





SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)

Epidemiology, Burden, and Treatment of Osteoporosis in Latvia

This document highlights the key findings for Latvia, published in "Osteoporosis in Europe: A Compendium of country-specific reports". 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 Latvia

124,800

INDIVIDUALS WITH OSTEOPOROSIS IN 2019



The prevalence of osteoporosis in the total population amounted to 5.8%, on par with the EU27+2 average (5.6%). In Latvia, 22.3% of women and 6.1% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Latvia

NEW FRAGILITY FRACTURES







1.8
FRACTURES
/HOUR

The number of new fragility fractures in Latvia in 2019 was slightly increased compared to 2010, equivalent to an increment of 2.5 fractures per 1000 individuals, totalling 20.1 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 were varied between the EU27+2 countries, which reflects rather the variable incidence of fractures than standards of healthcare.





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

Remaining lifetime probability of hip fracture

+50
YEARS



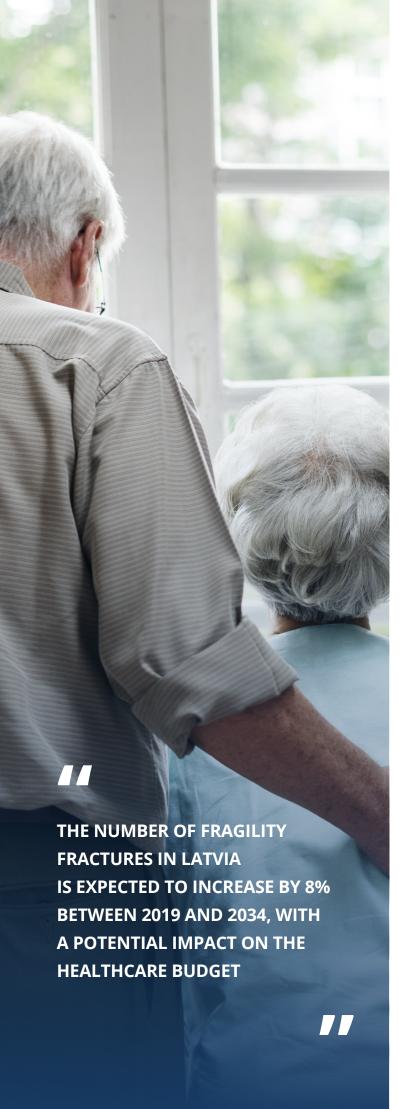
+50
YEARS





* No data available

Hip fracture is the most serious consequence of osteoporosis in terms of morbidity, mortality and health care expenditure. The data of remaining lifetime probability of hip fracture was not available for Latvia.



Projected increase in the number of fragility fractures

17,100 +8.2%

Age is an important risk factor for fractures. The Latvian population aged 50 years or more is projected to **decrease by 3.1%** between 2019 and 2034, contrary to the EU27+2 average which will increase by 11.4%. However, the numbers of men and women aged 75 years or more are expected to increase significantly; 18.9% for men; 6.1% 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 Latvia accounted for approximately 2.9% of healthcare spending (i.e., €49 million out of €1.6 billion in 2019), close to the EU27+2 average of 3.5%. These numbers indicate a substantial impact of fragility fractures on the healthcare budget.

Type of costs	
Direct cost of incident fractures	€28.0 million
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€18.8 million
Cost of pharmacological intervention (assessment & treatment)	€1.8 million
Total direct cost (excluding the value of QALYs* lost)	€49 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 Latvia was €25.2/person, while in 2010 the average was €18.8/person (increase of 34.0%).

The 2019 data ranked Latvia in 26th 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 Latvia

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

National fracture registries were established in Latvia which collect information on several fracture outcomes. However, high-quality data on hip fracture rate were not available

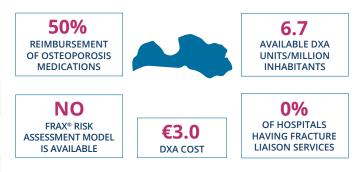
In Latvia, osteoporosis and metabolic diseases were neither a medical specialty nor a component of specialty medical training. However, the Latvian Osteoporosis and Bone Metabolic Diseases Association (LOKMSA) organises an Osteoporosis School to train physicians in various specialties.

Advocacy by patient organisations can fall into four categories: policy, capacity building and education, peer support, research and development. For Latvia, all of these 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 Latvia



Twelve out of 27 countries offered full reimbursement for osteoporosis medications. Latvia offered 50% reimbursement.

The number of DXA units expressed per million of the general population amounted to 6.7 which puts Latvia in 27th place among the EU27+2.

In Latvia, the estimated average waiting time for DXA amounted to 17 days (15th rank). The reimbursement for DXA was unconditional, and its charge has remained unchanged in the last 5 years.

Neither national fracture risk assessment models such as FRAX® nor guidelines for those use were available in Latvia. Guidelines for the management of osteoporosis were however available 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 provide a system for the routine assessment and management of patients who have sustained a low trauma fracture. However, no FLS was reported for Latvia.

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 Latvia.

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Service uptake for osteoporosis in Latvia

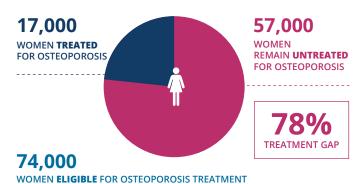
The condition of service uptake was evaluated with metrics that reflect fracture risk assessment, treatment gap, and management of surgery for hip fractures.

Measure	Estimate	Rank among EU27+2
Number of FRAX® sessions/ million people/year	218*	26
Treatment gap for women eligible for treatment	78%	17
Proportion of surgically managed hip fractures	>90%	

^{*}counted with the use of a surrogate FRAX® model

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 Latvia, the use of FRAX® amounted to 218 sessions/million in 2019 with a 300% 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 Latvia, the treatment gap amongst women **decreased to 78%** in 2019, compared to 2010 (85% in 2010). In the EU27+2 the average gap was 71% but ranged from 32% to 87%.

For Latvia, the average waiting time for hip fracture surgery after hospital admission was reported to be less than 24 hours. The proportion of surgically managed hip fractures was reported to be over 90%.

Burden of Disease	
Hip Fracture Risk	*
Fracture Risk	
Lifetime Risk	*
FRAX® Risk	
Fracture Projections	

Policy Framework	
Quality of Data	
National Health Priority	
Care Pathway	
Specialist Training	
Society Support	

Service Provision	
Treatment	
Availability of DXA	
Access to DXA	
Risk Models	
Guideline Quality	
Liaison Service	
Quality Indicators	

Service Uptake	
FRAX® Uptake	
Treatment Gap	
Δ Treatment Gap	
Waiting Time for Hip Fracture Surgery	

*no data available

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.

Latvia scores resulted in a 27th place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 19th place for Latvia. Accordingly, Latvia presents as one of the high-burden low-provision countries among the 29 European surveyed countries.

Since the previous SCOPE study in 2010, scores for Latvia were almost unchanged. Overall, they had improved in 15 countries, remained constant in 8 countries and worsened in 3 countries.

Acknowledgments

SCOPE Corresponding National Society based in Latvia

 Latvian Osteoporosis and Bone Metabolic Diseases Association

www.osteoporozesasociacija.lv

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



