

SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)

Epidemiology, Burden, and Treatment of Osteoporosis in Poland

This document highlights the key findings for Poland, published in "Osteoporosis in Europe: A Compendium of country-specific reports"¹. View the complete SCOPE 2021 report² and related 29 country profiles at: <https://www.osteoporosis.foundation/scope-2021>

BURDEN OF DISEASE

Individuals with osteoporosis in Poland

1,985,000
INDIVIDUALS WITH OSTEOPOROSIS IN 2019



The prevalence of osteoporosis in the total population amounted to 4.8%, somewhat lower than the EU27+2 average (5.6%). In Poland, 20.1% of women and 5.8% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Poland



The number of new fragility fractures in Poland in 2019 has slightly increased compared to 2010, equivalent to an increment of 1.7 fractures per 1000 individuals, totalling 14.3 fractures/ 1000 individuals in 2019.

Estimated annual number of deaths associated with a fracture event

In addition to pain and disability, some fractures are associated with premature mortality. SCOPE 2021 showed that the number of fracture-related deaths varied between the EU27+2 countries, reflecting the variable incidence of fractures rather than standards of healthcare.



Remaining lifetime probability of hip fracture



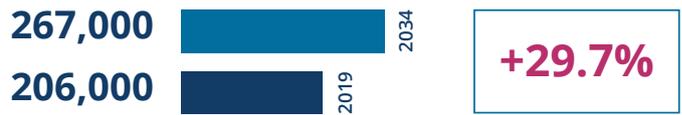
Hip fracture is the most serious consequence of osteoporosis in terms of morbidity, mortality and health care expenditure. The remaining lifetime probability of hip fracture (%) at the ages of 50 years in men and women was 4.0% and 9.7%, respectively, placing Poland in the bottom tertile of risk for both men and women.



THE NUMBER OF FRAGILITY FRACTURES IN POLAND IS EXPECTED TO INCREASE BY ALMOST 30% BETWEEN 2019 AND 2034, WITH A SUBSTANTIAL IMPACT ON THE HEALTHCARE BUDGET



Projected increase in the number of fragility fractures



Age is an important risk factor for fractures. The population aged 50 years or more is projected to increase by 16.6% between 2019 and 2034, somewhat higher than the EU27+2 average of 11.4%. The increases in men and women aged 75 years or more are even more marked; 92.4% for men; 60.8% for women. Accordingly, the number and burden of fragility fractures are likely to increase.

Healthcare cost of osteoporotic fractures

The cost of osteoporotic fractures in Poland accounted for approximately 2.2% of healthcare spending (i.e., €693.7 million out of €30.8 billion in 2019), less than the EU27+2 average of 3.5%.

Type of costs	
Direct cost of incident fractures	€332.9 million
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€347.3 million
Cost of pharmacological intervention (assessment & treatment)	€13.5 million
Total direct cost (excluding the value of QALYs* lost)	€693.7 million

*QALYs: Quality-Adjusted Life-Year – a multidimensional outcome measure that incorporates both the Quality (health-related) and Quantity (length) of life

In 2019, the average direct cost of osteoporotic fractures in Poland was €18.3/person, while in 2010 the average was €17.7/person (increase of 3%).

The 2019 data ranked Poland in 28th place in terms of highest cost of osteoporotic fractures per capita in the surveyed 29 countries.

POLICY FRAMEWORK

Documentation of the burden of disease is an essential prerequisite to determine if the resources are appropriately allocated in accordance with the country's policy framework for the diagnosis and treatment of the disease.

Key measures of policy framework for osteoporosis in Poland

Measure	Estimate
Established national fracture registries	No
Osteoporosis recognised as a specialty	No
Osteoporosis primarily managed in primary care	No
Other specialties involved in osteoporosis care	Rheumatology, Endocrinology, Geriatrics, Gynaecology, Internal medicine, Orthopaedics
Advocacy areas covered by patient organisations	None

Due to the lack of established national registries, high quality of national data on hip fracture rates were not identified for Poland.

In Poland, osteoporosis and metabolic bone disease are not recognised specialties. However, osteoporosis is recognised as a component of specialty training.

Advocacy by patient organisations can fall into four categories: policy, capacity building and education, peer support, research and development. For Poland, none of these advocacy areas were covered by a patient organisation.

SERVICE PROVISION

The provision of medical services for osteoporosis was reviewed with certain key components, including reimbursement elements which may impair the delivery of healthcare.

Service provision for osteoporosis in Poland



Twelve out of 27 countries offered full reimbursement for osteoporosis medications. Poland offered partial reimbursement.

The number of DXA units expressed per million of the general population amounted to 7.1 which puts Poland in 25th place among the EU27+2.

In Poland, the estimated average waiting time for DXA amounted to 42 days (22nd rank). The reimbursement for DXA was conditional.

National fracture risk assessment models such as FRAX® were available in Poland, as well as guidance on the use of fracture risk assessment within national guidelines.

Guidelines for the management of osteoporosis were available in Poland with a focus on different specificities; postmenopausal women, osteoporosis in men, secondary osteoporosis including glucocorticoid-induced osteoporosis.

Fracture Liaison Services (FLS), also known as post-fracture care coordination programmes and care manager programmes were reported for 1-10% of hospitals in Poland.

National quality indicators allow to measure the quality of care provided to patients with osteoporosis or associated fractures. However, no use of national quality indicators was reported for Poland.

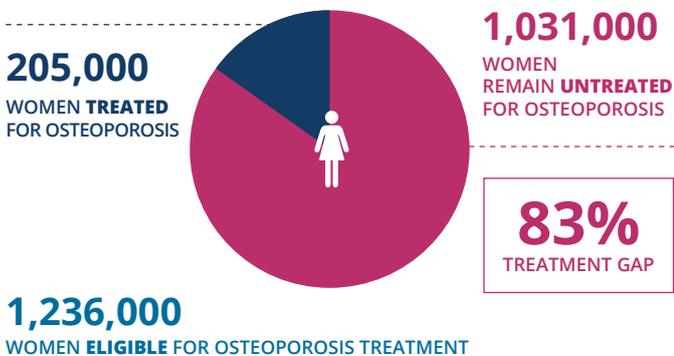
Service uptake for osteoporosis in Poland

The condition of service uptake was evaluated with metrics that reflect fracture risk assessment, treatment gap, and management of surgery for hip fractures.

Measure	Estimate	Rank among EU27+2
Number of FRAX® sessions/ million people/year	513	19
Treatment gap for women eligible for treatment	83%	24
Proportion of surgically managed hip fractures	>90%	

There was considerable heterogeneity between the countries in web-based FRAX® usage. The average uptake for the EU27+2 was 1,555 sessions/million/year of the general population with an enormous range of 49 to 41,874 sessions/million. For Poland, the use of FRAX® amounted to 513 sessions/million in 2019, with a 52% increase since 2011.

Do women at high fracture risk receive treatment?



Many studies have demonstrated that a significant proportion of men and women at high fracture risk do not receive therapy for osteoporosis (the treatment gap). For Poland, the treatment gap amongst women **amounted to 83%** in 2019, which did not change significantly compared to 2010 (78% in 2010). In the EU27+2 the average gap was 71% but ranged from 32% to 87%.

For Poland, the average waiting time for hip fracture surgery after hospital admission was reported to be less than 24 hours, implying a reduction in waiting time compared to 1-2 days in 2010. The proportion of surgically managed hip fractures was reported to be over 90%.

Burden of Disease		Policy Framework	
Hip Fracture Risk	Green	Quality of Data	Red
Fracture Risk	Green	National Health Priority	Green
Lifetime Risk	Green	Care Pathway	Red
FRAX® Risk	Green	Specialist Training	Yellow
Fracture Projections	Yellow	Society Support	Red
Service Provision		Service Uptake	
Treatment	Yellow	FRAX® Uptake	Yellow
Availability of DXA	Red	Treatment Gap	Red
Access to DXA	Yellow	Δ Treatment Gap	Yellow
Risk Models	Green	Waiting Time for Hip Fracture Surgery	Green
Guideline Quality	Yellow		
Liaison Service	Yellow		
Quality Indicators	Red		

The elements of each domain in each country were scored and coded using a traffic light system (red, orange, green) and used to synthesise a scorecard.

Poland scores resulted in a 25th place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 23rd place for Poland. Accordingly, Poland represents one of the low-burden low-provision countries among the 29 European surveyed countries.

Overall, scores had improved in 15 countries, remained constant in 8 countries and worsened in 3 countries since the previous SCOPE study in 2010. For Poland, the scores were much improved.

Acknowledgments

SCOPE Corresponding National Societies based in Poland

- **Polish Osteoarthrology Society**
www.osteoporoza.pl
- **Polish Foundation of Osteoporosis**
www.pfo.com.pl

References

1. Willers C, et al. Osteoporosis in Europe: A compendium of country-specific reports, Arch Osteoporos, 2022
2. Kanis JA, et al. SCOPE 2021: a new scorecard for osteoporosis in Europe, Arch Osteoporos, 2021