



## A global call to action to improve the care of people with fragility fractures



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the European Geriatric Medicine Society (EuGMS)

the European Federation of National Associations of Orthopaedics and Traumatology (EFORT)

the International Collaboration of Orthopaedic Nursing (ICON)

the International Geriatric Fracture Society (IGFS)

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## ABSTRACT

The ageing of society is driving an enormous increase in fragility fracture incidence and imposing a massive burden on patients, their families, health systems and societies globally. Disrupting the status quo has therefore become an obligation and a necessity.

Initiated by the Fragility Fracture Network (FFN) at a “Presidents’ Roundtable” during the 5<sup>th</sup> FFN Global Congress in 2016 several leading organisations agreed that a global multidisciplinary and multiprofessional collaboration, resulting in a Global Call to Action (CtA), would be the right step forward to improve the care of people presenting with fragility fractures. So far global and regional organisations in geriatrics/internal medicine, orthopaedics, osteoporosis/metabolic bone disease, rehabilitation and rheumatology were contacted as well as national organisations in five highly populated countries (Brazil, China, India, Japan and the United States), resulting in 81 societies endorsing the CtA.

We call for implementation of a systematic approach to fragility fracture care with the goal of restoring function and preventing subsequent fractures without further delay.

There is an urgent need to improve:

- Acute multidisciplinary care for the person who suffers a hip, clinical vertebral and other major fragility fractures
- Rapid secondary prevention after first occurrence of all fragility fractures, including those in younger people as well as those in older persons, to prevent future fractures
- Ongoing post-acute care of people whose ability to function is impaired by hip and major fragility fractures

To address this fragility fracture crisis, the undersigned organisations pledge to intensify their efforts to improve the current management of all fragility fractures, prevent subsequent fractures, and strive to restore functional abilities and quality of life.

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## Preface to the global call to action on fragility fractures

On September 25<sup>th</sup>, 2015, the United Nations (UN) adopted a set of goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years. Goal 3, sustainable development, aims to ensure healthy lives and promote wellbeing for all at all ages. This implies support of functional independence and participation.

Since global life expectancy is steadily increasing, the world is ageing. The world is therefore confronted with more and more health problems in the later years of life. This led the World Health Organisation (WHO) to declare the years 2020–2030 to be the “Decade of Healthy Aging”. One major burden threatening healthy ageing is fragility fractures that can occur at all ages but do so most frequently in the elderly.

One year later, in September 2016, the Fragility Fracture Network (FFN) convened a “Presidents Roundtable” during the 5<sup>th</sup> FFN Global Congress held in Rome. The purpose of the roundtable was to explore how several leading organisations could collaborate to improve the care of people presenting with fragility fractures. The organisations represented were the European Federation of National Associations of Orthopaedics and Traumatology (EFORT), European Geriatric Medicine Society (EuGMS), Fragility Fracture Network (FFN), International Collaboration of Orthopaedic Nursing (ICON)<sup>1</sup>, International Geriatric Fracture Society (IGFS) and the International Osteoporosis Foundation (IOF).

It was generally agreed that despite enormous efforts of individual organisations in recent years, aiming to improve the awareness of the problem and the management of people with fragility fractures, insufficient improvement has been achieved. The participating societies of the roundtable decided that a global

multidisciplinary and multiprofessional collaboration, resulting in a Global Call to Action (CtA), would be the right step forward.

Upon completion of drafting the final text of the CtA, the six organisations agreed that an invitation would be made to leading organisations throughout the world to add their organisation’s endorsement to the document prior to publication. Global and regional organisations in geriatrics/internal medicine, orthopaedics, osteoporosis/metabolic bone disease, rehabilitation and rheumatology were contacted as well as national organisations in five highly populated countries (Brazil, China, India, Japan and the United States).

We believe that a unified statement endorsed by the world’s leading societies in geriatrics/internal medicine, orthopaedics, osteoporosis/metabolic bone disease, rehabilitation and rheumatology would send a very strong message to policymakers globally. Further, the CtA is timely as the Third UN High-level Meeting on Non-Communicable Diseases (NCDs) will be staged by the UN General Assembly later this year.

The document has now been endorsed by 81 of the largest and most influential global and regional organisations as well as national societies in the five countries mentioned. A web-based presence for this initiative ([www.fragilityfracturenetwork.org/CtA](http://www.fragilityfracturenetwork.org/CtA)) will provide a platform for additional organisations to lend their endorsement to the document.

The sustainable development goals and the Decade of Healthy Ageing 2020–2030 offer a timely and favourable opportunity for increased global attention and action on musculoskeletal health.

A recent publication of the WHO bulletin [1] has pointed out, that: “to achieve the 2030 agenda for sustainable development and to promote and maintain health across the life course, a renewed and sustained focus on improving musculoskeletal health is needed at national and global levels . . .

Further development and dissemination of effective models of care is needed to inform promotive, preventative, rehabilitative and curative essential packages for universal health coverage; innovative service delivery options; and strategies to build

<sup>1</sup> ICON, <http://orthopaedicnursing.org/> (ICON is a virtual organisation).

workforce capacity and consumers' capacity to actively participate in care . . .

This will have the greatest impact if organisations that focus on noncommunicable diseases and injury work cooperatively to tackle the crosscutting challenges of health system reform."

In this spirit of cooperative action, the FFN has led the process of producing the CtA. The text – and the list of endorsing organisations – follows.

### **A global call to action to improve the care of people with fragility fractures**

The ageing of society is driving an enormous increase in fragility fracture incidence and imposing a massive burden on patients, their families, health systems and societies globally [2]. Disrupting the status quo has therefore become an obligation and a necessity. We call for implementation of a systematic approach to fragility fracture care with the goal of restoring function and preventing subsequent fractures without further delay.

There is an urgent need to improve:

- Acute multidisciplinary care for the person who suffers a hip, clinical vertebral and other major fragility fractures
- Rapid secondary prevention after first occurrence of all fragility fractures, including those in younger people as well as those in older persons, to prevent future fractures
- Ongoing post-acute care of people whose ability to function is impaired by hip and major fragility fractures

Older people with fragility fractures often have pre-existing chronic diseases impacting their general management, short-term and long-term survival rate and functional recovery. Minimising delirium and avoiding complications is critical for achieving good outcomes. Appropriate pain management, rapid optimisation of fitness for surgery and early surgery improve morbidity and mortality. Adequate preoperative investigations should allow identification and treatment of acute medical illness or exacerbations of chronic medical conditions [3].

Towards that goal it is increasingly recognised that people with fragility fractures should be managed in the context of a multidisciplinary clinical system, guaranteeing adequate and efficient preoperative assessment and preparation (Orthogeriatric Service - OGS). In people with hip fracture, the joint care model between geriatrician and orthopaedic surgeon on a dedicated orthogeriatric ward has been shown to drive shorter time to surgery, shorter length of inpatient stay and the lowest inpatient and 1-year mortality rate [4].

People of all ages with a fragility fracture have an increased future risk for subsequent fractures. However, numerous studies conducted in all regions of the world have clearly documented a major and unacceptable treatment gap after the fracture [5]. Therefore, fracture risk evaluation should be mandatory to inform therapeutic decisions in these high-risk patients. Pharmacological and non-pharmacological treatment options are available and efficient to prevent further fractures – yet 80% of people presenting with fragility fracture remain unidentified and untreated. The organisation of post-fracture care through coordinator-led Fracture Liaison Services (FLS) has in many countries improved the delivery of secondary preventive care, comprising both osteoporosis management and falls prevention. These services have been shown to improve re-fracture prevention in the younger as well as older patient groups [6,7].

As many as half of older people who were independent prior to sustaining a hip fracture fail to recover their pre-fracture ability to walk and carry out usual activities required to remain autonomous. Strategies for long-term rehabilitation that address these functional limitations also need implementation beyond the acute recovery

period; these too require management by multi-disciplinary care teams working with patients and their families [8].

To address this fragility fracture crisis, the undersigned organisations pledge to intensify their current efforts to improve the current management of all fragility fractures, prevent subsequent fractures, and strive to restore functional abilities and quality of life. The time is now and it requires we acknowledge that the status quo is no longer acceptable and that the opportunity starts with the next fractured patient!

In addition, they also call for specific actions in different sectors:

#### *Patient and patient advocacy organisations*

- To call for access to care at the right time, in the right place and by the right health care professionals so as to optimise patient outcomes and recovery after a fracture and to prevent further falls and fractures

#### *Individual health workers*

- to seek, create and follow evidence-based best practice
- to form multidisciplinary teams with colleagues to identify and address the needs of people with fragility fractures

#### *Health professional societies*

- to collaborate nationally and locally to form alliances to speak with a unified voice to policy makers
- to produce consensus guidelines setting clear standards for adequate care using the best available research evidence, and propose metrics to evaluate performance
- to expand education and research programs that can establish best practice

#### *Governmental organisations*

- to respond to the threat posed to their societies from fragility fractures
- to recognise the critical role that they play in establishing health systems capable of addressing this challenge
- to prioritise acute and long-term fragility fracture care and prevention in National Health Strategies
- to increase funding available to develop, implement and test care models (i.e. OGS and FLS) designed to improve outcomes for people with fragility fractures

#### *Insurers (private and public)*

- to reimburse the most effective services to improve the management and fracture prevention in people who sustain a fragility fracture
- to incentivise where appropriate the delivery of best care
- to provide additional resources for research on best practices for care of people who sustain fragility fractures

#### *Health systems and medical practices*

- to adopt and benchmark against quality standards
- to incentivise clinicians and health systems to deliver optimal acute and long-term management and secondary prevention of fragility fractures

- to provide additional resources for research on best practices for care of fragility fractures
- to collect and analyse information on people who sustain fragility fractures, their care and long-term outcomes and to use this information to effect changes in care and to monitor their progress and clinical outcomes

#### Industry

- to respond to care and service needs by developing and evaluating new products and technologies intended to improve patient outcomes through clear patient value
- to work collaboratively with professional societies, government organisations, universities, insurers and health care systems in the development and evaluation of these products and technologies
- to advocate globally for implementation of systematic approaches to fragility fracture care and fracture prevention like OGS and FLS.

The mandate is upon us to address the unacceptable crisis of under-recognised and undertreated people who have sustained an osteoporotic fracture. Our patients and society can no longer wait!

#### Endorsing organisations

The following 81 organisations have endorsed the Global Call to Action on Fragility Fractures. In order to illustrate the diversity of endorsement, in terms of both clinical specialty and geography, organisations are classified according to their specialty first, and secondly based on whether their membership is global, regional or national in composition.

#### Geriatrics

Global: International Association of Gerontology and Geriatrics (IAGG)

Regional: Asia Pacific Geriatrics Network (APGN), European Geriatric Medicine Society (EuGMS), International Association Gerontology Geriatrics - European Region (IAGG-ER) Clinical Section, Latin American and Caribbean Committee of Gerontology (COMLAT), Middle-East Academy for Medicine of Ageing (MEAMA), Middle-East Association on Aging and Alzheimer's (MEAAA)

National: American Geriatrics Society (AGS), Brazilian Society of Geriatrics and Gerontology (SBGG), Chinese Society of Geriatrics (CSG), Indian Academy of Geriatrics (IAG), Japanese Society for Fall Prevention (JSFP), Japan Geriatrics Society (JGS)

#### Multidisciplinary

Global: Fragility Fracture Network (FFN), Global Alliance for Musculoskeletal Health (G-Musc), International Geriatric Fracture Society (IGFS)

National: Fragility Fracture Network China (FFN-C), Fragility Fracture Network Greece (FFN-G), Fragility Fracture Network India (FFN-I), Fragility Fracture Network Japan (FFN-J), Fragility Fracture Network Lebanon (FFN-L), Fragility Fracture Network Norway (FFN-N), Musculoskeletal Infection Society (MSIS – USA), National Bone Health Alliance (NBHA – USA), United States Bone and Joint Initiative (USBJI)

#### Orthopaedics

Global: Cervical Spine Research Society (CSRS), International Collaboration of Orthopaedic Nursing (ICON), International Society of Orthopaedic Surgery and Traumatology (SICOT), Orthopaedic

Research Society (ORS), Orthopaedic Research Society - International Society for Fracture Repair (ORS-ISFR), Scoliosis Research Society (SRS)

Regional: Asia Pacific Orthopaedic Association (APOA), European Federation of National Associations of Orthopaedics and Traumatology (EFORT), European Hip Society (EHS), European Society for Trauma and Emergency Surgery (ESTES), EuroSpine (the Spine Society of Europe), Latin American Society of Orthopaedics and Traumatology (SLOAT), Pan Arab Orthopaedic Association (PAOA)

National: American Academy of Orthopaedic Surgeons (AAOS), American Association for Hand Surgery (AAHS), American Orthopaedic Association (AOA), American Orthopaedic Foot and Ankle Society (AOFAS), American Orthopaedic Society for Sports Medicine (AOSSM), American Shoulder and Elbow Surgeons (ASES), American Spinal Injury Association (ASIA), Arthroscopy Association of North America (AANA), Brazilian Orthopaedic Association of Osteometabolism (ABOOM), Brazilian Society of Orthopedics and Traumatology (SBOT), Chinese Orthopaedic Association (COA), Hip Society (HipSoc – USA), Indian Orthopaedic Association (IOA), Japanese Orthopaedic Association (JOA), Japanese Society for Fracture Repair (JSFR), Limb Lengthening and Reconstruction Society (LLRS – USA), Musculoskeletal Tumor Society (MSTS – USA), Orthopaedic Trauma Association (OTA – USA), Ruth Jackson Orthopaedic Society (RJOS – USA), Society of Military Orthopaedic Surgeons (SOMOS – USA)

#### Osteoporosis/Metabolic bone disease

Global: American Society for Bone and Mineral Research (ASBMR), International Osteoporosis Foundation (IOF)

Regional: Asian Federation of Osteoporosis Societies (AFOS), European Calcified Tissue Society (ECTS)

National: Brazilian Association for Bone Health Assessment and Osteometabolism (ABRASSO), Indian Society for Bone and Mineral Research (ISBMR), Japan Osteoporosis Society (JOS), Japanese Society for Bone and Mineral Research (JSBMR), National Osteoporosis Foundation (NOF – USA)

#### Rehabilitation

Global: International Society of Physical and Rehabilitation Medicine (ISPRM)

Regional: Asia-Oceanian Society of Physical and Rehabilitation Medicine (AOSPRM), European Society of Physical and Rehabilitation Medicine (ESPMR)

National: Academy of Geriatric Physical Therapy (AGPT), a component of the American Physical Therapy Association (APTA), Chinese Geriatrics Society of Rehabilitation (CGS), Brazilian Association of Physical Medicine and Rehabilitation (ABMFR), Chinese Medical Association of Physical Medicine and Rehabilitation (CMAPMR)

#### Rheumatology

Global: International League Against Rheumatism (ILAR)

Regional: African League Against Rheumatism (AFLAR), Asia Pacific League of Associations for Rheumatology (APLAR), European League Against Rheumatism (EULAR), Pan-American League of Rheumatology Associations (PANLAR)

National: American College of Rheumatology (ACR), Japan College of Rheumatology (JCR)

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## Disclosures

Karsten Dreinhöfer (KD): KD has no disclosures relating to this work. KD has undertaken consultancy for governments, national osteoporosis societies, healthcare professional organisations and private sector companies relating to systematic approaches to fragility fracture care and prevention since 2004.

Cyrus Cooper (CC): CC has no disclosures relating to this work. CC has received consulting fees and honoraria from Amgen, Danone, Eli Lilly, GSK, Medtronic, Merck, Nestle, Novartis, Pfizer, Roche, Servier, Shire, Takeda, and UCB.

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