SCORECARD FOR OSTEOPOROSIS IN EUROPE (SCOPE)

Epidemiology, Burden, and Treatment of Osteoporosis in Sweden

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

BURDEN OF DISEASE

Individuals with osteoporosis in Sweden

583,000

INDIVIDUALS WITH OSTEOPOROSIS IN 2019

77.6%

WOMEN

22.4%

MEN

The prevalence of osteoporosis in the total population amounted to 5.6%, on par with the EU27+2 average (5.6%). In Sweden, 22.4% of women and 6.9% of men aged 50 years or more were estimated to have osteoporosis.

New fragility fractures in Sweden

124,000

NEW FRAGILITY FRACTURES IN 2019

338

FRACTURES /DAY

14

FRACTURES /HOUR

The number of new fragility fractures in Sweden in 2019 has slightly increased compared to 2010, equivalent to an increment of 0.9 fractures per 1000 individuals, totalling 31.6 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 10.9% and 25.1%, respectively, placing Sweden in the upper tertile of risk for both men and women.
The cost of osteoporotic fractures in Sweden accounted for approximately 4.3% of healthcare spending (i.e., €2.3 billion out of €52.8 billion in 2019), which is substantially higher than the EU27+2 average of 3.5%. These numbers indicate a substantial impact of fragility fractures on the healthcare budget.

### Healthcare cost of osteoporotic fractures

The cost of osteoporotic fractures in Sweden accounted for approximately 4.3% of healthcare spending (i.e., €2.3 billion out of €52.8 billion in 2019), which is substantially higher than the EU27+2 average of 3.5%. These numbers indicate a substantial impact of fragility fractures on the healthcare budget.

<table>
<thead>
<tr>
<th>Type of costs</th>
<th>2019</th>
<th>2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct cost of incident fractures</td>
<td>€1.4 billion</td>
<td>€1.4 billion</td>
</tr>
<tr>
<td>Ongoing cost resulting from fractures in previous years (long-term disability costs)</td>
<td>€848 million</td>
<td>€1.1 billion</td>
</tr>
<tr>
<td>Cost of pharmacological intervention (assessment &amp; treatment)</td>
<td>€45 million</td>
<td>€50 million</td>
</tr>
<tr>
<td><strong>Total direct cost (excluding the value of QALYs lost)</strong></td>
<td>€2.3 billion</td>
<td>€2.9 billion</td>
</tr>
</tbody>
</table>

*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 Sweden was €229.1/person, while in 2010 the average was €176.6/person (increase of 30%).

The 2019 data ranked Sweden in 3rd place in terms of highest cost of osteoporotic fractures per capita in the surveyed 29 countries.

The number of fragility fractures in Sweden is expected to increase by more than 30% between 2019 and 2034, with a substantial impact on the healthcare budget.
High quality of national data on hip fracture rates have been identified in Sweden. Data are collected on a national basis and include more than only hip fracture data.

In Sweden, 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 Sweden, three of these advocacy areas were covered, including policy, capacity and peer support.

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

The number of DXA units expressed per million of the general population amounted to 7.4 which puts Sweden in 24th place among the EU27+2. Furthermore, the relative availability of trabecular bone score (TBS), which measures an aspect of bone quality, was high in Sweden.

In Sweden, the estimated average waiting time for DXA amounted to 90 days (24th rank). The reimbursement for DXA was unconditional.

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

Guidelines for the management of osteoporosis were available in Sweden 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 25-50% of hospitals in Sweden.

Sweden was one of the few countries with national quality indicators available to measure the quality of care provided to patients with osteoporosis or associated fractures.
Service uptake for osteoporosis in Sweden

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

<table>
<thead>
<tr>
<th>Measure</th>
<th>Estimate</th>
<th>Rank among EU27+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of FRAX® sessions/million people/year</td>
<td>5306</td>
<td>3</td>
</tr>
<tr>
<td>Treatment gap for women eligible for treatment</td>
<td>67%</td>
<td>12</td>
</tr>
<tr>
<td>Proportion of surgically managed hip fractures</td>
<td>&gt;90%</td>
<td></td>
</tr>
</tbody>
</table>

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 Sweden, the use of FRAX® amounted to 5306 sessions/million in 2019, with a 178% 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 Sweden, the treatment gap amongst women amounted to 67% in 2019, which did not change significantly compared to 2010 (72% in 2010). In the EU27+2 the average gap was 71% but ranged from 32% to 87%.

For Sweden, 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%.

Acknowledgments

SCOPE Corresponding National Society based in Sweden

- Swedish Osteoporosis Society
  www.svos.se

References


©2022 International Osteoporosis Foundation
This report was supported by an unrestricted grant from Amgen.