

## Poland

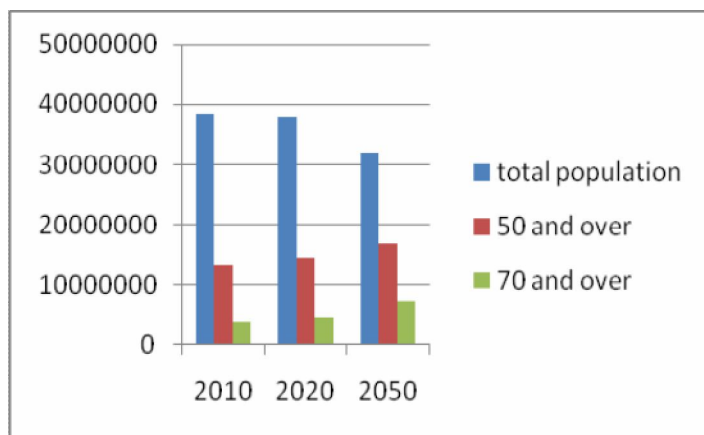
### Overview

The hip fracture incidence in Poland in women over 50 is estimated at 280/ 100,000. The prevalence of clinical fracture in this group is estimated at 27-29%, including 20% forearm and 4.6% clinical spinal fracture. Osteoporosis is not a national health priority in Poland, there is no national registry to collect data and monitor fragility fractures. The government is not supporting any patient or scientific societies nor training programs for health professionals. The most important problem for patients is that generic alendronate being the only reimbursed medications for osteoporosis. Currently, the most pressing issue is to prepare FRAX model based on the Polish data. The main scientific organizations working in the field of osteoporosis are the Polish Foundation of Osteoporosis, the Polish Osteoarthritis Society and the Multidisciplinary Osteoporotic Forum. National guidelines on osteoporosis treatment have been worked up. In 2011 we will be celebrating 25<sup>th</sup> anniversary of Polish Osteoarthritis, which is active since 1986.

### Key findings

The present population in Poland is estimated to be 38.4 million, of this 35% (13.4 million) is 50 years of age and over and 10% (3.8 million) is 70 and over. By 2050, it is estimated that 52% (16.7 million) of the population will be 50 and over and 23% (7.4 million) will be 70 and over while the total population will decrease to 32 million (fig 1) [1].

Figure 1 Population projection for Poland until 2050 (graph Poland)



In Poland, it has been estimated that the prevalence of osteoporosis in women older than 55 years is 18.5%, and osteopenia it is 40.7%, both irrespective of place of residence (urban or rural area) [2].

### Hip fractures

In a 2007 study, data provided by the Mazowsze Division of the National Health Fund were used to evaluate the number of hip fractures in Poland [3]. The number of hip fractures in the Mazowsze Province was calculated per 100,000 inhabitants and then extrapolated for the whole of Poland according to age and sex. Based on this, 28,000 cases of hip fractures per year were estimated to occur in Poland.

In 2005, there were 17,625 hip fractures diagnosed in Poland [4]. In the over-50-year-old population, hip fracture incidence was found to be 1.85 times more frequent in women than in men (89/100,000 for men and 165/100,000 for women). In the 50–65-year band, hip fracture incidence was higher in men than in women.

Among women under 40 years of age, the annual risk of hip fracture is 0.01% [3]. With regards to men, this risk is slightly higher and amounts to 0.04%. Among women this risk slowly rises until 70 years of age and then suddenly increases, reaching 1.55% at ages over 80. A slowly rising risk is also found among men until 70 years of age, while the further increase is not as sudden as among women. The risk of hip fracture among men over 80 years of age amounts to 0.89%. To sum up, the availability of the data concerning hip fractures in Poland, the key factor to develop the Polish FRAX, is still not satisfactory, being the subject of further extensive evaluation.

The estimated direct hospital cost of hip fracture is about 870-1,300€, and the average number of hospital days varies from 14 to 21 days.

### *Vertebral fractures*

No precise data for incidence of spinal fracture is available. We have data on prevalence of clinical fractures. In women over 50 years old there is prevalence of clinical fractures 27% [5] to 29% [6], forearm 20% [7] and spine 4.6% [5].

### *Diagnosis*

In Poland, it is estimated that there are 4.2 DXA scanners per million population (European recommendation is 10.6 DXA per million population [8]). Most DXA scanners are only available in large cities (10 per 1,000,000) and in the private sector. The waiting time for a DXA exam is 1 month in the public health system (0-3 days in the private system) and the cost for a DXA scan of hip or spine is 7.5€ (8-22€ in the private). DXA scans are not directly reimbursed. Reimbursement is related to the whole patient care without additional amount for bone densitometry.

### *Reimbursement*

Only generic alendronates are reimbursed up to 30% and patients at high risk are eligible for treatment reimbursement before the first fracture.

### *Calcium and vitamin D*

National guidelines have been developed on optimum daily intake of calcium and vitamin D but currently there is not any national public health programme regarding calcium and vitamin D supplementation [9, 10, 11]. Department of Biochemistry and Experimental Medicine, The Children's Memorial Health Institute get Certificate of Proficiency in 25(OH)D determination under The Vitamin D External Quality Assessment Scheme – it is first certified laboratory in vitamin D assessment status in Central Europe. In a cross-sectional observational study conducted in a standardized way during February–March 2004 in Denmark, Finland, Ireland, and Poland, it has been observed that Polish women (average age 71.6) had a significantly lower concentration of S-25OHD compared to the other women (P 0.0001); 25% of Polish women had a S-25OH <25 nmol/L and 92% was <50 nmol/l [12].

### *Prevention, education, government policy*

Osteoporosis is not a national health priority in Poland, there is no national registry to collect data and monitor fragility fractures. The government is not supporting any patient or scientific societies nor training programs for health professionals. We have three main scientific organizations which struggle to improve the situation: Polish Foundation of Osteoporosis (PFO, [www.pfo.com.pl](http://www.pfo.com.pl)), Polish Osteoarthrology Society (POS, [www.osteoporoz.pl](http://www.osteoporoz.pl)), and Multidisciplinary Osteoporotic Forum (MOF,

[www.warman.com.pl/~osteo/mofpl.html](http://www.warman.com.pl/~osteo/mofpl.html)). National guidelines on osteoporosis treatment have been worked up [13,14]. We try to change the government attitude to osteoporosis with not much success. A program of limiting reimbursing other medications than alendronate is being worked up. Since 1988 MOF has been organizing annual symposia and during the last 8 years ISCD and IOF certified courses for physicians focused on diagnostic and treatment of osteoporosis. PFO and POS organised 18 training courses on diagnosis and treatment of osteoporosis. Since 1997 Congress on the Polish Osteoarthrology has been organized biannually including Central European Congress on Osteoporosis and Osteoarthritis, first organised in 2005. The Congress in the year 2009 was attended by 800 participants with 130 presentations in Polish and English (details on [www.osteoporoza.pl](http://www.osteoporoza.pl)). Nationwide action "Don't break" was launched in 2008 with 30,000 leaflets distributed among doctors and patients since then. A hand held FRAX calculator was designed, produced in Polish and English versions.

"World Osteoporosis Day 2010"



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