BROKEN BONES, BROKEN LIVES:

The fragility fracture crisis in Germany

The development of this initiative has been supported by UCB.
Prevalence:  
- Approximately 5.3 million people have osteoporosis in Germany (2015)  
- Comparable to the other EU6* nations
Fragility fractures due to osteoporosis affect both men and women

Fragility fractures during 2017

<table>
<thead>
<tr>
<th>Fracture Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip Fractures</td>
<td>19%</td>
</tr>
<tr>
<td>Verterbral Fractures</td>
<td>16%</td>
</tr>
<tr>
<td>Other Fractures</td>
<td>65%</td>
</tr>
</tbody>
</table>

of which 51% were MOFs*

* Major Osteoporotic Fractures

Incidence in Germany:
Estimated number of fragility fractures in 2017, and by fracture category
FRAGILITY FRACTURES IN THE CONTEXT OF PUBLIC HEALTH PRIORITIES

Lifetime risk of sustaining a MOF is higher than the lifetime risk of having a stroke for both women and men.

MOF = 20% +
STROKE = 14% +

MOF = 35% +
STROKE = 20% +

Disability-adjusted life years: a measure of the impact of a disease or injury in terms of healthy years lost.

*MOF (Major Osteoporotic Fracture) risk for individuals aged 50 in Germany; equivalent stroke risk in Europe.
FRAGILITY FRACTURES INCUR SUBSTANTIAL HEALTHCARE COSTS

Fracture-related costs:

1st Year
Happen during first year after fracture

Highest with hip fractures

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FRAGILITY FRACTURES HAVE A MULTIFACETED IMPACT ON THE INDIVIDUAL AND SOCIETY

Reduced independence and lifestyle impairment

**LIFE-CHANGING IMPACT OF FRAGILITY FRACTURES**

**LONG-TERM CARE**
35.3% of patients aged 90 + years move into long-term care following hip fracture

**SICK DAYS**
taken in Germany among individuals of pre-retirement age affected by fragility fractures.

1.380.000

Patients suffering fragility fractures depend on care from family and friends

Fragility fractures can significantly impact the working population:
Germany has among the highest number of average sick days taken per 1000 people compared to the other EU6 nations

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FRAGILITY FRACTURES ARE A GROWING CHALLENGE IN THE PUBLIC HEALTH LANDSCAPE

The incidence of fragility fractures is set to rise

Fracture-related costs are set to rise

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- 2017: 765,000 fragility fractures
- 2030: 907,000 fragility fractures
- 2017: €11.3 billion
- 2030: €13.9 billion

+18.5%
EFFECTIVE MANAGEMENT IMPROVES OUTCOMES AND REDUCES COSTS

One fragility fracture leads to another:

Women who had a fragility fracture are five times more likely to experience a second fracture within the first year after a fracture than women who have not had a prior fracture, yet…

Massive Treatment Gap

60% of women do not receive treatment following a fracture

With appropriate medical treatment, many fragility fractures can be avoided
EFFECTIVE MANAGEMENT IMPROVES OUTCOMES AND REDUCES COSTS

Coordinated care models are multidisciplinary healthcare delivery models which aim to identify, diagnose and treat patients who have suffered a fragility fracture.

Multidisciplinary models for secondary fracture prevention can contribute to closing the treatment gap.

FRACTURE LIAISON SERVICES (FLS)

= cost-effective care delivery model to IMPROVE OVERALL OUTCOMES & REDUCE COSTS

EFFECTS of FLS (absolute change)

- +24% BMD testing
- +22% Treatment adherence
- +20% Treatment initiation
- -5% Re-fracture rate
- -3% Mortality
A ROADMAP TO SOLVE THE FRAGILITY FRACTURE CRISIS IN GERMANY

Osteoporosis prevention and treatment is not receiving the priority it deserves by the Government and relevant health policy officials.

A joint stakeholder effort (involving physicians, health politicians, health insurances, patient organizations, and social welfare associations) is required to reduce the impact of fragility fractures for patients and the society.

Some of the improvements to osteoporosis care and healthcare policy needed are to:

1. Implement DVO Medical Guidelines to treat patients with fragility fractures
2. Ensure reimbursement of the dual X-ray absorptiometry bone density measurement for all high-risk patients
3. Use coordinated care models (e.g. IDNs) and implement the discharge management model
4. Create an osteoporosis management program could foster a multidisciplinary approach to care, improve the quality of medical care for patients and close the current treatment gap
5. Encourage education and information to patients and citizens to be more ‘bone-conscious’
6. Actively support civil society organizations working within the field of osteoporosis
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FOR MORE INFORMATION
www.iofbonehealth.org/broken-bones-broken-lives