OBJECTIVES: To evaluate utilization of resources and direct medical costs of postmenopausal osteoporotic fractures (proximal femur and vertebral) in the first and subsequent years after the event.

METHODS: A medical chart review was performed to examine the medical resources used to treat the two most costly osteoporotic fractures in the first and second or subsequent year after the event. Data were collected between December 2009 and April 2011 by local investigators from 5 centers in Slovenia (159 patients), 5 in Serbia (199) and 3 in Bulgaria (186). Documentation of patients above 50 years of age with a low-energy fracture sustained no later than 5 years before the start of the study was included. Patients with multiple fractures were excluded. Cost of treatment from a public payer and patient perspective in all countries except Bulgaria was estimated. These costs were compared to GDP per capita in each country (International Monetary Fund data - year 2010: 15,953 in Slovenia, 3,522 in Serbia) to evaluate economic burden of fractures.

RESULTS: All Slovenian patients were hospitalized after proximal femur and 53% after vertebral fracture, compared with 84% and 30% in Serbia and 69% and 5% in Bulgaria. However, in the following years after the fracture, hospitalization was most common in Serbia (49% of patients after proximal femur and 18% after vertebral fracture yearly). The 2-year treatment cost of proximal femur fracture was 4463 (SD 1750) in Slovenia and 3277 (SD 2409) in Serbia, while the 2-year cost of vertebral fracture during was estimated at 3902 (SD 2714) in Slovenia and 491 (SD 295) in Serbia.

CONCLUSION: Osteoporotic fractures are responsible for high economic burden. Mean cost of treatment of low-energy proximal femur fracture is equal 28% of GDP per capita in Slovenia and 93% in Serbia.