Fracture liaison services prevent fractures and save lives

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Using a simulation model, Swedish researchers have shown that the implementation of Fracture Liaison Services (FLS) could considerably reduce the human and healthcare costs associated with osteoporotic fractures. The results from the model were presented today at the World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases in Milan.

FLS are coordinated, multi-disciplinary models of care which help ensure that fracture patients are assessed and treated to reduce their risk of subsequent fractures. According to expert opinion and the International Osteoporosis Foundation's Capture the Fracture programme, FLS services are the most effective method to reduce the risk of secondary fractures.

Worldwide studies show that older adults who have already suffered one fragility fracture (a broken bone caused by a minor fall or bump) are among those most likely to break another bone. In fact they are at double the risk of future fractures compared to those who have not fractured. Left untreated, one in four women who have had a vertebral (spinal) fracture will go on to experience another fracture within one year. Fragility fractures are not just costly to healthcare systems, they also result in pain, disability, loss of quality of life, and - especially for elderly hip fracture sufferers - an increased risk of premature death.

With appropriate assessment and therapy patients who have suffered a first fracture can considerably reduce their risk of subsequent

osteoporotic fractures. Despite this, of Swedish women aged 50 years or older who have for the first time received inpatient care for a fracture, only 14.1% currently receive osteoporosis treatment.

In a hypothetical group of 1,000 fracture patients, of which all had an incident fracture and a T-score lower than an age-matched population, and assuming FLS increases the proportion of patients identified with bone mineral testing to 50%, 383 patients started treatment in the FLS.

FLS saved a total of 5.5 hip fractures, 7.3 vertebral fractures 6.0 wrist fractures, and 3.6 other fractures. This represents a saving of 19 quality-adjusted life years and 40 added life years. In terms of health economic cost, while the FLS versus standard care increased assessment and treatment costs, the cost of fractures was reduced by approximately 300 EUR per patient.

Oskar Ström, RPh, PhDc, co-author of the study said, "Our model, based on Swedish costs and fracture risk data, shows that the widespread implementation of FLS has the potential to prevent a large number of fractures in Swedish patients with only a moderate cost per quality-adjusted life-year."

He added, "In Sweden, as elsewhere in the world, the majority of hospitals and clinics are missing the opportunity to respond to a first fracture and thereby to prevent the second and subsequent fractures. FLS need to become an essential component of any broader strategy to promote healthy, active ageing in the growing senior population."

More information: Reference: OC8 Cost effectiveness evaluation of fracture liaison services for the management of osteoporosis in Sweden. E. Jonsson, O. Ström, F. Borgström. Osteoporosis International, Vol. 26, S. 1 2015

This abstract will be highlighted in the WCO Milan 2015 educational slide set, to be available at www.iofbonehealth.org/what-we- … /congress-highlights

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