

**SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)**

# Epidemiology, Burden, and Treatment of Osteoporosis in Austria

This document highlights the key findings for Austria published in “Osteoporosis in Europe: A Compendium of country-specific reports”<sup>1</sup>. View the complete SCOPE 2021 report<sup>2</sup> and related 29 country profiles at: <https://www.osteoporosis.foundation/scope-2021>

## BURDEN OF DISEASE

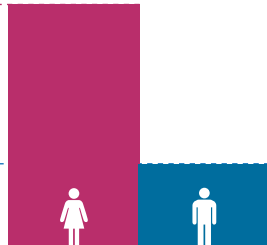
### Individuals with osteoporosis in Austria

**552,000**

INDIVIDUALS WITH OSTEOPOROSIS IN 2019

**79.5%**  
WOMEN

**20.5%**  
MEN



The prevalence of osteoporosis in the total population amounted to 5.5%, on par with the EU27+2 average (5.6%). In Austria, 22.2% of women and 6.5% of men aged 50 years or more were estimated to have osteoporosis.

### New fragility fractures in Austria

**110,000**

**NEW FRAGILITY FRACTURES**

IN 2019



**300**  
FRACTURES /DAY

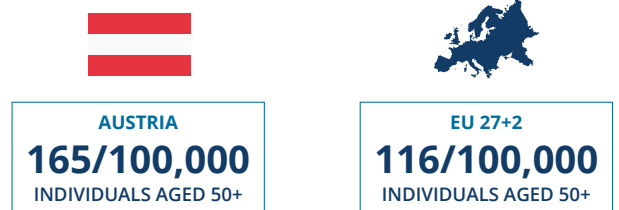


**12**  
FRACTURES /HOUR

The number of new fragility fractures in Austria in 2019 has slightly increased compared to 2010, equivalent to an increment of 1.1 fractures per 1000 individuals, totalling 29.6 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.



### 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 8.3% and 19.7%, respectively, placing Austria in the upper tertile of risk for both men and women.



“  
**THE NUMBER OF FRAGILITY FRACTURES IN AUSTRIA IS EXPECTED TO INCREASE BY MORE THAN 27% 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 Austrian population aged 50 years or more is projected to increase by 11.8% between 2019 and 2034, close to the EU27+2 average of 11.4%. The increases in men and women aged 75 years or more are even more marked; 38.0% for men; 22.0% 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 Austria accounted for approximately 3.4% of healthcare spending (i.e., €1.3 billion out of €38.7 billion in 2019), which is close to the EU27+2 average of 3.5%.

Type of costs	
Direct cost of incident fractures	€833.5 million
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€468.1 million
Cost of pharmacological intervention (assessment & treatment)	€41.7 million
<b>Total direct cost (excluding the value of QALYs* lost)</b>	<b>€1.3 billion</b>

\*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 Austria was €151.8/person, while in 2010 the average was €104.8/person (increase of 45%).

The 2019 data ranked Austria in 6<sup>th</sup> 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 Austria

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	Endocrinology, Rheumatology, Gynaecology, Orthopaedics
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 Austria. Data are collected on a national basis and include more than only hip fracture data.

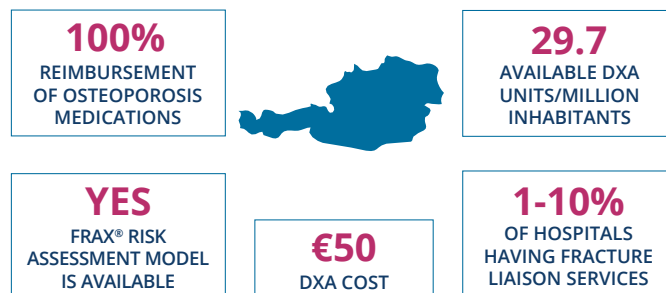
In Austria, osteoporosis and metabolic bone disease are not recognised specialties. However, osteoporosis is recognised as a component of specialty training.

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



Austria is one of the 12 (out of 27) countries that offered full reimbursement for osteoporosis medications.

The number of DXA units expressed per million of the general population amounted to 29.7 which puts Austria in 3<sup>rd</sup> place among the EU27+2. Furthermore, the availability of Trabecular Bone Score (TBS), which measures an aspect of bone quality, was highest in Austria.

In Austria, the estimated average waiting time for DXA amounted to 14 days (10<sup>th</sup> rank). The reimbursement for DXA was conditional and varied depending on public versus private delivery of the service.

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

Guidelines for the management of osteoporosis were available in Austria 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 only 1- 10% of hospitals in Austria.

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 Austria.

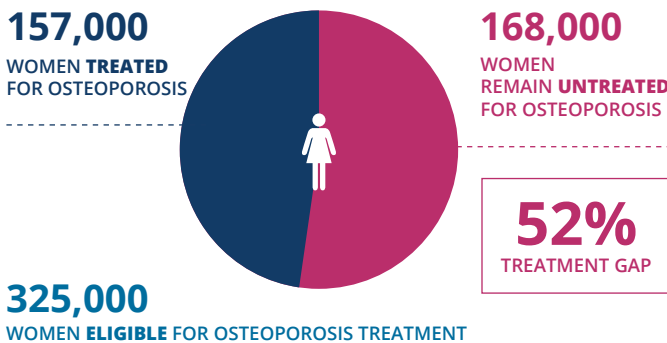
Service uptake for osteoporosis in Austria

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	2439	10
Treatment gap for women eligible for treatment	52%	4
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 Austria, the use of FRAX® amounted to 2439 sessions/million in 2019, with a 59% increase since 2011.

Do women at high fracture risk receive treatment?



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 Austria, the treatment gap amongst women amounted to 52% in 2019, similar to the gap of 51% in 2010. However, in a recent study<sup>3</sup>, the treatment gaps at 4, 12, and 18 months after the first hip fracture in women were 82%, 84%, and 85% respectively. In the EU27+2 the average gap was 71% in 2019 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, a decrease since 2010 (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	Red	Quality of Data	Green
Fracture Risk	Red	National Health Priority	Red
Lifetime Risk	Red	Care Pathway	Green
FRAX® Risk	Red	Specialist Training	Yellow
Fracture Projections	Yellow	Society Support	Green

Service Provision		Service Uptake	
Treatment	Green	FRAX® Uptake	Yellow
Availability of DXA	Green	Treatment Gap	Green
Access to DXA	Yellow	Δ Treatment Gap	Yellow
Risk Models	Green	Waiting Time for Hip Fracture Surgery	Green
Guideline Quality	Green		
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.

Austria scores resulted in a 4<sup>th</sup> place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 7<sup>th</sup> place for Austria. Accordingly, Austria represents one of the high-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 Austria, the scores were slightly improved.

Acknowledgments

SCOPE Corresponding National Society based in Austria

- Austrian Bone and Mineral Society (ÖGKM) [www.oegkm.at](http://www.oegkm.at)

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
3. Malle O, et al. Mind the gap: Incidence of osteoporosis treatment after an osteoporotic fracture - results of the Austrian branch of the International Costs and Utilities Related to Osteoporotic Fractures Study (ICUROS). Bone, 2021