



Guide to the Formation of National Fragility Fracture Networks

Fragility Fracture Network
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Contents

The rationale for establishing national FFNs	1
FFN Global: Increasing awareness and implementing change.....	2
A global organization.....	2
Four pillars through the Global Call to Action.....	2
Developing a plan and supporting resources.....	3
Supporting countries to implement change through nFFNs.....	3
Creating a national FFN	4
Step 1: Engagement with activists.....	4
Step 2: Building a relationship with the core national health professional associations	4
Step 3: Inaugural meeting to establish a nFFN.....	5
Step 4: Identifying and developing plans for activities.....	5
Step 5: Broadening engagement of national FFNs.....	7
Step 6: Implementing plans.....	9
Relationship between national FFNs and the global FFN.....	9
The Regionalisation Committee (RegCom)	9
Communication strategy	10
Regional FFN meetings.....	11
Appendix A	12
Appendix B	14
References.....	16

The rationale for establishing national FFNs

The global population is currently ageing at an unprecedented rate [1]. A direct consequence of this will be a substantial increase in chronic diseases and injuries, such as fragility fractures, which afflict older people. In response to this challenge, policymakers throughout the world need to develop and implement strategies that will ensure older people can continue to live independent, happy and fulfilling lives. These strategies must minimise the burden imposed by chronic disease and injuries on individuals, their families, health systems and national finances.

Fragility fractures and falls are a major threat to older people's quality of life, causing pain and loss of mobility and the capacity to remain independent and living in their own home.

Key observations include [2]:

- In 2010, the number of individuals aged 50 years and over at high risk of fragility fracture worldwide was estimated at 158 million and is set to double by 2040.
- In the same year, the global incidence of hip fracture was estimated to have reached 2.7 million cases per year.
- The costs associated with fragility fractures are staggering:
 - In 2010, the 3.5 million fragility fractures which occurred in the European Union cost Euro 37 billion.
 - By 2025, the annual incidence of fragility fractures in the United States is projected to exceed 3 million cases, at a cost of US\$25 billion.
 - Recent projections from the Asian Federation of Osteoporosis Societies (AFOS) suggest that more than 1.1 million hip fractures occurred in nine Asian countries/regions in 2018 at a cost of US\$9.5 billion, figures which are set to increase to 2.6 million hip fractures at a cost of US\$15 billion by 2050 [3].

FFN has a vision of a world where anybody who sustains a fragility fracture achieves the optimal recovery of independent function and quality of life, with no further fractures. To achieve this the focus of work includes:

Managing fractures

- When fractures occur, treatment is provided using an **interdisciplinary approach** that combines the skills of the surgeon with those of physicians, nurses and rehabilitation professionals in an evidence based, cost-effective approach to care.

Preventing fractures

- The two key factors that lead to fragility fractures are (i) **osteoporosis** and (ii) the **tendency to fall**; both are treatable.

FFN Global: Increasing awareness and implementing change

A global organization

FFN was started in 2011 when a small group of activists came together to develop a plan on improving care for patients who had sustained a fragility fractures, including secondary prevention. This included increasing the awareness of the burden to healthcare systems and society, and the need for coordinated interdisciplinary care for patients who had sustained a fragility fracture.

The organization is made up of multidisciplinary activists from around the globe who can network with like-minded clinicians to share and learn.

The organization has 6 Special Interest Groups that engage members who have a specific clinical area of interest:

- Perioperative Care
- Vertebral Fracture
- Hip Fracture Audit
- Fragility Fracture Recovery Research
- Physiotherapy
- Secondary Prevention

Four pillars through the Global Call to Action

In 2018, the Fragility Fracture Network (FFN) launched a Call to Action (CtA) supported by national and international organizations around the globe. This defined four “pillars” that are required to improve care of people who sustain fragility fractures [4]:

1. Acute interdisciplinary care for people who suffer a fragility fracture which requires admission to hospital.
2. Rehabilitation for all fragility fractures.
3. Secondary prevention, after first occurrence of all fragility fractures.
4. Formation of national alliances between relevant professional associations to promote the uptake of evidence-based practice among colleagues and persuade politicians of the need for coordinated and funded care.

This approach requires a commitment from all health professions to create multidisciplinary alliances that work together to:

- Speak with a unified voice to clinical colleagues and policy makers.
- Produce consensus guidelines setting clear standards for adequate care using the best available research evidence, and propose metrics to evaluate performance.
- Expand education programmes that can build the multidisciplinary workforce capable of delivering evidence-based best practice on a wide scale.
- Support activities and projects with the aim of implementing and advancing standards for adequate care according to available evidence-based best practice.

Developing a plan and supporting resources

Since the launch of the 4 pillars, FFN has continued to set a direction at a global level to help countries implement local change.

Strategic Plan 2021 - 2026

A Strategic Plan was launched in 2021 that identifies the following 5 key initiatives:

1. Lead in Orthogeriatric Care
2. Promote Best Practice Fragility Fracture Care
3. Develop Leaders
4. Harmonize Global Efforts
5. Improve Organisational Efficiency

Resources

FFN has developed a number of resources [5] that have been made available on the FFN website including:

- Toolkits: 1) Clinical and 2) Policy [6,7]
- Access to books
 - The Management of Older Patients with Fragility Fractures [8]
 - Interdisciplinary Nutrition Management and Care of Older Adults: An Evidence-based Practice Guide for Nurses [9]
 - Fragility Fracture Nursing, Holistic Care and Management of the Orthogeriatric Patient [10]

The FFN website provides access to a **free membership section** for clinicians and policy makers with an interest in fragility fracture. This membership section provides links to evidence-based resources that have been created by leaders around the world. Through this one stop “hub” clinician and policy makers can easily access the latest information in implementing change for this patient population.

Supporting countries to implement change through nFFNs

Healthcare system function differently in each country. Changes to the care of patients who have sustained a fragility fracture requires a coordinated approach by multiple healthcare professionals who work within the health system. As such, successful change in practice must be designed to maximize the activities of all relevant health professionals. Change can happen at an organizational level, however

there may be barriers that need to be addressed at a national level, including changes to the health care infrastructure that may require changes in health policy. This will require policy discussions in which all the health care professions should have input: a national alliance is needed.



The purpose of this booklet is to support colleagues in countries without a current national alliance to set up an organization that can advocate for change, both with their colleagues in clinical practice and with government agencies: a national FFN (nFFN).

There are a number of benefits to working through a nFFN. The most significant is the opportunity to link with leaders and clinical experts across the globe to share and learn. This will generate the efficient exchange of experience and inspiration to drive national changes forward.

In countries with an established national alliance that shares our strategic priorities, FFN global is committed to working with them in partnership. FFN (both globally and nationally) is a **network** and does not compete with existing associations but aims to facilitate collaboration to address the needs of this specific patient population.

Creating a national FFN

Initiating a nFFN starts with the vision of a number of activists who work to build consensus and activity across the country to improve the management of fragility fracture patients including prevention of the next fracture. The activities will be defined by the needs of the country and achieving a fully functioning nFFN that is addressing these needs will take a number of years.

Step 1: Engagement with activists

The activists who initiate the nFFN will identify the appropriate people required for a successful national initiative. Representatives from the following groups should be considered:

- **Orthopaedics:** most fragility fractures present to the orthopaedic community and will be managed by the orthopaedic surgeon.
- **Geriatrics:** *frailty* is the key issue in elderly fracture patients which can be addressed by a geriatrician. However, if there are no geriatricians available to provide the services, other physicians (e.g., internal medicine) can upskill their competencies to manage frailty and fragility fractures,
- **Rehabilitation physician:** if a separate discipline of physiatry or similar exists.
- **Bone specialists for osteoporosis:** this may be endocrinologists, geriatricians, rheumatologists, internal medicine, orthopaedics, etc.
- **Nursing:** are critical for the management of the patients who are treated in the hospital as well as the nurses working in the outpatient sector e.g. Fracture Liaison Services.
- **Allied health:** including physiotherapy, occupational therapy and nutrition specialists provide services within the hospital sectors as well as work with fracture patients in the community.
- **Family Physicians:** will be involved in managing the patient in the community including their medical condition and secondary fracture prevention (bone health and/or falls prevention).

Step 2: Building a relationship with the core national health professional associations

The activists need to engage with the respective professional associations to secure their buy-in to create a nFFN. This will need to include an understanding of why the nFFN exists, the needs of the patient population and the specific issues and challenges faced by the various professions in managing these patients. Once activity is underway, ongoing communication will be required to **inform** the associations of developments in the nFFN and to **seek advice** on issues to ensure the planned activities respect the interests of each professional group.

Step 3: Inaugural meeting to establish a nFFN

Having assembled initiating group members, including appropriate representation from the core national health professional associations, the next step is to host a meeting to decide on:

- **Organizational structure:** the nFFN needs to be independent in their decision-making however must meet the business and financial laws of the country. *An independent organization is optimal; however, in some countries this may not be legally or financially achievable in which case alignment with a stakeholder agency should be considered.*
- **Governance structure:** the composition of the 'Foundation Board' or 'Leadership Team' that will run the Network with appropriate multidisciplinary representation.
- **Leadership:** Process to elect or appoint individuals to roles such as President/Chair, General Secretary, Treasurer, etc and the other Board Members (as needed). A combination needs to be found, between democratic openness and central coordination, that delivers balance between disciplines, geographical regions and gender.
- **Planning:** A vision and mission will need to be developed from which strategic objectives and annual work plans can be created.
- **Funding:** activities may require funding and a strategy to secure such funds should be developed.
- **Communication:** Agreement on developing a communication strategy to raise awareness of nFFN formation and subsequent projects (to include website development and social media presence).
- **Engagement:** A strategy to broaden engagement should be developed. (see next section).

Step 4: Identifying and developing plans for activities

The success of the nFFN will be measured by its ability to implement change within the country. In each country these will be based on the identified gaps in care and will likely require clinical change and in some cases changes to policy, including funding.

There is a range of projects and activities which could be led and/or coordinated by nFFNs that cover best practice care throughout the patients journey through the health care system. The following provides an overview of the types of activities that can be considered.

Consensus guidelines

Consensus guidelines relating to the acute management, rehabilitation and secondary prevention of fragility fractures help to define the framework for care to be provided. Many examples of consensus guidelines exist relating to the acute multidisciplinary management and secondary prevention of fragility fractures and can be customized to a country's healthcare system [11,12,13].

Clinical standards

Clinical or quality standards identify specific standards of care pertaining to the various components of management of people with fragility fractures. Clinical standards are derived from the best practices recommended in consensus guidelines and can be benchmarked to measure how well services are provided at a local level e.g. Audits. Examples for both acute multidisciplinary management and secondary prevention of fragility fractures are available [14,15,16,17,18].

Benchmarking with national databases

National databases have been developed in several countries to enable benchmarking of the delivery of care against clinical standards [19,20,21,22,23,24,25]. Through the Hip Fracture Audit Special Interest Group, a Minimum Common Data Set was developed and published in 2022 [26]. This allows countries to identify the data that they need to collect to successfully measure the effectiveness of their health care system.

The databases that have been developed are:

- Hip Fracture Audits: in patient care for hip fracture patients.
 - Some countries/regions have expanded to include in patient care for other fragility fracture patients e.g. vertebral fractures.
- Fracture Liaison Services: the management of osteoporosis and other conservative care options.

Education and workforce development

Education on a global level is important but nFFNs can be more effective in increasing the knowledge as they know the specific needs and possibilities existing in their own countries. By bringing together activists and opinion leaders from the relevant professional associations they can catalyze education and improvements to the workforce through policy development.

Education can be provided at a general awareness level and at a profession specific training level. These can be hosted at a regional level or at a country level and can be provided:

1. Online
 - a. Virtual webinars
 - b. Online learning through on demand modules
2. In person education session

Within the country the nFFN may choose to host events independently or to increase their audience by aligning with a professional association meeting. The presentation should leverage any agreements between nFFN, professional associations and sister societies to support interdisciplinary interactions and project developments.

The global FFN hosts general learning events through webinars put on by their Special Interest Groups and through their regional activities. The global FFN communication team is available to assist with topics and speakers as requested by the nFFN.

Driving policy change

A number of changes required to improve patient care for fragility fracture patients involve changes to policy including consideration of new funding/reimbursement mechanisms. The nFFN, by representing multiple professional groups, has an opportunity to advocate for change through several disciplines speaking with a unified voice. This can be further enhanced if the nFFN has been broadened to include other organizations and members as below.

The fundamental policy goals are common to all. They are laid out in the Policy Toolkit and are embedded in the three clinical pillars of acute care, rehabilitation and secondary prevention (bone health and falls). The nFFN will need to set the goals specific to meet the needs of the country.

Prior to setting up meetings with healthcare decision-makers including government representatives and politicians the nFFN has to ensure that the councils or other competent bodies in the relevant national associations have provided their agreement with the arguments to be put forward. It is essential that the nFFN acquires and maintains the reputation for accurately reflecting the member organizations professional views.

The case is made much stronger if it is backed up with good quality data, especially that obtained through audit and clinical databases. There are many other sources of data on fracture and global need that can be considered.

International meetings like the FFN's Global Congress and Regional Meetings provide an excellent opportunity to get ideas for policy goals and strategies. FFN uses a number of communication strategies to highlight the successful activities including: newsletters, blogs, and posting information on the membership section of the website to showcase stories of successful policy change. Please contribute your stories to be shared with others.

Step 5: Broadening engagement of national FFNs

As the nFFN is deciding on their plans for projects and activities there will be additional stakeholder organizations identified, beyond their core membership, with whom the nFFN will want to engage.

Other national health professional societies

A wider range of national societies, covering all professional groups involved in the management of people who sustain fragility fractures includes: anaesthetics, endocrinology, exercise and sports science, dieticians, falls prevention, family physicians/general practitioners, frailty, physiotherapy, musculoskeletal medicine, nutrition, obstetrics and gynaecology, occupational therapy, orthopaedic nursing, pharmacy, psychiatry, public health, radiology and sarcopenia.

Non-governmental organisations

A nFFN can strengthen their message by engaging with relevant non-governmental organisations (NGOs) such as groups for the aged (e.g. Age Concern, Age UK, HelpAge International national affiliates), carers organisations and groups focused on women's health.

Private sector organisations

There are a number of private sector organizations who provide care or equipment for this patient population. FFN has identified a role for the following specific actions to be taken by industry:

- Respond to care and service needs by developing and evaluating new products and technologies intended to improve patient outcomes through clear patient value.
- Work collaboratively with professional societies, government organisations, universities, insurers and health care systems in the development and evaluation of these products and technologies.

- Advocate globally for implementation of systematic approaches to fragility fracture care and fracture prevention like Orthogeriatric Services (OGS) and Fracture Liaison Services (FLS).

The leadership of an nFFN must decide how to include industry partners. The global FFN considers industry an important partner and respects the compliance rules of each regions and/or countries in which activities are undertaken.

Health system leaders

Health system leaders, in both the public and private sector, are important for dialogue to explore how the nFFN's strategic objectives can fit within the priorities of the health systems.

Highlighting synergies with existing program and quality improvement initiatives in other therapeutic areas can help to build a positive relationship with healthcare leaders. Examples include the affect of fragility fractures on the orthopaedic surgery departments, including elective surgeries, and aligning with dementia programs related to falls risk [27].

Insurers (public and private)

When a patient goes through hospital related to their fracture there is a payor for the service which can be a public or a private insurer. As it is in the interest of the insurer to minimize fractures FFN has identified the following specific actions to be taken by insurers:

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

As insurers in both the public and private sector often play a critical role in determining what aspects of care are reimbursed or not, developing a robust plan for engagement with these organisations is of great importance.

National policymakers

The ultimate goal of a nFFN would be to seek meaningful engagement with national policymakers to stimulate governments to deliver the specific actions to implement optimal care for patients including:

- Respond to the threat posed to their societies from fragility fractures.
- Recognise the critical role that they play in establishing health systems capable of addressing this challenge.
- Prioritise acute and long-term fragility fracture care and prevention in National Health Strategies.
- Increase funding available to develop, implement and test care models (i.e. Orthogeriatric services and Fracture Liaison Services) designed to improve outcomes for people with fragility fractures.

While achieving engagement with policymakers may seem aspirational there are a number of nFFNs that have successfully implemented national level policy change who are available to share their experiences.

Step 6: Implementing plans

Once a plan is developed the nFFN will need to undertake activity to implement the plan. This will require resources for which there are a number of different ways to access:

1. FFN members can contribute their personal time.
2. Individual FFN members can contribute their organizations time and/or resources e.g. administrative support.
3. Researchers in the country may apply for funding.
4. A Health care association may lead an activity that helps address a care gap for their specific profession e.g. standards of care.
5. Governments may provide resources to complete work such as policy guidelines or clinical standards.
6. Specific projects may be funded through industry partners e.g. educational events

The nFFN is responsible for the resourcing to complete the project. Global FFN is unable to fund any projects at a national level, however can help with activities such as providing supporting information for proposal writing, dissemination of information etc.

Relationship between national FFNs and the global FFN

National FFNs are autonomous organisations, compliant with the laws in their country. However, as they are using the name and 'brand' of the global FFN, there is an expectation that the nFFN will commit to:

- the Vision, Mission and Strategic Plan of the FFN,
- a multidisciplinary membership and Board,
- the FFN style of work: integrating existing organisations, not competing with them,
- ensuring independent decision making and, if possible, seek official recognition as a legitimate national organization,
- raise their own resources locally.
- develop an annual plan of action, which will be shared with the global FFN so it can be supported where appropriate and highlighted globally,
- interact with global FFN through the Regionalisation Committee (see below) to identify opportunities to learn and to share,
- promote the FFN Congress and/or Regional events, send representatives (in person or virtually), and encourage health care professionals from all disciplines to attend so that the coherence of the global FFN message is preserved and enriched, and
- create a communication strategy that links to the global FFN communication strategy and allows the dissemination of information to individuals throughout the country (see below).

The global FFN will endeavour to maintain a Board that is balanced by both discipline and global region and will include representation from the nFFNs.

The Regionalisation Committee (RegCom)

RegCom is one of the subcommittees of the global FFN Board – the others being the Scientific, Education, Nominations and Communications Committees. The RegCom Chair and Chair elect are members of the Executive Committee and are elected by the General Assembly.

The RegCom promotes the formation of nFFNs and supports collaboration across countries and global regions. Membership of the RegCom includes at least one Regional Deputy from each global region as it is developed: Asia-Pacific, Latin America, Europe, North America and Middle East/Africa. In each global region, there will be a committee of nFFN Presidents that will develop their plans and ensure that their views of all the nFFNs in that region are carried forward to the RegCom. All communications between nFFNs and global FFN should be copied to these Regional Deputy, thus empowering the RegCom to meet the needs of the nFFNs.

Communication strategy

Global

Global FFN has developed a comprehensive communication strategy to leverage technology to host meetings and provide education. This includes the website where individuals can register for FFN membership which provides free access to FFN tools and best practice documents and resources from around the globe. A secondary level of membership is available to individuals who are working at a Board level for nFFNs, providing access to other resource documents to host meetings and create events.

Registration for the general membership section also provides consent for FFN to contact individuals through email so they receive newsletters and information about the Congress etc. As such global FFN has a network of contacts in countries across the globe which can be leveraged by the nFFN.

National FFN

To be successful in creating change, nFFNs are strongly recommended to create a brand through the development of a logo and a communication strategy that leverages the relationship with the global network. A Communications Guideline document is available that provides the recommendations on how to align with the global FFN brand.

Communications strategies at the national level can include:

1. Social media: using whatever social media platforms are appropriate to the country.
2. Website that offers information on the local interdisciplinary network, facilitates synergies among their members by promoting leaders and outreach opportunities such as educational events and identifies the annual plan of activities to promote engagement and uptake.
3. An interactive platform to host meetings e.g., Zoom.
4. A platform to host education events such as webinars e.g., Zoom Webinar function.
5. A membership database, e.g., Brevo to communicate with individuals who have expressed an interest in fragility fracture.

The nFFN will retain full responsibility for their technologies including content. There will be extensive two-way links between the national and global communication leads to align the supporting technologies. This includes leveraging the Global FFN membership list for the country to support effective and efficient dissemination of messaging.

Regional FFN meetings

The structure of FFN is national and global levels of organisation. However, regional meetings are hosted to support the nFFNs to share experience. This is scheduled by the RegCom and is coordinated/hosted by the countries. The regional meetings are used to enhance uptake and support attendance at the Global Congress.

- **Two organization meetings**
 - One **Review and Next Year Plan Activities meeting** at Q4, with participation of Program Committee Members and Presidents of nFFNs of the Region.
 - Second on **Opportunities for Research Projects and Funding within the Region *only between nFFNs' Presidents*** at Q1 or Q2. Research projects could also identify the NEEDS in terms of education, guidance and training. This will give time and freedom to create new initiatives and Regional Leaders.
- **Two – three awareness meetings**
 - Aiming on knowledge transfer on current principles of Orthogeriatric Care and the four pillars of FFN, and subsequently spread the FFN concept and enrich the global FFN's member list.
- **Training courses**
 - A series of webinars, or access to online training for a specific discipline like Nurses, Physios.

Appendix A

Regionalisation Committee Terms of Reference

The Regionalisation Committee (RegCom) shall be a standing sub-committee of the Board. Its Chair shall be a voting member of the Executive Committee (ExCom) *ex officio*.

Purpose

The over-riding purpose of the RegCom shall be to promote the formation of national FFNs and to coordinate their work with each other and with the global FFN.

Promotion of new local FFNs

The RegCom will:

- identify countries where there seems to be a critical mass of activists willing to create a national FFN and a local context appropriate for that to be done,
- convince the proposed initiators that they should adhere to the principles laid out in the Guide to national FFN Formation, and
- ensure that the global, and other relevant national FFNs are aware of developments and provide whatever support is needed for the launch: speakers etc

Relations between FFNs

The national FFN will undertake to send a reasonable number of members to the Annual Global Congress each year, prepared to report their progress both to the RegCom and to the Congress as a whole. These members will pay the registration fee for the Congress, unless they are global Board members or invited speakers, sponsored by their national resources.

Occasional regional meetings will be organised, bringing together national FFNs in the region concerned, to share experience and promote the formation of other national FFNs.

Composition

Chairman

The RegCom Chair shall be directly elected by the General Assembly from candidates nominated by the membership. The term of office shall be two years. Re-election is possible once only.

Regionalisation Manager

The Regionalisation Manager shall be employed – subject to available funding – on a consultancy basis. Selection, commencement and termination of employment shall be decided by the ExCom, on the advice of the RegCom Chair.

Committee members

The membership of the RegCom shall be determined by the Board, on the recommendation of the RegCom Chair. The membership shall be balanced by discipline and global region. The Board may appoint an experienced member as Deputy Chair and Secretary/minute taker, on the recommendation of the RegCom Chair. The Deputy Chair may attend ExCom meetings with, or in place of, the Chair, as a non-voting member.

Meetings and reporting

The RegCom will meet by teleconference at approximately monthly intervals and face-to-face at the Annual Global Congress. The chair will report monthly to the ExCom and bi-monthly to the Board.

Depending on the agenda and overall situation, the meetings may be joined by the Comms Director, EduCom Chair or other ExCom Members.

Minutes will be taken and reviewed at the next meeting.

Appendix B

Summary of Steps to Developing a nFFN

These steps outline a strategic approach to establishing and empowering the National Fragility Fracture Network (nFFN) through the formation of a multiprofessional collaborative team, the support for local and national initiatives, and the implementation and continuous improvement of the best practices in fragility fracture care.

Step 1: Establishing a multi-disciplinary team

- Create a core multi-professional team of 5-8 experts, clinical leaders, and patient associations focused on enhancing fragility fracture care
- Ensure diversity within the team by including representatives from orthopaedics, geriatrics, internal medicine, rehabilitation physicians, bone specialists, nursing, allied health practitioners, and family physicians (as appropriate)

Step 2: Building relationships

- Communicate with related associations and societies to foster cooperation
- Avoid duplicating initiatives and support activities to amplify the impact

Step 3: Meetings

- Conduct a board meeting to share ideas of nFFN and to formally approve the association's statute to comply with local legal requirements: Legal organization or Memorandum of Understanding
- Arrange nFFN meeting(s) to promote unity and initiate the governance needed to successfully improve healthcare services
- Organize local meetings at sites with recognition for excellence in orthogeriatric care

Step 4: Identify and develop plans

- Identify the activities required to improve care within the country and develop a plan
- Consider multidisciplinary guidelines, consensus statements, databases, education and workforce development and policy change
- Identify, promote and support multi-professional research projects aimed at investigating and implementing best practices in fragility fracture care

Step 5: Broadening the engagement

- Strengthen the cooperation among the nFFN members to enhance multidisciplinary care
- Engage more leaders, professional and patients' associations who have interest in improving patient care, organizational effectiveness and healthcare system management
- Expand to include other stakeholders who can align with policy change, such as non-governmental organizations, private sector, health system leaders and insurers

Step 6: Implementing plans

- Collaborate with other organizations to support activities to improve care, including dissemination of clinical standards
- Demonstrate the commitment to change with the development of materials and the implementation of plans where resources are available

Step 7: Stay connected with Global FFN

- Stay connected and be involved with global FFN
- Get insight from experiences and achievements from centers and leaders around the globe
- Promote the visibility and cooperation of the nFFN at regional and global level

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