

# Improving Bone Health in the UN Decade Of Healthy Aging

## Post-Fracture Care through Fracture Liaison Services is the key to secondary fracture prevention.

As societies around the world age – to 1.4 billion people over 60 by 2030 and 2.1 billion by 2050 – and people live longer, our strength, mobility, and independence highly depend on our bone health to continue living active and healthy lives.<sup>1</sup> Unfortunately, experts project that half a billion people will soon be living with osteoporosis, a disease that weakens their bones and can lead to fractures.<sup>2</sup>

It's estimated that every 3 seconds, an older adult suffers a fracture, resulting in 9 million fractures globally every year; nearly 50% of all women and 20% of men over 50 will suffer a fracture at some point in their lives.<sup>3</sup> A staggering 80% of people with fractures are not being diagnosed and treated with effective therapies, according to the International Osteoporosis Foundation.<sup>4</sup>

### What are Fracture Liaison Services?

An FLS program helps people who have sustained a fracture reduce the risk of a secondary fracture by evaluating their bone health and developing a personalized treatment plan for them to prevent future fractures.<sup>5</sup>

Older people who have sustained a fracture are also far more likely to sustain a second fracture; they are an easily identifiable group for successful treatment and prevention through FLS and should not unnecessarily be withheld diagnosis and treatment.<sup>6</sup>

---

### Improving bone health is crucial for healthy aging.

Fractures are a public health issue that severely affects people, their caregivers, and our healthcare systems. As people age, a failure to ensure good bone health can cause fractures and lead to a loss of mobility and independence, resulting in pain and suffering and a caregiver burden on families, friends, or relatives.

Half of people over 60 never return to their prior level of mobility after a fall-related hip fracture.<sup>7</sup> Hip fractures lead to a substantial loss of independence: 40% of patients are unable to walk independently, and 33% become totally dependent or in a nursing home in the year following the fracture.<sup>8</sup>

Older people who suffer a first fracture of any kind are twice as likely to suffer a second one.<sup>9</sup> The effect of a secondary fracture can have even greater and more severe consequences: the mortality rate for people suffering a secondary hip fracture increases by 93 percent.<sup>10</sup>

Age and osteoporosis are two of the most significant risk factors for fractures.<sup>11</sup> This disease weakens bone and makes people more vulnerable to fractures, typically to the hip, wrist, or spine. Improving bone health allows older people to remain mobile and independent, preserving the strength and agility needed to participate fully in society by working, traveling, and spending time with family and friends.

---

### **Fractures burden our healthcare systems.**

In most countries, bone health is not integrated into primary health care for older people.<sup>12</sup> When fractures occur, treatment is focused on fixing the fracture and not preventing the next one due to gaps in care coordination and integration of rehabilitation services across the healthcare continuum, placing older people at greater risk for further fractures.<sup>13</sup> This means there needs to be more awareness of fracture prevention as many barriers exist to accessing timely quality treatment.

The treatment of fractures significantly burdens our health and long-term care systems, threatening their ability to provide care and financial sustainability. The health and economic cost of fractures are enormous and will grow well beyond \$100 billion per year globally before 2050, threatening healthy aging and leaving our health systems fractured.<sup>14,15,16,17</sup> The need to focus on preventing, treating, and rehabilitating fractures is clear.

---

### **Fracture Liaison Services are an effective intervention that prevents secondary fractures.**

Older adults who sustain a fracture are a readily identifiable group at very high fracture risk of sustaining subsequent fractures.<sup>18</sup> For example, in 2020, investigators studied Swedish women aged 50 years or over and concluded that women who suffered a fracture were far more likely to sustain a second or third fracture.<sup>19</sup> Similar conclusions have been drawn from earlier studies in the United States, Australia, and Canada.<sup>20</sup>

The treatment of osteoporosis and prevention of secondary fractures through the deployment of FLS provides a proven, multidisciplinary model of integrated care that identifies patients with fractures, facilitates the diagnosis of osteoporosis, informs patients, and recommends appropriate treatment. Super-aging Japan recently successfully adopted a new access and reimbursement policy to pay for FLS that will help improve rehabilitation and prevent secondary fractures by providing coverage for patients with hip fractures for visits to facilities that provide holistic care, including a multidisciplinary approach based on Fracture Liaison Services.<sup>21</sup>

## All relevant stakeholders need to act and advocate for change.

Poor bone health is not an inevitability of aging; it is, in fact, both manageable and preventable through integrated care. Improving bone health will improve the quality of life for older people, their families, and wider social circle by allowing them to live longer, lead more active lives, and reduce the burden on our healthcare system.

Interventions are needed to address fractures in general and secondary fractures specifically. Therefore, focusing our efforts on secondary fracture prevention by integrating Fracture Liaison Services into our healthcare systems is a crucial success factor in reducing fractures and improving the quality of life for older people. The Bone Health Initiative calls on global and national policymakers, officials in age-friendly cities and communities, healthcare professionals, patient advocacy organizations, employers concerned about the health and employability of older employees, and other societal stakeholders to join us in advocating for the adaptation and prioritization of Fracture Liaison Services to prevent secondary fractures.



### **About the Bone Health Initiative.**

The Global Coalition on Aging (GCOA) convened its Bone Health Initiative (BHI) in 2021 to address the importance of bone health on the global public health agenda as a contribution to the UN Decade of Healthy Aging.

**For more information about the Bone Health Initiative or other Global Coalition on Aging activities, contact**

Michiel Peters, Director, Global Coalition on Aging  
mpeters@globalcoalitiononaging.com

## Endnotes

1. World Health Organization. (2022). Aging and Health. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
2. International Osteoporosis Foundation. (n.d.). Epidemiology of osteoporosis and fragility fractures. International Osteoporosis Foundation. <https://www.osteoporosis.foundation/facts-statistics/epidemiology-of-osteoporosis-and-fragility-fractures>
3. Ibid.
4. International Osteoporosis Foundation. (2021). New policy guidance highlights urgent global need for post-fracture care programs. International Osteoporosis Foundation. <https://www.osteoporosis.foundation/news/new-policy-guidance-highlights-urgent-global-need-post-fracture-care-programs-20210201-1221>
5. Bone Health and Osteoporosis Foundation. (n.d.). Fracture Liaison Service "FLS". Bone Health and Osteoporosis Foundation. <https://www.bonehealthandosteoporosis.org/patients/communication-with-your-doctor/fracture-liaison-service-fls/>
6. Mitchell P. J. (2022). Fracture liaison: A crucial tool in the fight against fragility fracture. *Maturitas*, 165, 26-32. <https://doi.org/10.1016/j.maturitas.2022.07.001>
7. Barton, D. W., Piple, A. S., Smith, C. T., Moskal, S. A., & Carmouche, J. J. (2021). The clinical impact of fracture liaison services: a systematic review. *Geriatric Orthopaedic Surgery & Rehabilitation*, 12. <https://doi.org/10.1177/2151459320979978>
8. International Osteoporosis Foundation (n.d.). Burden of Osteoporosis. International Osteoporosis Foundation. <https://www.osteoporosis.foundation/policy-makers/burden-osteoporosis>
9. Colón-Emeric, C. S. & Saag, K.G. (2007). Osteoporotic fractures in older adults. *Best Practice & Research: Clinical Rheumatology*, 20(4), 695-706. <https://doi.org/10.1016/j.berh.2006.04.004>
10. Barton, D. W., Piple, A. S., Smith, C. T., Moskal, S. A., & Carmouche, J. J. (2021). The clinical impact of fracture liaison services: a systematic review. *Geriatric Orthopaedic Surgery & Rehabilitation*, 12. <https://doi.org/10.1177/2151459320979978>
11. Hernlund, E., Svedbom, A., Ivergård, M., Compston, J., Cooper, C., Stenmark, J., McCloskey, E. V., Jönsson, B., & Kanis, J. A. (2013). Osteoporosis in the European Union: medical management, epidemiology and economic burden. A report prepared in collaboration with the International Osteoporosis Foundation (IOF) and the European Federation of Pharmaceutical Industry Associations (EFPIA). *Archives of osteoporosis*, 8(1), 136. <https://doi.org/10.1007/s11657-013>
12. World Health Organization. (2019). Integrated care for older people (ICOPE): guidance for person-centred assessment and pathways in primary care. World Health Organization. <https://www.who.int/publications/i/item/WHO-FWC-ALC-19.1>
13. Ibid.
14. International Osteoporosis Foundation. (2022). Burden of Osteoporosis. International Osteoporosis Foundation. <https://www.osteoporosis.foundation/policy-makers/burden-osteoporosis>
15. International Osteoporosis Foundation. (2020). European countries face a costly 23% increase in fragility fractures by 2030. International Osteoporosis Foundation. <https://www.osteoporosis.foundation/news/european-countries-face-costly-23-increase-fragility-fractures-2030-20200427-0900>
16. Rashki Kemmaq, A., Rezapour, A., Jahangiri, R., Nikjoo, S., Farabi, H., & Soleimanpour, S. (2020). Economic burden of osteoporosis in the world: A systematic review. *Medical journal of the Islamic Republic of Iran*, 34, 154. <https://doi.org/10.21203/rs.2.22372/v1>
17. Mo, X., Zhao, S., Wen, Z. et al. (2021) High prevalence of osteoporosis in patients undergoing spine surgery in China. *BMC Geriatric* 21, 361. <https://doi.org/10.1186/s12877-021-02313-8>
18. Hernlund, E., Svedbom, A., Ivergård, M., Compston, J., Cooper, C., Stenmark, J., McCloskey, E. V., Jönsson, B., & Kanis, J. A. (2013). Osteoporosis in the European Union: medical management, epidemiology and economic burden. A report prepared in collaboration with the International Osteoporosis Foundation (IOF) and the European Federation of Pharmaceutical Industry Associations (EFPIA). *Archives of osteoporosis*, 8(1), 136. <https://doi.org/10.1007/s11657-013>
19. Soreskog, E., Strom, O., Spangeus, A. et al. (2020). Risk of major osteoporotic fracture after first, second and third fracture in Swedish women aged 50 years and older. *Bone*, 134:115286. <https://doi.org/10.1016/j.bone.2020.115286>
20. Mitchell P. J. (2022). Fracture liaison: A crucial tool in the fight against fragility fracture. *Maturitas*, 165, 26-32. <https://doi.org/10.1016/j.maturitas.2022.07.001>
21. Sudo, K., Kobayashi, J., Noda, S., et al. (2018). Japan's healthcare policy for the elderly through the concepts of self-help (Ji-jo), mutual aid (Go-jo), social solidarity care (Kyo-jo), and governmental care (Ko-jo). *BioScience Trends*, 12(1), 7-11. <https://doi.org/10.5582/bst.2017.01271>