

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

# Epidemiology, Burden, and Treatment of Osteoporosis in Malta

This document highlights the key findings for Malta, 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

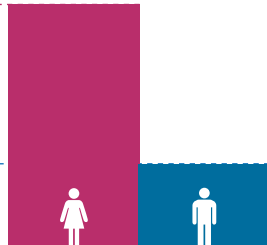
Individuals with osteoporosis in Malta

**23,000**

INDIVIDUALS WITH OSTEOPOROSIS IN 2019

**78.3%**  
WOMEN

**21.7%**  
MEN



The prevalence of osteoporosis in the total population amounted to 4.9%, on par with the EU27+2 average (5.6%). In Malta, 19.8% of women and 5.9% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Malta

**3,200**  
NEW  
FRAGILITY  
FRACTURES  
IN 2019



**9**  
FRACTURES  
/DAY



**0.4**  
FRACTURES  
/HOUR

The number of new fragility fractures in Malta in 2019 was slightly increased compared to 2010, equivalent to an increment of 0.9 fractures per 1000 individuals, totalling 18.3 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.



**MALTA**  
**84/100,000**  
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 5.8% and 14.2%, respectively, placing Malta in the mid tertile of risk for both men and women.



THE NUMBER OF FRAGILITY FRACTURES IN MALTA IS EXPECTED TO INCREASE BY MORE THAN 47% 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 Maltese population aged 50 years or more is projected to increase by 14.7% between 2019 and 2034, close to the EU27+2 average of increasing by 11.4%. The numbers of men and women aged 75 years or more are expected to increase significantly; 76.2% for men; 57.3% 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 Malta accounted for approximately 2.5% of healthcare spending (i.e., €29.1 million out of €1.06 billion in 2019), lower than the EU27+2 average of 3.5%. However, these numbers indicate a substantial impact of fragility fractures on the healthcare budget.

Type of costs	
Direct cost of incident fractures	€18.6 million
Ongoing cost resulting from fractures in previous years (long-term disability costs)	€8.4 million
Cost of pharmacological intervention (assessment & treatment)	€2.1 million
<b>Total direct cost (excluding the value of QALYs* lost)</b>	<b>€29.1 million</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 Malta was €60.1/person, while in 2010 the average was €45.3/person (increase of 33%).

The 2019 data ranked Malta in 18<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 Malta

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, Orthopaedics, Gynaecology, Rehabilitation, Endocrinology, Geriatrics
Advocacy areas covered by patient organisations	Policy, Capacity, Peer support

Despite the lack of established national fracture registries, the national data on hip fracture rates for Malta are of high quality and include more than only hip fracture data.

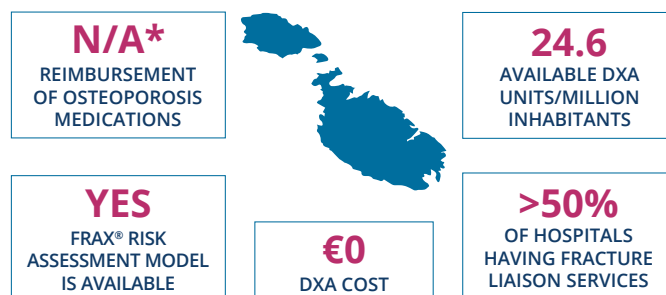
In Malta, osteoporosis and metabolic bone disease were not recognised specialties. However, osteoporosis is recognised as a component of specialty training.

Advocacy by patient organisations can fall into four categories: policy, capacity building and education, peer support, research and development. For Malta, three of four advocacy areas (Policy, Capacity, Peer support) 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 Malta



\* No data available

Twelve out of 27 countries offered full reimbursement for osteoporosis medications. No information on reimbursement rates was available for Malta.

The number of DXA units expressed per million of the general population amounted to 24.6 which puts Malta in 7<sup>th</sup> place among the EU27+2. In Malta, the estimated average waiting time for DXA amounted to 30 days (18<sup>th</sup> rank). DXA was provided at no cost to the patient. However, assessment of Trabecular Bone Score (TBS) that measures bone quality was not available in Malta.

Although national fracture risk assessment models such as FRAX® were available in Malta, guidance on the use of fracture risk assessment within national guidelines were not available.

In contrast to most of the EU27+2 countries, guidelines for the management of osteoporosis were not available in Malta.

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. FLS were reported for more than 50% of hospitals for Malta.

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 Malta.

Service uptake for osteoporosis in Malta

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	1541	12
Treatment gap for women eligible for treatment	No data	
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 Malta, the use of FRAX® amounted to 1541 sessions/million in 2019 with a 91% decrease 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 Malta, **no information about the treatment gap was available.**

For Malta, the average waiting time for hip fracture surgery after hospital admission was reported to be 1-2 days. The proportion of surgically managed hip fractures was reported to be over 90%.

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

Service Provision		Service Uptake	
Treatment	Black*	FRAX® Uptake	Orange
Availability of DXA	Green	Treatment Gap	Black*
Access to DXA	Green	Δ Treatment Gap	Black*
Risk Models	Orange	Waiting Time for Hip Fracture Surgery	Orange
Guideline Quality	Black*		
Liaison Service	Green		
Quality Indicators	Red		

\* 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.

Malta scores resulted in a 10<sup>th</sup> place regarding Burden of Disease. The combined Healthcare Provision (Policy Framework, Service Provision, and Service Uptake) scorecard resulted in a 27<sup>th</sup> place for Malta. Accordingly, Malta represents one of the high-burden low-provision countries among the 29 European surveyed countries.

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

Acknowledgments

SCOPE Corresponding National Society in Malta

- Malta Osteoporosis Society (MOS)

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