

## SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)

# Epidemiology, Burden, and Treatment of Osteoporosis in Spain

This document highlights the key findings for Spain, 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

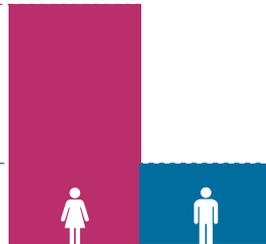
Individuals with osteoporosis in Spain

**2,945,000**

INDIVIDUALS WITH OSTEOPOROSIS IN 2019

**79.2%**  
WOMEN

**20.8%**  
MEN



The prevalence of osteoporosis in the total population amounted to 5.4%, on par with the EU27+2 average (5.6%). In Spain, 22.6% of women and 6.8% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Spain

**285,000**

NEW FRAGILITY FRACTURES IN 2019



**782**  
FRACTURES /DAY



**33**  
FRACTURES /HOUR

The number of new fragility fractures in Spain in 2019 was slightly increased compared to 2010, equivalent to an increment of 2.0 fractures per 1000 individuals, totalling 14.8 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.



**SPAIN**  
**74/100,000**  
INDIVIDUALS AGED 50+



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

### Remaining lifetime probability of hip fracture

WOMEN

**+50**  
YEARS



MEN

**+50**  
YEARS



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 12.1%, respectively, placing Spain in the bottom tertile of risk for both men and women.



“  
**THE NUMBER OF FRAGILITY FRACTURES IN SPAIN IS EXPECTED TO INCREASE BY APPROXIMATELY 30% BETWEEN 2019 AND 2034, WITH A SUBSTANTIAL IMPACT ON THE HEALTHCARE BUDGET**  
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### Projected increase in the number of fragility fractures



Age is an important risk factor for fractures. The Spanish population aged 50 years or more is projected to increase by 22.3% between 2019 and 2034, significantly higher than the EU27+2 average of 11.4%. The increases in men and women aged 75 years or more are even more marked; 37.7% for men; 28.6% 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 Spain accounted for approximately 3.8% of healthcare spending (i.e., €4.3 billion out of €104.3 billion in 2019), somewhat more than 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	€1.81 billion
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€2.19 billion
Cost of pharmacological intervention (assessment & treatment)	€303 million
<b>Total direct cost (excluding the value of QALYs* lost)</b>	<b>€4.3 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 Spain was €92.3/person, while in 2010 the average was €69.5/person (increase of 33%).

The 2019 data ranked Spain in 12<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 Spain

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	Internal medicine, Orthopaedics, Gynaecology, Endocrinology, Rheumatology, Geriatrics
Advocacy areas covered by patient organisations	Policy, Capacity, Research & Development

High quality of national data on hip fracture rates have been identified in Spain. Data are collected on a national basis and include more than only hip fracture data.

In Spain, 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 Spain, three of these advocacy areas were covered by a patient organisation, except for peer support.

## 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 Spain



Twelve out of 27 countries offered full reimbursement for osteoporosis medications. Spain offered 90 % reimbursement.

The number of DXA units expressed per million of the general population amounted to 15.5 which puts Spain in 15<sup>th</sup> place among the EU27+2.

In Spain, the estimated average waiting time for DXA amounted to 180 days. The reimbursement for DXA was unconditional.

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

Guidelines for the management of osteoporosis were available in Spain 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 Spain.

In some surveyed countries, national quality indicators were available that 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 Spain.

## SERVICE UPTAKE

### Service uptake for osteoporosis in Spain

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

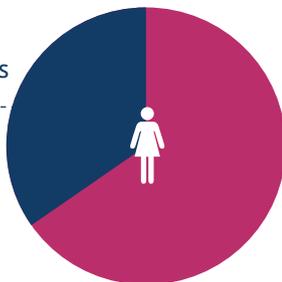
Measure	Estimate	Rank among EU27+2
Number of FRAX® sessions/million people/year	1527	13
Treatment gap for women eligible for treatment	64%	8
Proportion of surgically managed hip fractures	75-90%	

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 Spain, the use of FRAX® amounted to 1527 sessions/million in 2019 with a 37 % increase since 2011.

### Do women at high fracture risk receive treatment?

**656,000**

WOMEN TREATED FOR OSTEOPOROSIS



**1,171,000**

WOMEN REMAIN UNTREATED FOR OSTEOPOROSIS

**64%**

TREATMENT GAP

**1,827,000**

WOMEN ELIGIBLE FOR OSTEOPOROSIS 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 Spain, the treatment gap amongst women **increased to 64%** in 2019, compared to 25% in 2010. In the EU27+2 the average gap was 71% but ranged from 32% to 87%.

For Spain, the average waiting time for hip fracture surgery after hospital admission was reported to be more than 3 days. The proportion of surgically managed hip fractures was reported to be situated between 75 and 90%.

## SCORECARD

Burden of Disease		Policy Framework	
Hip Fracture Risk	Green	Quality of Data	Green
Fracture Risk	Green	National Health Priority	Yellow
Lifetime Risk	Green	Care Pathway	Green
FRAX® Risk	Green	Specialist Training	Yellow
Fracture Projections	Yellow	Society Support	Yellow

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

Spain scores resulted in a 26<sup>th</sup> place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 17<sup>th</sup> place for Spain. Accordingly, Spain represents one of the low-burden high-provision countries among the 29 European surveyed countries.

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

## Acknowledgments

### SCOPE Corresponding National Societies based in Spain

- **Hispanic Foundation of Osteoporosis and Metabolic Bone Diseases (FHOEMO)**

[www.fhoemo.com](http://www.fhoemo.com)

- **Spanish Society for Research on Bone and Mineral Metabolism (SEIOMM)**

[www.seiommm.org](http://www.seiommm.org)

## 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