteoporosis is a musculoskeletal disease occurring when an individual has a decrease in bone mineral density¹ In the next 15 years, it is estimated that the rates of osteoporosis will double and the rates of hip fractures are projected to almost triple by 2040.² Osteoporosis is underdiagnosed due to the lack of visible symptoms until an individual experiences a fracture.¹ Rural Veterans at risk for osteoporosis tend to be older and sicker than the general population and may be unaware of their vulnerability to fractures.

Access Challenge

Rural Veterans also face additional health care challenges, such as the need to travel significant distances for testing and treatment.

Solution

The Osteoporosis Self-Assessment Tool (OST) program was developed to improve osteoporosis screening among their patient population. The primary tool for this screening program is the OST, a risk formula based on age and weight, which has been proven to be a reliable screening tool for osteoporosis in both men and women. OST is used as a practice across VA and private sector clinics.

VA health care providers used the OST and conducted a medication review to identify Veterans at high risk for osteoporosis. Identified Veterans received education about the disease and were offered a dual energy X-ray absorptiometry (DXA) scan, which measures bone mineral density.

A total of 867 Veterans were screened through this program; 168 (19%) were at high risk for osteoporosis. Of these, 53 Veterans completed radiological scans to confirm a diagnosis of osteoporosis.

By identifying and educating at-risk Veterans at their local health care facility, the number of individuals who suffer from osteoporosis fractures will decrease along with the cost incurred from medical treatment and care. Preventing severe fractures helps Veterans stay independent and in their communities longer, and also helps avoid costly medical procedures and rehabilitation.

¹ Wilson, T., Nelson, S.D., Newbold, J., Nelson, R.E., & LaFleur, J. (2015). The clinical epidemiology of male osteoporosis: A review of the recent literature. *Clinical Epidemiology*, 7, 65–76.

² Shekelle, P., Munjas, B., Liu, H., Wong, W., Paige, N., Goldzweig, C., Zhou, A., & Suttrop, M. (2007). Screening men for osteoporosis: Who & how. Department of Veterans Affairs. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK49063/>

The Office of Rural Health (ORH) works to see that America's Veterans thrive in rural communities. To support the health and well-being of rural Veterans, ORH and its Veterans Rural Health Resource Centers establish and disseminate initiatives that increase access to care for the 2.7 million rural Veterans enrolled in the U.S. Department of Veterans Affairs' health care system. Key focus areas include programs that address workforce shortages, transportation, primary care, mental health, telehealth and specialty care. To learn more, visit www.ruralhealth.va.gov.