

SCOPE – Scorecard for Osteoporosis in Europe

Key findings of the SCOPE report

What is SCOPE?

The scorecard for osteoporosis in Europe (SCOPE) is a project led by independent panel to develop a tool to compare and contrast key quality indicators of osteoporosis management in each of the 27 member states of the European Union (EU). The information researched covers **four main indicators of osteoporosis** that were applied to each country:

- **Burden** of osteoporosis and fractures, including forecasts for the future
- **Policy framework** - availability of public health programmes
- **Service provision** - assessment and treatments of osteoporosis
- **Service uptake** - e.g. treatment gap, the proportion of men and women at high risk who don't receive treatment

SCOPE draws on independent research from two major sources: International Osteoporosis Foundation (IOF) audits & national osteoporosis societies throughout Europe as well as the comprehensive report 'Osteoporosis in the European Union: Medical Management, Epidemiology and Economic Burden'. From this data, a **one-page scorecard** was developed to provide a unique overview of osteoporosis in Europe. **The SCOPE panel is composed by the following independent experts:**

- Professor John A Kanis (Chair), Professor emeritus, University of Sheffield, UK; President, International Osteoporosis Foundation.
- Dr. Frederik Borgström, LIME/MMC, Karolinska Institutet, Stockholm, Sweden
- Professor Juliet Compston, University of Cambridge School of Clinical Medicine, Department of Medicine, Cambridge, United Kingdom
- Professor Karsten Dreinhofer, Charité Universitätsmedizin Berlin and Medical Park Berlin Humboldtmühle
- Dr. Ellen Nolte, Health and Healthcare policy program, RAND Europe, Cambridge, United Kingdom
- Dr. Linus Jonsson, OptumInsight, Stockholm, Sweden
- Professor Willem Lems, VU University Medical Centre, Amsterdam, The Netherlands
- Professor Eugene V McCloskey, Osteoporosis Centre, Northern General Hospital, Sheffield, United Kingdom.
- Professor Rene Rizzoli, Rehabilitation and Geriatrics, Geneva University Hospitals, Geneva, Switzerland.
- Ms. Judy Stenmark, International Osteoporosis Foundation, Nyon, Switzerland
- Ms. Hildrun Sundseth, European Institute of Women's Health

<p>Why Scope?</p>	<p>The project draws attention to gaps and inequalities in the provision of primary and secondary prevention of fractures due to osteoporosis. It enables healthcare professionals and policy makers to assess their country's general approach to the disease and provides indicators to inform future provision of healthcare. The aim is to stimulate a balanced, common and optimal approach to the management of osteoporosis throughout the EU.</p> <p>This is necessary in order to relieve the enormous health-economic cost of osteoporosis and fractures in the EU:</p> <ul style="list-style-type: none"> • 22 million women and 5.6 million men in the EU are estimated to have osteoporosis. • There are 3.5 million new fractures in men and women per year - ca. 9,556 per day, 390 per hour. • In addition to pain and disability, some fragility fractures are associated with premature mortality. In 2010, 43,000 men and women died as a consequence of osteoporotic fracture, equivalent to 118 deaths per day. Approximately 50% of fracture-related deaths in women were due to hip fractures. • The total direct cost of osteoporosis in the EU in 2010 was approximately € 37.4 billion. This represents approximately 3% of the healthcare budget of the EU (€ 1,260 billion). • The cost of Quality of Life Lost (QALY) amounted to € 57.2 billion, bringing the total socio-economic cost of osteoporotic fractures to € 94.6 billion. • 54% of the costs are attributed to hip fractures, 39% to other fractures, 5% to spine, 2 % to forearm fractures. • The average direct cost of osteoporosis per capita was € 75 for each individual in the EU. The cost per capita was highest in Denmark (€188/person) and lowest in Bulgaria (€ 6) and Romania (€ 6).
<p>Burden of disease - variation in fracture risk and projections</p>	<ul style="list-style-type: none"> • Fracture incidence is poorly documented in the EU. The fracture that has been best evaluated is hip fracture, as these fractures always require hospitalization. • National data on hip fracture rates is available in only 17 member states. No data were available for Bulgaria, Cyprus, Latvia, and Luxembourg. In the remaining 6 countries, regional estimates were identified. For Estonia and Slovenia data were available in women only. • There was a nearly three-fold range of hip fracture rates throughout the EU from 198/100,000 (Romania) to 574/100,000 (Denmark). • Women from Denmark, Sweden, Austria, Ireland and Slovakia are identified as those at highest risk of hip fracture, followed by Czech Republic, Hungary, Belgium, Malta, UK, Slovenia, Germany, Italy and Greece. • Countries with very high prevalence of 10-year fracture risk were Denmark, Sweden, Austria, Slovakia, UK, Italy, Ireland, Greece, Belgium.

	<ul style="list-style-type: none"> • The population of women over 50 years of age is expected to increase by 22% and in men by 17% in the EU between 2010 and 2025. With some exceptions, the percentage increase of the population aged 75 or more is even greater. • Between 2010 and 2025, the number of women over the age of 75 will increase by more than 40% in Cyprus, Denmark, Finland, Ireland, Malta and the Netherlands. • The number of men and women aged 50 years of more will increase in all countries except Bulgaria, Hungary and Latvia. • The annual number of osteoporotic fractures in the EU27 will increase from 3.49 million in 2010 to 4.48 million in 2025. • The increase in the annual number of fractures is found in all countries, ranging from a 53% increase in Ireland to a modest 4% increase in Bulgaria. • In 2025, Germany is expected to have the largest number of fractures with almost 940,000 fractures, followed by the UK with 680,000.
<p>Policy Framework - collecting data, prioritizing musculoskeletal diseases</p>	<ul style="list-style-type: none"> • Documentation of the burden of disease is essential to determine the resources that should be allocated to the diagnosis and treatment of the disorder. Nevertheless, fracture incidence is poorly documented in the EU. • High quality national data on hip fracture rates were identified in only 15 of the 27 member states. Fair to poor quality national estimates were found for two, and no data were available for 4 countries (Bulgaria, Cyprus, Latvia, and Luxembourg). In the remaining 6 countries, regional estimates of variable quality were identified. • Data on the incidence of clinical vertebral fractures are lacking in most of the countries in the EU, the exceptions being regional data for Sweden and the UK. • Information on forearm fracture is also scarce. High quality data are only available for Hungary, the UK and Sweden. • National fracture registries were in place in 11 of the 27 EU countries, however in some countries, only hip fracture is registered. • The majority of member states (18 of 27) do not recognise osteoporosis or musculoskeletal diseases as a national health priority issue. • The UK is most advanced in using quality indicators to track the quality of care provided to people with osteoporosis or fractures.
<p>Service Provision - reimbursement, availability of</p>	<ul style="list-style-type: none"> • Full reimbursement of osteoporosis medications was provided in only 7 of 26 EU member states. In the remaining countries, the level of reimbursement ranged from 0 (Malta) to up to 100% for selected treatments (Luxembourg and Spain). • Restricted reimbursement was reported as a significant obstacle to accessibility and long term uptake, either due to

<p>DXA</p>	<p>unaffordable cost to the patient (Spain), age restrictions for some agents (Belgium, Italy, Poland), less reimbursement in the absence of a prior fracture (Estonia), and reimbursement for some or all agents conditional on a specialist referral (Czech Republic, Greece and Hungary).</p> <ul style="list-style-type: none"> • Only about 50% of countries in the EU had the recommended number of DXA machines (11 units per million) for their population. Given that some DXA units are underutilised or reserved for research, it is likely that a majority of countries are under-resourced. • Reimbursement, reimbursement criteria, and waiting times for DXA scans varied widely between countries. Countries with good access to DXA are Sweden, Spain, Slovakia, Portugal, Netherlands, Luxembourg, Latvia, Greece, Finland and Denmark. • Risk assessment models (e.g. FRAX) are available in 21 of the EU States. Of these, only 12 have national guidance on how results should be used in clinical practice. • Guidelines for the management of osteoporosis are available in the majority of member states, with the exception of Cyprus and Malta. • It is estimated that even in those countries which have Fracture Liaison Services, less than 10% of hospitals have FLS in place.
<p>Service Uptake - diagnosis and treatment</p>	<ul style="list-style-type: none"> • Data about uptake of DXA is only available for Denmark, and the data suggests suboptimal uptake. • It is estimated that risk assessment models are underutilised. • Though treatment guidelines are available in nearly all EU member states, there is no uniform approach to intervention thresholds across the EU27. • There is wide inter-country variation in the treatment penetration of women at high risk for osteoporotic fractures. The treatment gap varied from 25% in Spain to 95% in Bulgaria. • The majority of high risk individuals remain untreated. Out of the 18.4 women who are at high risk for subsequent fracture, 10.6 million are untreated. • Early surgical intervention (within 48 hours) of hip fracture significantly reduces the mortality within one year, and the proportion of patients returning to their original residence. More than 90% of hip fracture cases receive surgery in most countries. In 6 countries the waiting times are greater than 2 days (Cyprus, Greece, Ireland, Italy, Portugal, Spain).

SCOPE scorecard available at <http://www.iofbonehealth.org/scope-scorecard-osteoporosis-europe>

SCOPE: A Scorecard for Osteoporosis in Europe. Kanis JA, Borgström F, Compston J. et al. soon to be published in Archives of Osteoporosis

<http://link.springer.com/journal/11657>