



IOF
CAPTURE *the*
FRACTURE

INTERNATIONAL FRACTURE LIAISON SERVICE TOOLKIT

INTRODUCTION

WHY HAVE A TOOLKIT FOR FRACTURE LIAISON SERVICES?

The International Osteoporosis Foundation (IOF) has developed this toolkit to facilitate the implementation of Fracture Liaison Services (FLS). Used in conjunction with resources from the IOF Capture the Fracture® initiative (www.capturethefracture.org), the toolkit gives those wanting to establish an FLS the case for, and the resources to, enable FLS expansion.

WHAT'S IN THIS TOOLKIT

The following tools are to support clinicians, health administrators and policymakers in the implementation of effective FLS based on successful experiences from established high performing FLS.

1. Understanding the need for FLS

A guide to understanding the size of the problem and why FLS is the solution to secondary fracture prevention.

2. FLS implementation guide

A step-by-step 'how to' guide to design and implement an FLS in hospitals and health systems throughout the world.

3. FLS business planning process guide

A tool intended to support clinicians and health administrators in the FLS business planning process, including a generic FLS business plan template.

4. Multi-sector FLS coalition guide

A tool intended for national osteoporosis societies and national healthcare professional organizations to establish an effective national coalition to drive widespread adoption of FLS in your country.

HOW TO USE THIS TOOLKIT

Use Tools 1 - 4 for implementing an FLS.

This document contains resources and links of case studies and success stories that can be used to model your FLS.

TOOL #1 UNDERSTANDING THE NEED FOR FLS

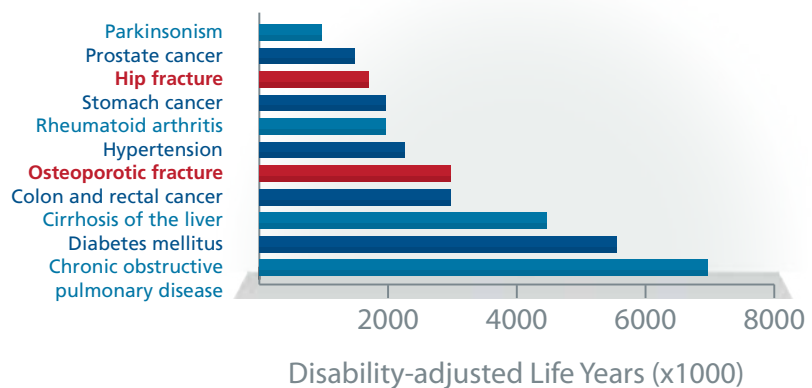
WHY SECONDARY FRACTURE PREVENTION SHOULD BE A PUBLIC HEALTH PRIORITY

FRACTURES AFFECT THE QUALITY OF LIFE OF PATIENTS:

After a hip fracture, 80% of patients are unable to perform basic tasks independently, and up to 64% are admitted to a nursing home.

In women over 45 years of age, osteoporosis accounts for more days in hospital than diabetes, heart attacks or breast cancer⁴.

Osteoporosis: Burden of disability¹



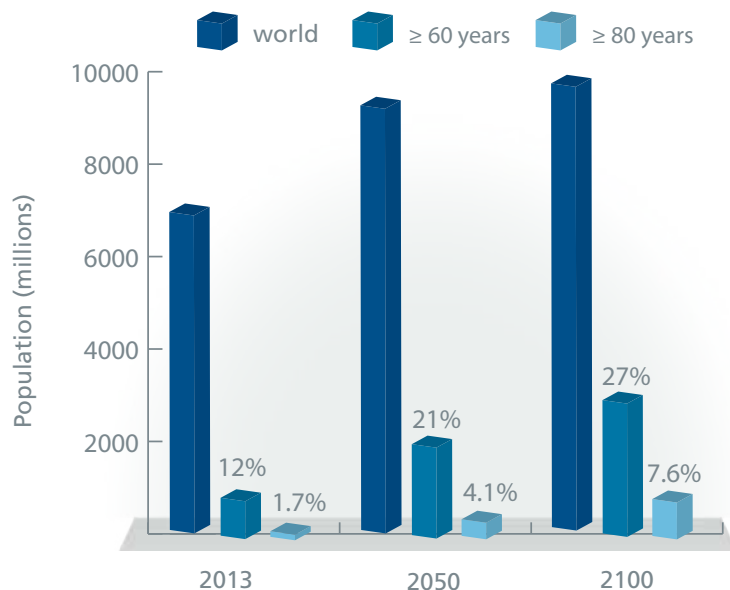
INCIDENCE OF FRACTURES IS EXTREMELY HIGH AND WILL INCREASE WITH THE AGEING POPULATION:

Worldwide, 8.9 million fragility fractures occur every year. 1 in 3 women and 1 in 5 men aged over 50 years will experience an osteoporotic fracture.

Hip fracture rates alone are set to rise 310% in men and 240% in women by 2050.

By 2050 the number of older persons worldwide is projected to more than double to 2 billion and is expected to more than triple by 2100 close to 3 billion.

Growth and ageing of the world's population during the 21st century²



FRACTURES ARE A HUGE ECONOMIC BURDEN

The costs associated with fragility fractures are currently enormous for Western populations and expected to dramatically increase in Asia, Latin America and the Middle East as these populations age.

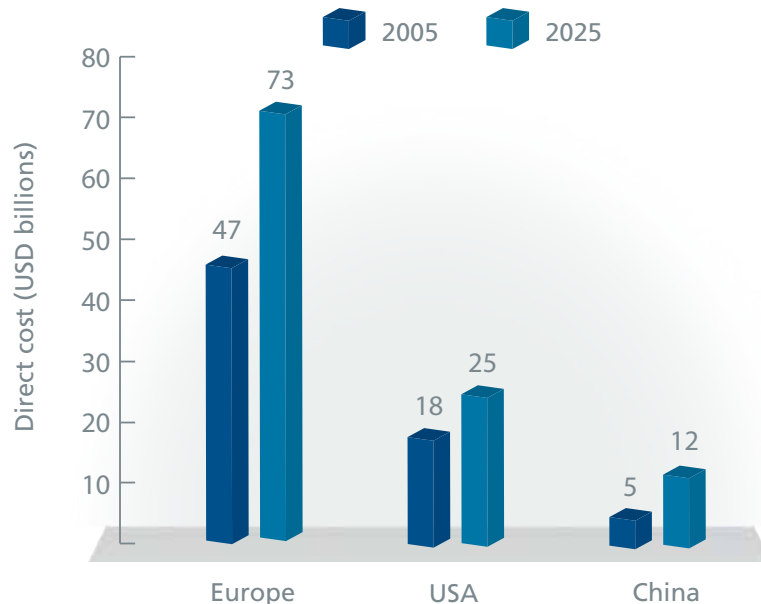
United States: fragility fractures cost approximately 20 billion USD per year.

China: hip fracture costs are estimated to increase from 1.6 billion USD in 2006 to 12.5 billion USD by 2020 and 265 billion USD by 2050³.

European Union: fragility fractures cost in excess of €37 billion each year⁴.

Mexico: hip fracture costs are estimated to increase from 97 million USD in 2006 to 213-466 million USD by 2025 and 555 million to 4.1 billion USD by 2050⁵.

Estimated cost of fractures



THERE IS A CARE GAP WHICH NEEDS TO BE URGENTLY ADDRESSED

Over 80% of fracture patients are never offered screening for future fracture risk and/or treatment for osteoporosis.

Around the world fragility fracture patients:

- Fail to be evaluated or tested for osteoporosis;
- Remain untreated for osteoporosis;
- Lack prescriptions for osteoporosis specific medication;
- Are neither diagnosed nor documented;
- Never learn about the underlying cause of their fracture;
- Frequently go on to break another bone.

USEFUL RESOURCES

THE CARE GAP

List of care gap surveys at the international, national, regional and local levels: www.capturethefracture.org click on 'Resources' and 'Audits and Surveys'

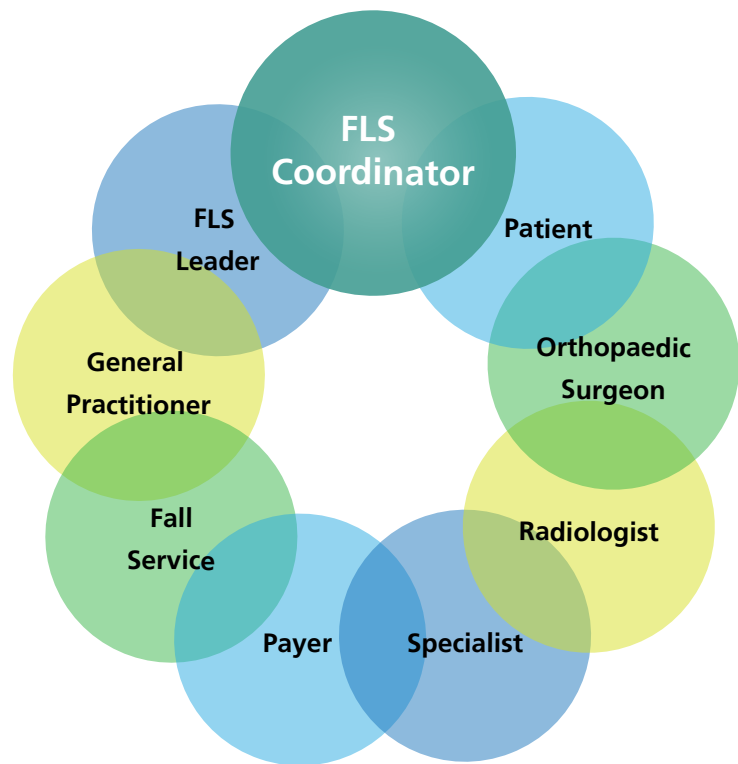
List of calls to action to end the care gap: www.capturethefracture.org/calls-action

A PROVEN SOLUTION: THE IMPLEMENTATION OF A COORDINATOR FLS APPROACH

Coordinator-based models of care, often called Fracture Liaison Services (FLS), are coordinator-based, secondary fracture prevention services implemented by health care systems for the treatment of osteoporotic patients. FLS are designed to:

- Close the care gap for fracture patients, 80% of whom are currently never offered screening and/or treatment for osteoporosis.
- Enhance communication between health care providers by providing a care pathway for the treatment of fragility fracture patients.

Studies show that FLS bring a 135% increase in patients receiving osteoporosis treatment where necessary, and 95% of fracture patients are accurately diagnosed with osteoporosis in an FLS system.



USEFUL RESOURCES

SIZE OF THE PROBLEM

IOF regional audits on the epidemiology, costs and burden of osteoporosis: www.iofbonehealth.org/regional-audits

Modelling of the costs of second fractures and the impact of effective FLS are available at national, regional and local levels: www.capturethefracture.org/health-economics

SCOPE: A scorecard for osteoporosis in Europe: www.ncbi.nlm.nih.gov/pubmed/24030479

TOOL #2 FLS IMPLEMENTATION GUIDE

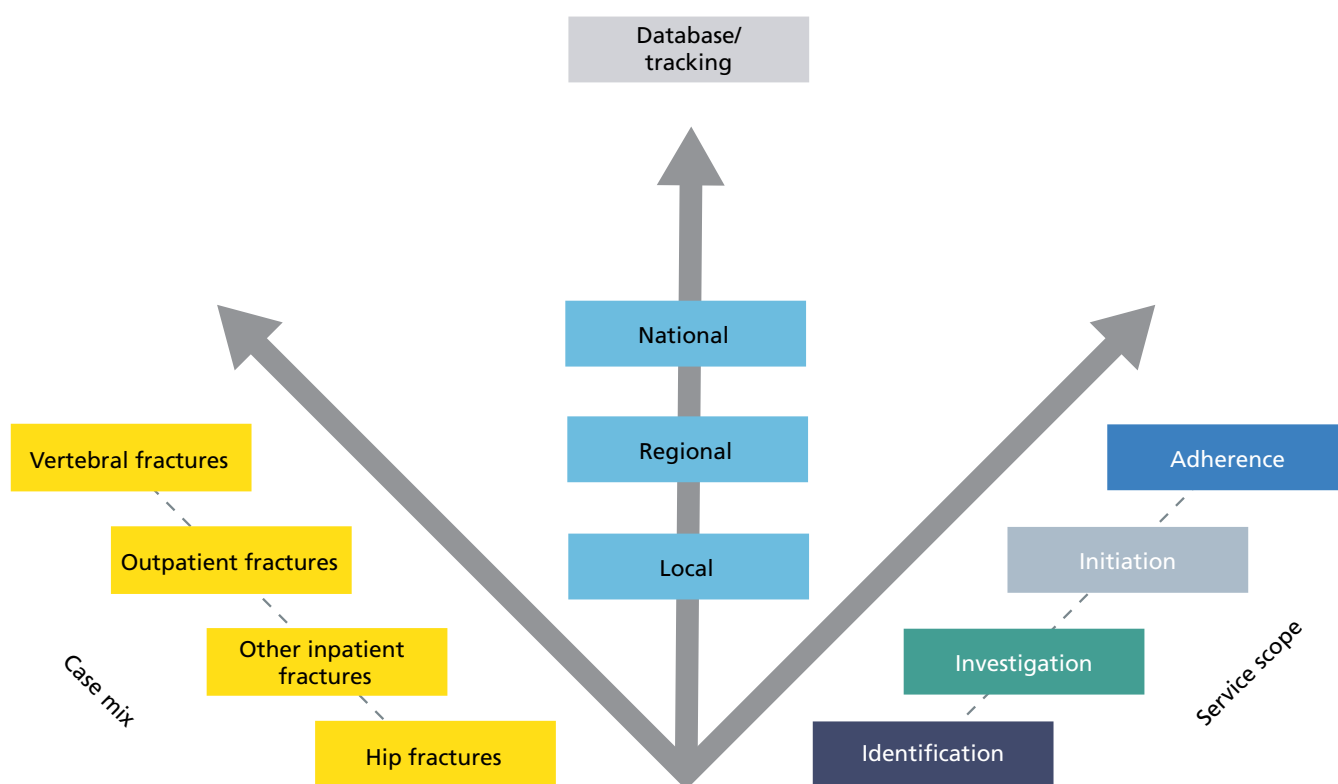
The FLS Implementation guide is intended to support clinicians and hospital or health system administrators to establish a high-performing FLS.

GETTING STARTED AND EXPANDING YOUR FLS

START AN FLS MODEL

The 2012 World Osteoporosis Day Report launched the Capture the Fracture® Campaign on a worldwide basis. As part of the IOF global health campaign, a Best Practice Framework (BPF) was developed and published in 2013 to provide globally endorsed standards of care for FLS. On account of the variation in structure of healthcare systems throughout the world, IOF consulted with leading experts from many countries who have established FLS in their localities and undertook beta-testing to ensure that the standards were internationally relevant and fit-for-purpose.

The BPF sets 13 criteria as an international benchmark for FLS, which defines essential and aspirational elements of service delivery. The graph below summarizes the steps to implement an FLS model of care:



The primary objectives of an FLS are to establish critical procedures to ensure identification and tracking of fracture patients, initiation of treatment and assessments of the FLS system. Thirteen criteria are described in the BPF documents to guide healthcare systems and assist them to focus on key priorities. These criteria (table below) are summarized under 5 major categories:

Identify the patients

- Identify the patients presenting with fragility fractures (criteria 1) and establish reliable mechanisms within a hospital or health system to identify all women and men aged ≥ 50 years who present with fragility fracture.
- Vertebral fracture patients represent a different challenge for case finding given the majority will be detected by chance (criteria 4): develop a system whereby patients with previously unrecognised vertebral fractures are identified and undergo secondary fracture prevention evaluation. The gold standard is more aspirational as vertebral fractures are difficult to identify however, since vertebral fractures are the most common fragility fracture, it would be remiss to not include an attempt to identify them in this framework.

1

Investigate Undertake assessment of risk factors for osteoporosis, falls and future fractures in accordance with relevant clinical guidelines:

- Patient evaluation (criteria 2): ascertain what proportion of all patients presenting to the institution or system with a fracture are evaluated for future fracture risk.
- Post fracture assessment timing (criteria 3): ensure a formal fracture risk assessment is performed at an appropriate time after the fracture.
- Assessment guidelines (criteria 5): ensure the assessment for fracture risk is consistent with local/regional/national guidelines and where appropriate include bone density testing.
- Secondary causes of osteoporosis (criteria 6): ensure that patients with low BMD / high fracture risk are screened for secondary causes.
- Multifaceted risk-factor assessment (criteria 8): ensure that underlying lifestyle factors are assessed and, if found, addressed.
- Medication review (criteria 10): ensure patients that have fractured whilst receiving treatment for osteoporosis are assessed for compliance and consideration of alternative osteoporosis medications/ optimization of non-pharmacological interventions.

2

Initiate

- Medication initiation (criteria 9): ensure patients who are eligible for treatment are initiated on osteoporosis medications.
- Fall prevention service (criteria 7): evaluate all patients to determine whether falls prevention services are needed.
- Communication strategy (criteria 11): ensure the FLS management plan is communicated to relevant clinical colleagues in primary and secondary care.

3

Adherence

- Long-term management (criteria 12): check osteoporosis treatment adherence and tolerability by 6 and 12 months to inform treatment reinforcement or switching within relevant clinical guidelines.

4

Database

- Database standard (criteria 13): record all identified fragility fracture patients in a database locally, regionally and/or nationally.

5

SUMMARY OF THE 13 CRITERIA FROM THE BEST PRACTICE FRAMEWORK

BPF STANDARD	LEVEL 1	LEVEL 2	LEVEL 3
1. Patient Identification	Patients ID'd, not tracked	Patients ID'd, are tracked	Patients ID'd, tracked & Independent review
2. Patient Evaluation	50% assessed	70% assessed	90% assessed
3. Post Fracture Assessment Timing	Within 13-16 weeks	Within 9-12 weeks	Within 8 weeks
4. Vertebral Fracture (VF) ID	Known VF assessed	Routinely assesses for VF	Radiologists identify VF
5. Assessment Guidelines	Local	Regional	National
6. Secondary Causes of Osteoporosis	50% of patients screened	70% of patients screened	90% of patients screened
7. Falls Prevention Services	50% of patients evaluated	70% of patients evaluated	90% of patients evaluated
8. Multifaceted Assessment	50% of patients screened	70% of patients screened	90% of patients screened
9. Medication Initiation	50% of patients initiated	70% of patients initiated	90% of patients initiated
10. Medication Review	50% assessed	70% assessed	90% assessed
11. Communication Strategy	Communicates to doctor	Communicates to doctor w/ %50 criteria	Communicates to doctor w/ %90 criteria*
12. Long-term Management	1 year follow-up		6 month follow-up & 1 year follow-up
13. Database	Local	Regional	National

*Criteria: FRAX, DXA, Vertebral DXA/x-ray, primary risk factors, secondary risk factors, falls risk, current medications, medication compliance, follow-up plan, lifestyle risk-factors, time since last fracture.

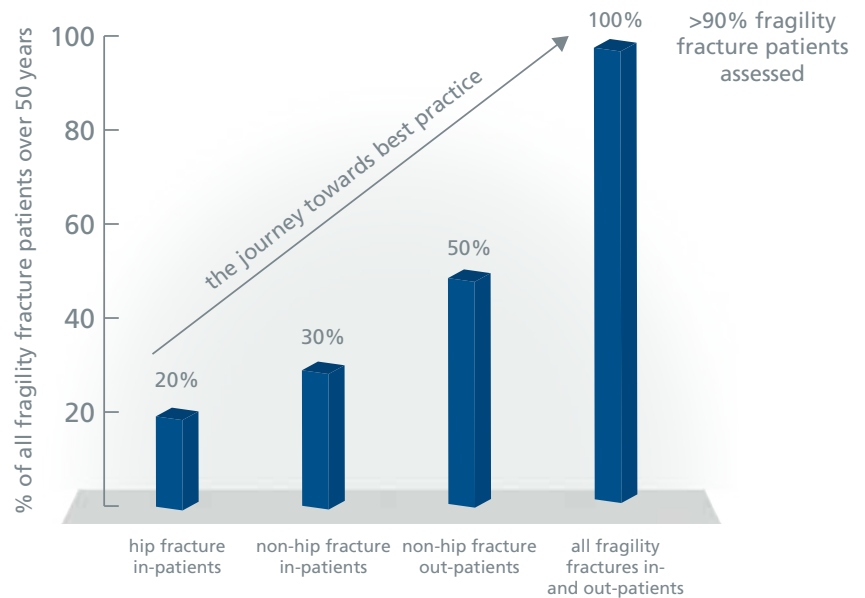


EXPAND AN FLS MODEL

Six approaches can be followed to expand an FLS system

- Increase the scope of FLS based on fractures types: starting with hip fracture then incorporating other fracture types (non-hip patients, then outpatients and finally vertebral patients).
- Implement an FLS Centre of Excellence with subsequent expansion to other localities.
- Increase gradually in the intensity of the FLS model from a 2iM model to a 3iM model that includes monitoring at 6 and 12 months.
- Enhance the intervention based on patient identification from regional/provincial healthcare administrative databases or other electronic medical record systems.
- Implement a region/province wide Type A (3i) model of FLS from the outset to maximize health gains in the shortest time-frame possible.
- Case find vertebral fractures through diagnostic imaging.

Definition of the patient groups to be targeted by post-fracture services



USEFUL RESOURCES

The full details of the 13 best practice criteria are at www.capturethefracture.org/framework-breakdown, and are available in the Osteoporosis International publications which can be downloaded free of charge via www.ncbi.nlm.nih.gov/pubmed/23589162.

Osteoporosis Canada's 'Making the FIRST fracture the LAST with Fracture Liaison Services' initiative provides useful commentary on this issue. See Appendix L at: www.osteoporosis.ca/wp-content/uploads/Appendix-L.pdf

Osteoporosis Canada's 'Making the FIRST fracture the LAST with Fracture Liaison Services' initiative. See Appendix G at: www.osteoporosis.ca/wp-content/uploads/Appendix-G.pdf

STEP-BY-STEP GUIDE TO FLS PLANNING AND DEVELOPMENT

The Plan-Do-Study-Act (PDSA) rapid process improvement methodology has been used by groups that have established successful and sustainable FLS in the UK and the United States. An overview of the application of PDSA cycles to FLS development is provided below, in addition to links to other useful resources.

PLAN

- **Ensure management protocols are approved by appropriate local and national organizations before FLS clinics are initiated**
- **Establish a multi-disciplinary FLS project team who will support and endorse the FLS and which will likely include the following individuals in your hospital or health system:**
 - Lead Champion for Osteoporosis
 - FLS Coordinator
 - Orthopaedic surgeon with interest in hip fracture surgery
 - Geriatrician, Endocrinologist, Rheumatologist
 - Radiology specialists for DXA
 - Relevant specialist nurses, physiotherapists and Allied Health Care Professionals
 - Representative of hospital or health system pharmacy group
 - Representative of local primary care physicians
 - Representative from hospital or health system administration responsible for new services
 - Patients, charity sector and public involvement
 - Health systems management funders
- **Conduct a baseline audit to establish care gap for fragility fracture sufferers using the Capture the Fracture® BPF toolkit:**
 - Number of women and men aged ≥ 50 years attending with fragility fracture
 - Proportion of women and men aged ≥ 50 years receiving post-fracture osteoporosis care in accordance with relevant clinical guidelines (BMD testing and osteoporosis medications)
 - Review any data from previous local audits of fragility fracture care
- **Design FLS service model:**
 - Write specific and time-dependent aims and objectives
 - Identify how you will capture fragility fracture patients
 - Write case-finding protocols for the appropriate setting, e.g. inpatient ward, fracture clinic, diagnostic imaging, etc.
 - Decide what to include in your service model (see BPF)
 - Ensure all members of multi-disciplinary FLS project team endorse the prototype FLS model
- **Discuss all documentation and communication mechanisms with relevant stakeholders**
- **Fund it: Engage hospital or health systems management to fund pilot phase & consider basic costs**

DO

- Implement prototype service model
- Collect audit data throughout pilot phase

STUDY

- Analyse improvement in provision of care from audit using the BPF toolkit and submit your application to IOF's Capture the Fracture® initiative
- Refine prototype service model to improve performance further

ACT

- Implement changes and monitor performance improvement
- Repeat PDSA cycle through continuous ongoing audit and review



THE IOF CAPTURE THE FRACTURE® CAMPAIGN AND HOW TO SHOWCASE YOUR FLS

The 2012 World Osteoporosis Day Report launched the Capture the Fracture® Campaign on a worldwide basis. The objectives of Capture the Fracture® are to:



Provide internationally endorsed standards for best practice in secondary fracture prevention through

- The Best Practice Framework (for FLS)
- Best Practice Recognition
- Showcase of Best Practices



Facilitate change at a local and national level through

- Implementation of guides and toolkits
- National Mentoring programme
- Grant programme for developing systems



Raise awareness of FLS for preventing secondary fractures through

- An on-going communications plan
- An anthology of literature, worldwide surveys and audits
- The international coalition of partners and endorsers

The Capture the Fracture® Best Practice Framework has four key objectives:

- To set the standard in global, coordinator-based, post-fracture models of care.
- To serve as the criteria from which IOF will award “best practice” recognition to FLS globally.
- To be multi-tiered (Gold/Silver/Bronze) to include systems that are in place but have not reached Gold level status.
- To generate information about care gaps that exist within systems globally, and use this information to offer assistance in implementing coordinator-based, post-fracture models.

In order to receive Capture the Fracture® Best Practice Recognition, FLS are invited to submit an application which describes how the FLS delivers care for four fragility fracture patient groups – hip fractures, other in-patient fractures, outpatient fractures and vertebral fractures – and how it is organized. IOF processes the applications, generates a draft summary profile for each of the 5 domains (on a scale of gold, silver, bronze or unclassified), corresponds with the site to seek further clarification as needed and gains feedback on the draft summary profile before approving a final summary profile. At that point, the site will have the opportunity to feature on the Map of best practice.

The Map of best practice provides an opportunity for those developing FLS to identify examples of best practice and learn from the experience of colleagues elsewhere who have successfully established an FLS. At the time of writing, 81 FLS are presented on the Map of Best Practice .

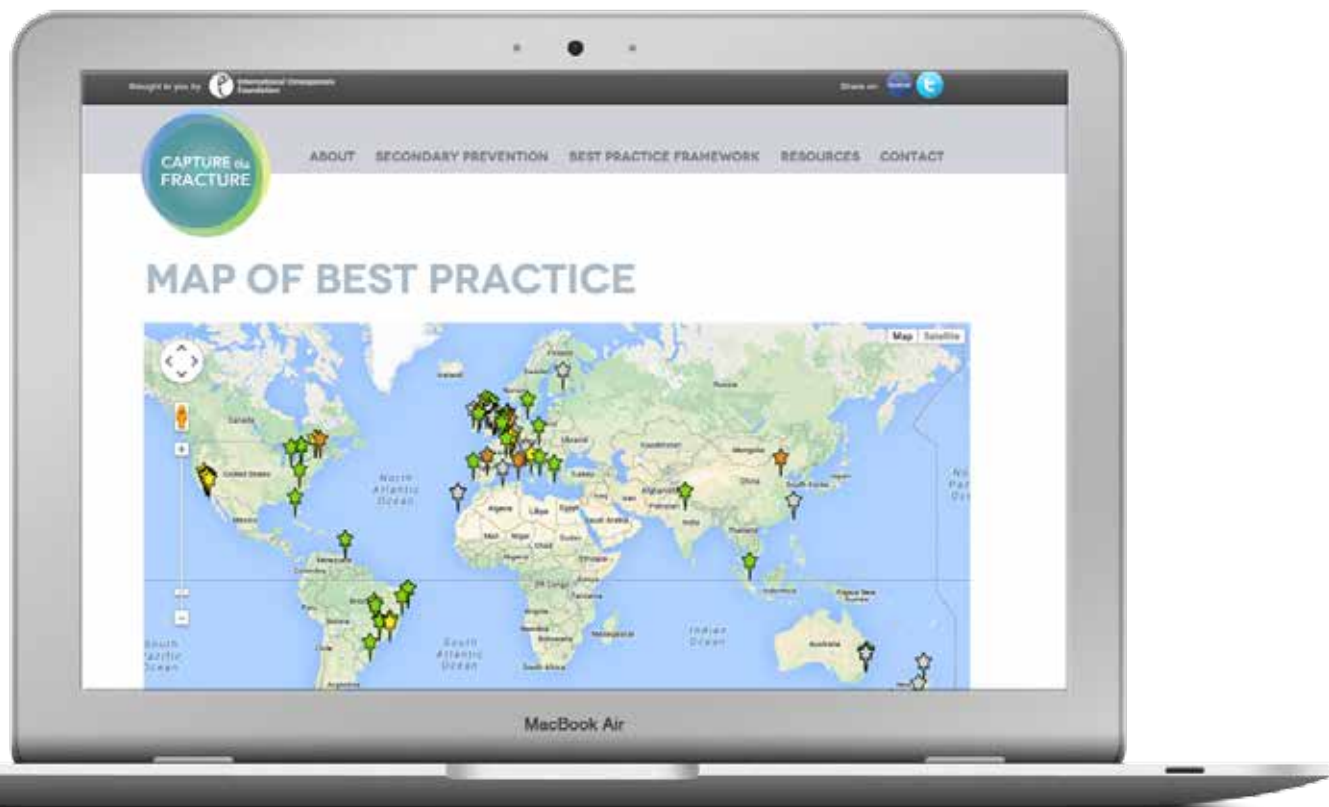
In addition to the three key process steps of an effective FLS mentioned previously – identification, investigation and initiation – the BPF highlights another crucial element of effective post-fracture care; long-term adherence with treatment. As with many chronic diseases, a significant proportion of patients initiated on osteoporosis treatments will discontinue therapy without effective support. In this regard,

FLS are well placed to capitalise upon a 'teachable moment' post-fracture, and long-term adherence with treatment has been shown to be far superior for patients managed by FLS compared to rates usually reported in the literature.

In addition to providing globally endorsed standards

of care against which FLS can benchmark their performance, the BPF is useful to hospital and health systems that are in the process of establishing an FLS. A good illustration of this point comes from New Zealand. Pursuant to inclusion of FLS as an expectation in the 2013-2014 District Annual Plans for New Zealand's District Health Boards⁶,

in FLS Workshops facilitated by the Ministry of Health, the BPF has proved a useful resource to centres beginning development of their FLS plans. In a similar vein, Osteoporosis Canada has highlighted the BPF as a useful resource in its FLS initiative 'Make the FIRST break the LAST with Fracture Liaison Services' (see Appendix L)⁷.



USEFUL RESOURCES

The IOF Capture the Fracture® Best Practice Framework publications and application form is available at: www.capturethefracture.org/best-practice-framework

See Chapter 4 of national FLS Toolkits for Australia and New Zealand on the IOF Capture the Fracture® website at www.capturethefracture.org/national-toolkits. Osteoporosis Canada's Making the FIRST fracture the LAST with Fracture Liaison Services initiative provides a comprehensive suite of resources in Appendices H, I and J at: www.osteoporosis.ca/fracture-liaison-service. The National Bone Health Alliance in the United States also provides extensive resources on FLS implementation at www.nbha.org/fpc/implementing-fls (n.b. visitors can access these materials by registering with this site for free).

MAP OF BEST PRACTICE

IOF has established an international 'Map of Best Practice' as a component of the Capture the Fracture® Best Practice Framework, (next section of this guide). The map recognises FLS that have been benchmarked against the global standards for FLS described in the Best Practice Framework. Look at FLS in your country which feature on the map at www.capturethefracture.org/map-of-best-practice

SUCCESSFUL FLS CASE STUDIES

The following examples illustrate that successful FLS have been established throughout the world, and provide those at the outset of FLS implementation with useful insights on how they have established their services. IOF also maintains a more comprehensive list of publications from leading FLS at www.capturethefracture.org/case-studies-successful-services.



Concord Reparation General Hospital, Sydney, Australia

Cost-effectiveness of the Concord Minimal Trauma Fracture Liaison service, a prospective, controlled fracture prevention study⁸.



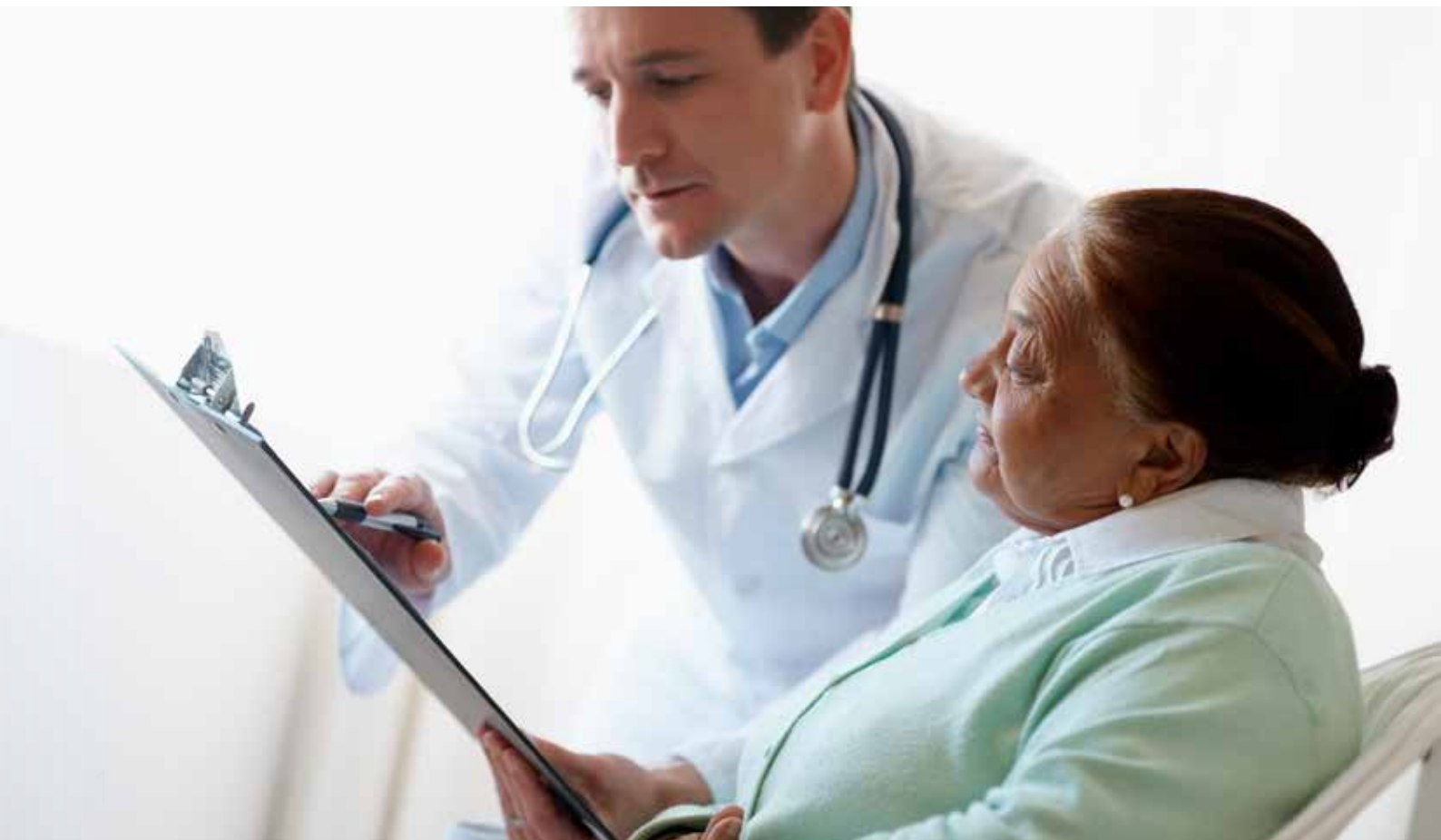
St. Michael's Hospital, Toronto, Canada

A coordinator program in post-fracture osteoporosis management improves outcomes and saves costs⁹.



Academic Hospital of Maastricht, Netherlands

Impact of guideline implementation by a fracture nurse on subsequent fractures and mortality in patients presenting with non-vertebral fractures¹⁰.





The OPTIMAL Program, Singapore

Secondary prevention of osteoporotic fractures - an "OPTIMAL" model of care from Singapore¹¹.



Glasgow, Scotland

Fracture liaison services for the evaluation and management of patients with osteoporotic fracture: a cost-effectiveness evaluation based on data collected over 8 years of service provision¹².



Kaiser Healthy Bones Program, United States of America

Osteoporosis disease management: What every orthopaedic surgeon should know¹³.

USEFUL RESOURCES

FLS MODELS OF CARE

Entities that have adopted FLS models of care:

- International Osteoporosis Foundation Capture the Fracture®: www.capturethefracture.org
- New South Wales Agency for Clinical Innovation Musculoskeletal Network: www.aci.health.nsw.gov.au/__data/assets/pdf_file/0003/153543/aci_osteoporotic_refracture.pdf#zoom=100
- UK National Osteoporosis Society: www.nos.org.uk
- Osteoporosis Canada: www.osteoporosis.ca/fracture-liaison-service
- Osteoporosis New Zealand: www.osteoporosis.org.nz/about-us/our-strategy
- National Bone Health Alliance: www.nbha.org/projects/secondary-fracture-prevention-initiative
- American Orthopaedic Association Own the Bone: www.ownthebone.org/about-own-the-bone.aspx

Case studies of successful FLS models of care: www.capturethefracture.org/case-studies-successful-services

Case finding patients for FLS: www.capturethefracture.org/identifying-patients

Guidelines and policies for FLS: www.capturethefracture.org/guidelines-policies-fls

List of literature pertaining to FLS: www.capturethefracture.org/anthology-literature

TOOL #3 FLS BUSINESS PLANNING PROCESS GUIDE

This guide is intended to support clinicians and hospital or health system administrators to develop a robust business plan which makes the case for allocation of resources to support implementation of a high-performing FLS. IOF has developed a generic FLS business plan template which can be downloaded as an editable MS Word document from www.capturethefracture.org/sites/default/files/fls-business_plan_template.docx. This business plan template provides a starting point for business plan development in countries that currently do not have available templates tailored to the national health system. For those working in the following countries, IOF is aware that specific business plan templates have been developed as indicated:

Australia: Business plan template included as Appendix 2 of the Australian FLS Resource Pack available at www.capturethefracture.org/themes/capture/files/Australian-FLS-Resource-Pack.pdf.

Canada: Business plan template included as Appendix E of the Osteoporosis Canada document 'Make the First Break the Last with Fracture Liaison Services' available at www.osteoporosis.ca/fracture-liaison-service.

New Zealand: Business plan template included as Appendix 2 of the New Zealand FLS Resource Pack at www.capturethefracture.org/themes/capture/files/NZ-FLS-Resource-Pack.pdf.

United States of America: Business plan template and slide presentation are available at www.nbha.org/fpci/business-plans (n.b. visitors can access these materials by registering with this site for free).

Clinicians and hospital or health system administrators working in countries where successful FLS have been established could approach the leads of established FLS in their countries to gain insight on how their business planning process worked. In the UK, the team responsible for development of the high-performing Glasgow FLS^{12,17} shared their experiences with colleagues throughout the country, which played a crucial role in expediting the widespread adoption of FLS in the UK¹⁸.

KEY SUCCESS FACTORS IN AN FLS BUSINESS PLANNING PROCESS

1

Early engagement between the clinical leads of the proposed FLS and local hospital or health system administrators (n.b. we recommend that readers review tool#2: the IOF FLS Implementation guide on page 6).

2

A clear understanding of the management gap in the particular hospital or health system at baseline and the required capacity of the FLS.

3

Identification of where secondary fracture prevention features in national clinical guidelines, particularly those that are considered mandatory, and national healthcare policy. This should be clearly stated within the FLS business plan.

4

Development of a fully costed business plan. Health economic modelling of FLS is inevitably country-specific on account of costs to implement FLS, and savings associated with reduced incidence of secondary and subsequent fractures, varying between different countries' health systems. However, published economic modelling of FLS from Australia⁸, Canada⁹, the UK^{12,14} and the United States^{15,16} provide case studies that can be considered by those establishing FLS in other countries.

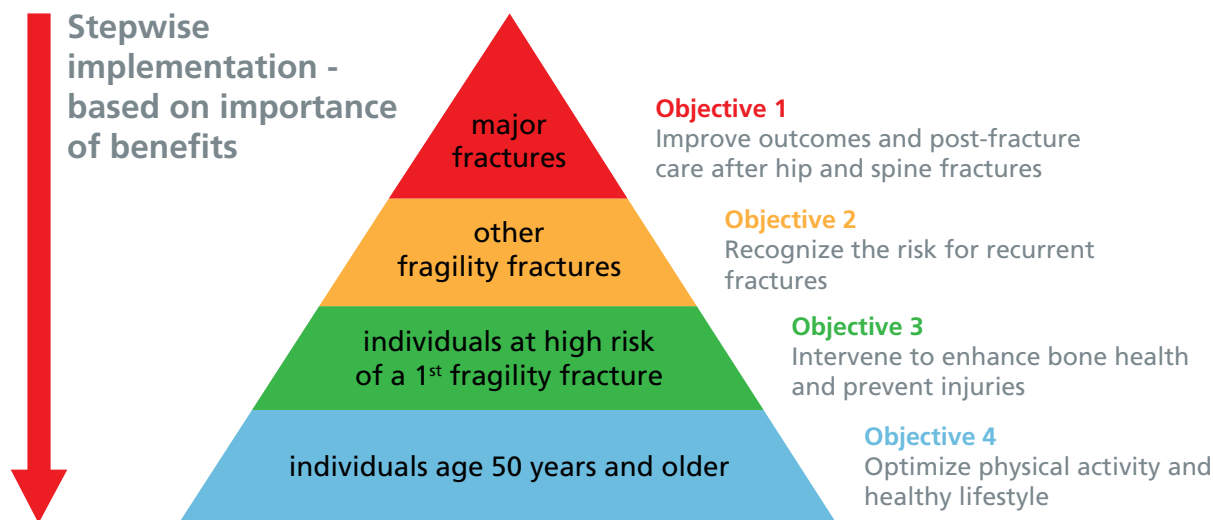
TOOL #4 MULTI-SECTOR FLS COALITION GUIDE

HOW TO DEVELOP A MULTI-SECTOR FLS COALITION

The experience from the UK and United States of developing national multi-sector coalitions (see more details in the next section), which advocate for the widespread implementation of FLS, serves to illustrate the key steps in the development of such a coalition. Implement a region/province wide Type A (3i) model of FLS from the outset to maximize health gains in the shortest time-frame possible. Implement a region/province wide Type A (3i) model of FLS from the outset to maximize health gains in the shortest time-frame possible.

- 1. To begin, one organization must take the initiative:** Just as an individual FLS in a hospital or local health system requires a champion to advocate for its initial establishment, at the national level an organisation must be prepared to champion the establishment of the multi-sector coalition. The most likely organizations to assume this role would be the national osteoporosis society and/or a leading healthcare professional organization, such as the national association of endocrinologists, rheumatologists, geriatricians or orthopaedic surgeons.
- 2. Formation of a multi-sector strategy group:** The lead organization must identify and invite other key organizations to join the national coalition, which are likely to include:
 - **Patient organizations**
 - i. The national osteoporosis society
 - ii. Not-for-profit groups representing older people's interests (e.g. Age UK, AARP [USA])
 - **Professional organizations**
 - i. Endocrinology
 - ii. Geriatrics
 - iii. Nursing
 - iv. Orthopaedics
 - v. Primary care
 - vi. Rheumatology
 - **Private sector (funder/commissioner/payer)**
 - i. Health Management Organizations
 - ii. Imaging manufacturers
 - iii. Insurance companies
 - iv. Medical device manufacturers
 - v. Pharmaceutical manufacturers
 - **Policymakers**
 - i. Liaisons from relevant government departments and agencies (e.g. the National Bone Health Alliance in the United States has four federal government agency liaisons from the Centers for Disease Control and Prevention, National Aeronautics and Space Administration, National Institutes of Health and the U.S. Food and Drug Administration¹³)
 - ii. Representation from osteoporosis special interest groups for politicians (e.g. the All-Party Parliamentary Osteoporosis Group [UK])

3. Achieve consensus on a systematic approach: All members of the multi-sector coalition must reach consensus regarding how a systematic approach can be applied in their country. The approach advocated by IOF²⁰⁻²³, which includes implementation of FLS for all urgent care facilities which receive fragility fracture patients, has been employed in Australia²⁴⁻²⁶, Canada^{7,27,28}, New Zealand^{6,29}, Singapore^{11,30}, UK^{14,31,32} and the United States^{119,33-35}. All of these strategies employ an approach similar to that developed in 2009 by the Department of Health for England, illustrated below:



4. Lobbying programme: Lobbying government agencies and politicians provides an opportunity to shape or create, de novo, national policy on fracture care and prevention. The coalition must identify key priorities for lobbying activities and assign realistic timeframes to achieve the desired change. Osteoporosis New Zealand's strategy BoneCare 2020²⁹ provides an illustration of this approach. Published in late 2012, BoneCare 2020 called for specific steps to eliminate the secondary fracture prevention care gap in the period 2012-2015:

- A Fracture Liaison Service to be established in every hospital or District Health Board (DHB) in New Zealand to case-find all new fragility fracture patients.
- A systematic approach to case-finding the last 5 years' fracture patients in every primary care practice in New Zealand.
- To drive public awareness that fracture begets fracture and that effective, safe treatments to prevent fractures are available (in New Zealand) as daily or weekly pills, or daily or annual injections.

The key process steps to achieve these objectives were formation of a National Fragility Fracture Alliance, creation of Ministerial requirements for hip fracture care and prevention, and Osteoporosis New Zealand to work with the Royal New Zealand College of General Practitioners to develop clinically effective and cost-effective programmes for primary fracture prevention for implementation in the period 2016-2020. In response to BoneCare 2020, the Ministry of Health set an expectation that all DHBs implement an FLS by June 2014⁶. Furthermore, at the time of writing, significant progress is being made towards the establishment of a New Zealand Hip Fracture Registry.

5. Specific national initiatives: Multi-sector national coalitions can benefit from broad membership spanning the public and private sector. This provides a means for rapid dissemination of high quality information and resources pertaining to FLS implementation, to both clinical champions and health administrators at national, regional and local levels. The NBHA's Fracture Prevention CENTRAL³⁴ resource centre provides an illustration of what can be achieved when members of the coalition pool resources and use their networks to share best practice.

MULTI-SECTOR FLS COALITION EXAMPLES

In several countries, national osteoporosis societies, healthcare professional organisations and other stakeholders have formed national coalitions^{7,29,32,34} to advocate for the widespread implementation of FLS, as a key component of a systematic approach to fragility fracture care and prevention.

Speaking with a shared voice to policymakers creates an opportunity to expedite change. The following examples of coalitions formed in the UK³², the United States³⁴ and in Canada provide a useful illustration of this approach and thereafter follows a guide to setting up a national coalition.

UK: FALLS AND FRACTURES ALLIANCE

In 2007, leading healthcare professional organizations co-authored the Blue Book on the care of patients with fragility fracture³⁶, which was endorsed by the U.K. National Osteoporosis Society (NOS). The Blue Book described professional standards for the acute care of hip fracture patients and called for universal provision of FLS across the National Health Service (NHS) to eliminate the secondary prevention care gap. In parallel to publication of the Blue Book, a National Hip Fracture Database³¹ was launched as a means of benchmarking standards of care throughout the country.

In response to this work, and a focused programme of parliamentary influencing³⁸ by the 'Blue Book Coalition', in 2009 the Department of Health created policy^{14,31} which endorsed the professional standards for hip fracture care, and made the case for implementation of FLS in all healthcare localities in England. In 2012, on account of the secondary prevention care gap persisting for a significant proportion of health localities in England, the NOS and Age UK established a new Falls and Fractures Alliance (FFA)³². A significant number of patient and professional organizations have joined the FFA.



USA: NATIONAL BONE HEALTH ALLIANCE

The National Bone Health Alliance (NBHA)¹⁹ in the United States was officially launched in late 2010 as a public-private partnership co-convened by the American Society for Bone and Mineral Research (ASBMR) and the National Osteoporosis Foundation (NOF). NBHA is currently the largest national coalition (55 organisational participants in 2014) with the broadest membership, and provides an excellent illustration of what can be achieved when all organizational stakeholders at a national level speak with a common voice and pool resources.

In 2011, NBHA announced a bold goal in the form of its '20/20 Vision', which aims to reduce the incidence of fragility fractures in the United States by 20% by year 2020. Pursuant to achieving this goal, NBHA has launched two key initiatives³³:



2Million2Many Awareness Campaign³⁵: Launched in April 2012, this award winning campaign highlights the connection between fractures and osteoporosis for the 2 million fractures which occur in the United States every year. '2M2M' encourages individuals aged ≥ 50 years who break a bone to ask their healthcare professional for an osteoporosis test and gets people thinking about bone health. The centrepiece of the campaign is 'Cast Mountain', a thought provoking 3.6 metre tall by 3.6 metre wide installation which represents the 5,500 fractures that occur every day in the United States.

Fracture Prevention CENTRAL³⁴: Launched in March 2013, the Fracture Prevention CENTRAL online resource centre was created to help interested sites across the United States implement and maintain an FLS programme. By September 2014, over 2,200 individual users had registered to access the tools and resources available at 'FPC'. NBHA also used FPC as a platform to deliver a six-part FLS webinar series, freely available for 'live' participation and archived as a video-on-demand service, hosted by champions of established high-performing FLS and NBHA staff. During 2013, 600 individuals participated online and a further 1,500 downloaded webinars for viewing at their own convenience.

USEFUL RESOURCES

See the Committee of National Societies (CNS) of IOF which currently comprises 228 full or associate member societies in 97 countries, territories and regions worldwide:
www.iofbonehealth.org/societies-country-index-view/all

The IOF Capture the Fracture[®] website provides links to illustrate activities of national coalitions:

National toolkits are available at <http://www.capturethefracture.org/national-toolkits>
Guidelines and policies are available at <http://www.capturethefracture.org/guidelines-policies-fls>

Learn more about FFA at www.nos.org.uk/page.aspx?pid=1247
Read more about FLS in the UK at www.ncbi.nlm.nih.gov/pubmed/24026314

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GET INVOLVED



GET MAPPED

Submit your FLS and gain visibility on our Map of Best Practice at:
www.capturethefracture.org

JOIN US IN OUR EFFORTS TO CLOSE THE CARE GAP

Visit www.capturethefracture.org to:

SUBMIT YOUR FLS

Submit your Fracture Liaison Service (FLS) for Capture the Fracture® Best Practice Recognition and get mapped through the online application.

JOIN THE COALITION

Join the coalition of government agencies, companies, professionals, research and patient care organizations who support secondary fracture prevention and give your organization global recognition on the website.

SIGN UP

Sign up to receive the Capture the Fracture® newsletter.

ENDORSE

Volunteer to review and endorse the Capture the Fracture® campaign and the Best Practice Framework.

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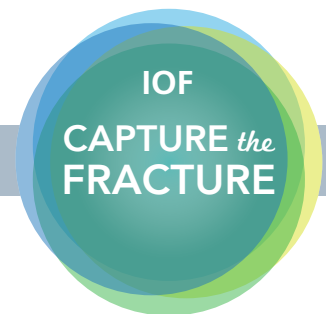
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NOTES

Worldwide, there is a large care gap that is leaving millions of fracture patients at serious risk of future fractures. 'Capture the Fracture®' hopes to close this gap and make secondary fracture prevention a reality.

Prof Cyrus Cooper

PRESIDENT, IOF



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