



SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)

Epidemiology, Burden, and Treatment of Osteoporosis in Romania

This document highlights the key findings for Romania 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

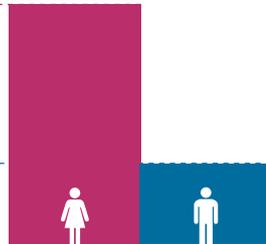
Individuals with osteoporosis in Romania

1,071,000

INDIVIDUALS WITH OSTEOPOROSIS IN 2019

80.7%
WOMEN

19.3%
MEN



The prevalence of osteoporosis in the total population amounted to 4.8%, lower than the EU27+2 average (5.6%). In Romania, 20.5% of women and 6.2% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Romania

103,000

NEW
FRAGILITY
FRACTURES

IN 2019



282
FRACTURES
/DAY



12
FRACTURES
/HOUR

The number of new fragility fractures in Romania in 2019 has slightly increased compared to 2010, equivalent to an increment of 0.7 fractures per 1000 individuals, totalling 13.6 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.



ROMANIA
148/100,000
INDIVIDUALS AGED 50+



EU 27+2
116/100,000
INDIVIDUALS AGED 50+

Remaining lifetime probability of hip fracture

WOMEN

+50
YEARS



7.0%

MEN

+50
YEARS



3.8%

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 3.8% and 7.0%, respectively, placing Romania in the bottom tertile of risk for both men and women.



THE NUMBER OF FRAGILITY FRACTURES IN ROMANIA IS EXPECTED TO INCREASE BY ALMOST 15% BETWEEN 2019 AND 2034, WITH A POTENTIAL 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 6.4% between 2019 and 2034, which is lower than the EU27+2 average of 11.4%. The increases in men and women aged 75 years or more are even more marked; 38.5% for men; 29.6% 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 Romania accounted for approximately 2.5% of healthcare spending (i.e., €257.3 million out of €9.7 billion in 2019), less than the EU27+2 average of 3.5%.

Type of costs	
Direct cost of incident fractures	€91.0 million
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€150.1 million
Cost of pharmacological intervention (assessment & treatment)	€16.2 million
Total direct cost (excluding the value of QALYs* lost)	€257.3 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 Romania was €13.2/person, while in 2010 the average was €6.6/person (increase of 100%).

The 2019 data ranked Romania lowest (29th) in terms of the 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 Romania

Measure	Estimate
Established national fracture registries	Yes
Osteoporosis recognised as a specialty	No
Osteoporosis primarily managed in primary care	No
Other specialties involved in osteoporosis care	Endocrinology, Rheumatology, Rehabilitation
Advocacy areas covered by patient organisations	Policy, Capacity, Peer support, Research & Development

High quality of national data on hip fracture rates have been identified in Romania. Data are collected on a national basis and include data on all fragility fractures as well as hip fractures.

In Romania, 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 Romania, all of these advocacy areas were covered by a patient organisation, the Romanian Society of Osteoporosis and Musculoskeletal Diseases (SROBMS).

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 Romania



Twelve out of 27 countries offered full reimbursement for osteoporosis medications. Romania offered 50-100% reimbursement depending on the prescribed treatment.

The number of DXA units expressed per million of the general population amounted to 9.9 which puts Romania in 20th place among the EU27+2. In Romania, the estimated average waiting time for DXA varied depending on conditions: no waiting time if the test was paid by the patient and 2-4 weeks when using the reimbursement budget. The reimbursement was unconditional.

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

Guidelines for the management of osteoporosis were available with a focus on different specificities; postmenopausal women, osteoporosis in men, secondary osteoporosis including glucocorticoid-induced osteoporosis; however, it has not been fully updated since 2010.

Fracture Liaison Services (FLS), also known as post-fracture care coordination programmes and care manager programmes, provide a system for the routine assessment and management of patients who have sustained a low trauma fracture. However, no FLS was reported for Romania.

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 Romania.

SERVICE UPTAKE

Service uptake for osteoporosis in Romania

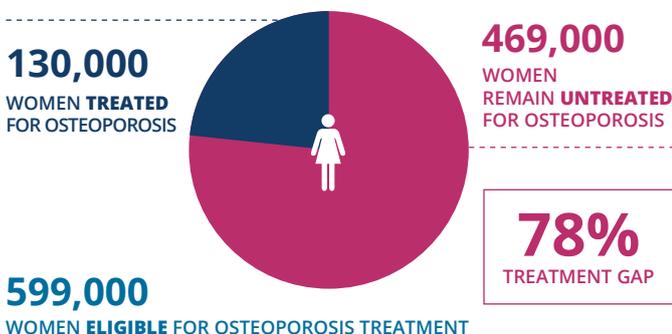
The condition of service uptake was evaluated with metrics that reflect fracture risk assessment, treatment gap, and management of surgery for hip fractures.

Measure	Estimate	Rank among EU27+2
Number of FRAX® sessions/ million people/year	463	22
Treatment gap for women eligible for treatment	78%	18
Proportion of surgically managed hip fractures	N/A*	

*No data available from the IOF Scope audit

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. In Romania, FRAX® usage amounted to 463 sessions/million in 2019, a 101% increase since 2011.

Do women at high fracture risk receive treatment?



Studies have demonstrated that a significant proportion of individuals at high fracture risk do not receive therapy for osteoporosis (the treatment gap). For Romania, the treatment gap amongst women **amounted to 78%** in 2019, similar to 2010 (83% in 2010). In the EU27+2 the average gap was 71% but ranged from 32% to 87%.

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. For this audit, no information was reported on the proportion of surgically managed hip fractures. However, another national study indicates that 81% of hip fractures were surgically managed during the period from 2008 to 2018³.

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

Romania scores resulted in a last (29th) place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 14th place for Romania. Accordingly, Romania represents one of the low-burden high-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 Romania, the scores were much improved.

Acknowledgments

SCOPE Corresponding National Society based in Romania

- Association for Prevention of Osteoporosis in Romania (ASPOR)

www.aspor.ro

References

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3. Grigorie D, et al. Incidence and time trend of hip fractures in Romania: a nationwide study from 2008 to 2018, Acta Endocrinol (Buchar), 2019