



**CAPTURE THE FRACTURE® PARTNERSHIP**

# **Fracture Liaison Services**

The need for secondary fracture prevention

An IOF initiative, supported by Amgen and UCB in collaboration with the University of Oxford





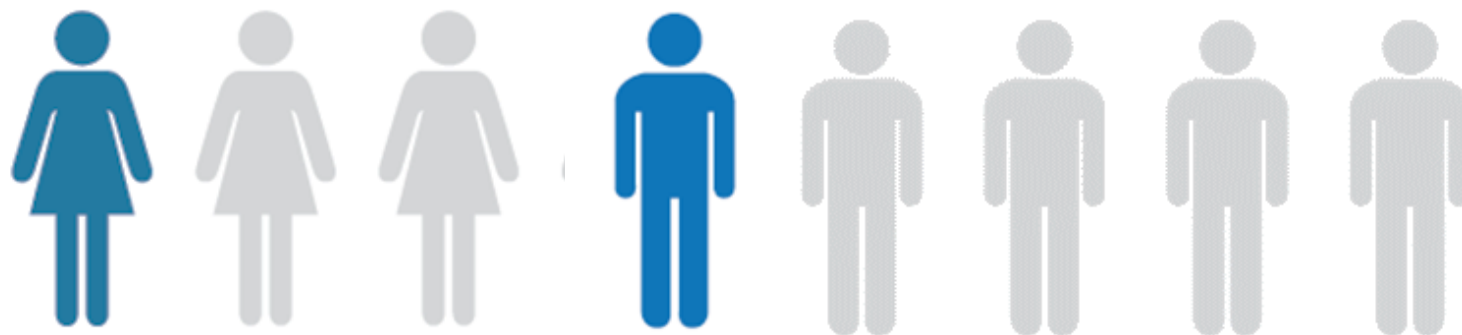
# THE BURDEN OF FRAGILITY FRACTURES



# The Burden of Fragility Fractures

## FRAGILITY FRACTURES ARE COMMON

1 in 3 women and in 1 in 5 men over 50 years of age worldwide



(One fracture every 3 seconds)

# The Burden of Fragility Fractures

## FRACTURES ARE COSTLY



- EU: estimated costs of 37.5 billion EUR per year\*

(Broken Bones, Broken Lives: A roadmap to solve the fragility fracture crisis in Europe. IOF 2018)

- USA: estimated costs of 57 billion USD per year

Lewiecki et al. (2019) JBMR Plus)

\* Analysis based in six major European countries: France, Germany, Italy, Spain, Sweden and the UK.

# The Burden of Fragility Fractures

## FRACTURES AFFECT QUALITY OF LIFE



- Poorer recovery and higher mortality
- Increases the risk of a new fracture
- Persistent loss of mobility
- Lower independence

# FIRST FRAGILITY FRACTURE...



= A broken bone after a fall from standing height, commonly resulting in fracture at the hip, wrist or spine

# FIRST FRAGILITY FRACTURE... leads to another fracture soon

THE FIRST  
FRACTURE IS A  
**SENTINEL**  
EVENT



Healthcare institutions are failing to respond to the first fracture



The underlying causes of incident fractures remain under-diagnosed and under-treated



Pharmacological interventions have been shown to substantially lower the risk of subsequent fractures



# THE PROBLEM

In busy hospital systems, how do you make sure all the high risk patients who have a broken bone get rapid assessment and treatment to lower the risk of another fracture?





# THE PROVEN SOLUTION

**Fracture Liaison Services** (FLS) – a coordinated, multi-disciplinary approach to patient care – offer the most clinically and cost-effective secondary preventive care.



# FLS: The Proven Solution

## Focused team that:

1. **Identifies** at risk patients
2. **Investigates** to identify those who need treatment
3. **Starts treatment** (lifestyle, medicines and exercise)
4. **Follows** the patient to support good adherence
5. **Continually improves** the FLS performance



IOF  
CAPTURE *the*  
FRACTURE

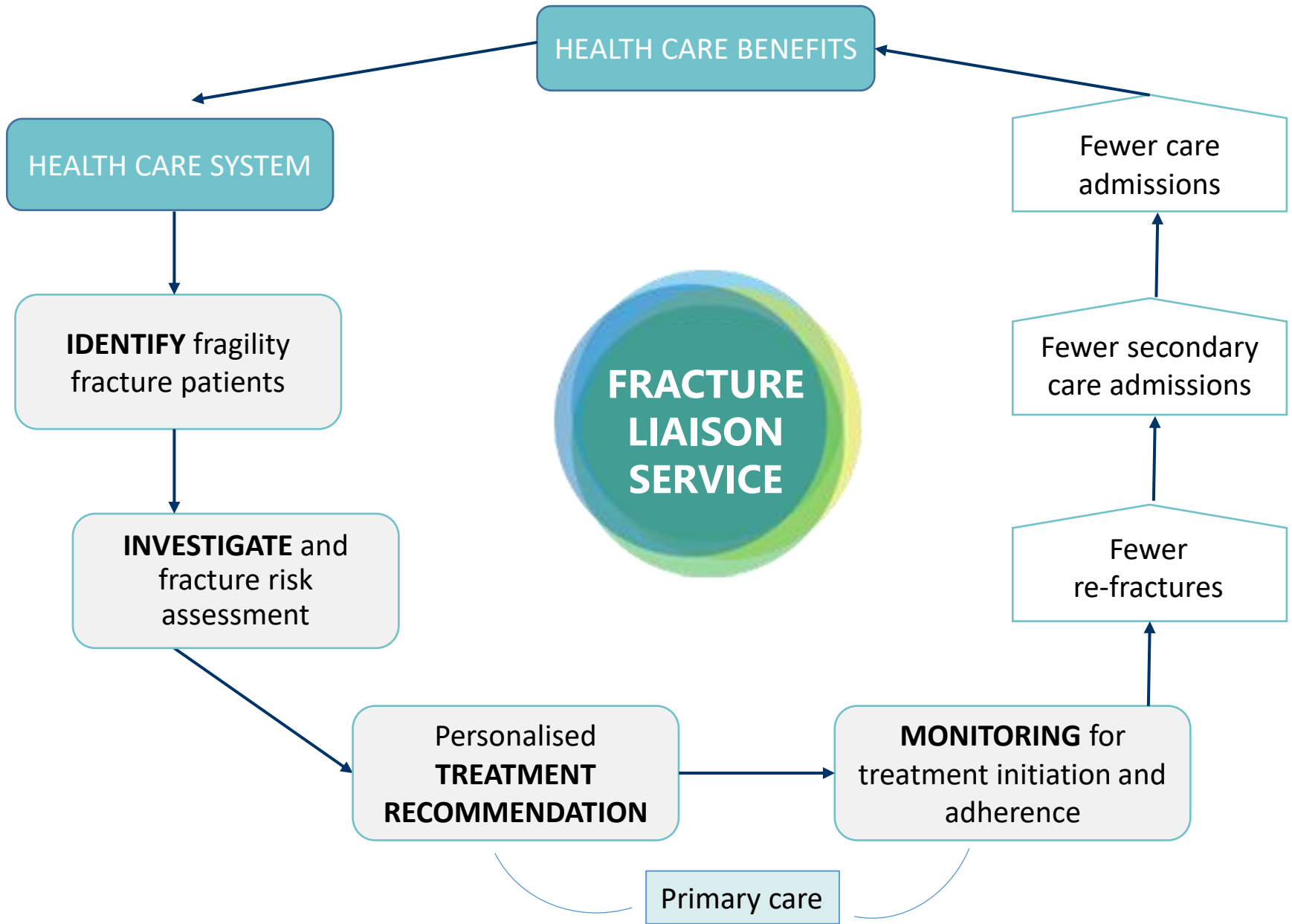
**BEST PRACTICE FRAMEWORK**  
for FRACTURE LIAISON SERVICES

Setting the standard

Studies have shown that Fracture Liaison Service models are the most cost-effective in preventing secondary fractures. This systematic approach, with a fracture coordinator at its centre, can result in fewer fractures, cost savings for the health system and improvement in the quality of life of patients.

[www.capturethefracture.org](http://www.capturethefracture.org)



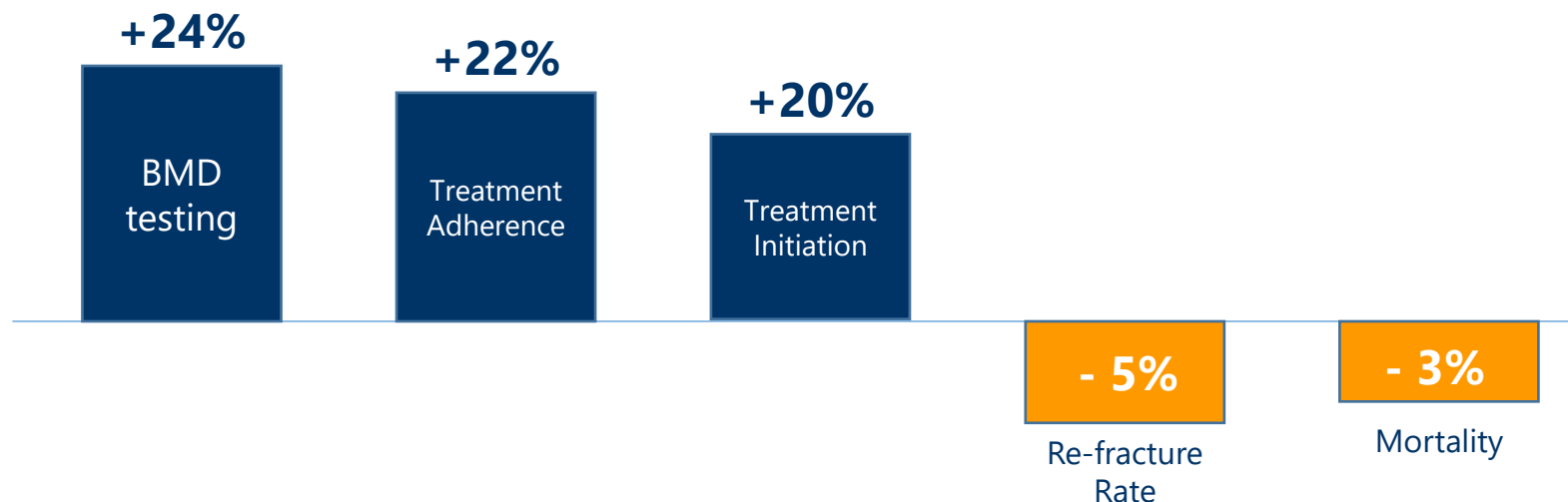


# FLS: The Proven Solution

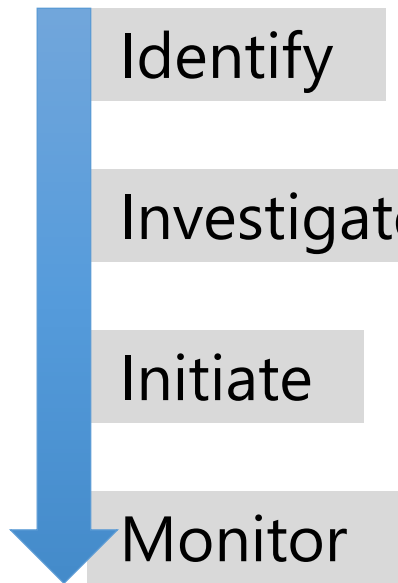
## FRACTURE LIAISON SERVICES (FLS)

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

EFFECTS OF FLS (absolute change)



# Fracture Liaison Services: Structure



## Small core specialist service

### Responsible for delivering pathway

Champion

Specialist nurses

Administrators

Patient pathways

DXA/ Laboratory tests

Treatment / referrals

# Steps towards “Implementation of FLS”

A FIRST STEP IS TO GAIN SUPPORT FROM THE DIFFERENT STAKEHOLDERS



## LOCAL

Hospital department, clinic

## REGIONAL

County government, hospital trust, health management organization.

## NATIONAL

Departments of Health, national health service, other governing, regulatory or financial stakeholders, private health care providers and health care insurance organizations.

# Create a multi-disciplinary FLS project team

- Lead clinician/local champion
- Fracture coordinator
- Orthopedic surgeon
- Radiologist
- Secondary care clinicians
- Rehabilitation specialist –physiatrist
- Service of fall prevention
- Nurse specialists
- Primary care physicians
- Allied health professionals
- Public health consultants
- Service manager, administrator
- Pharmacists
- Patient representative



# Designing your FLS service model

**1** WRITE AIMS

- Write specific and time-dependent aims and objectives

**2** IDENTIFY

- Identify how you will capture fragility fracture patients

**3** WRITE CASE FINDING

- Write case-finding protocols for the appropriate setting, e.g. inpatient ward, fracture clinic, diagnostic imaging, etc.

**4** DECIDE

- Decide what to include in your service model – see Best Practice Framework

**5** ENSURE

- Ensure all members of multi-disciplinary FLS project team endorse the prototype FLS mode



# FLS Business planning process

## KEY SUCCESS FACTORS IN AN FLS BUSINESS PLANNING PROCESS



- Bringing together the FLS team
- Early engagement with decision makers
- A clear understanding of the management needs
- Match with national clinical guidelines
- Health economic modelling of costs and benefits
- Develop business case plan for decision makers

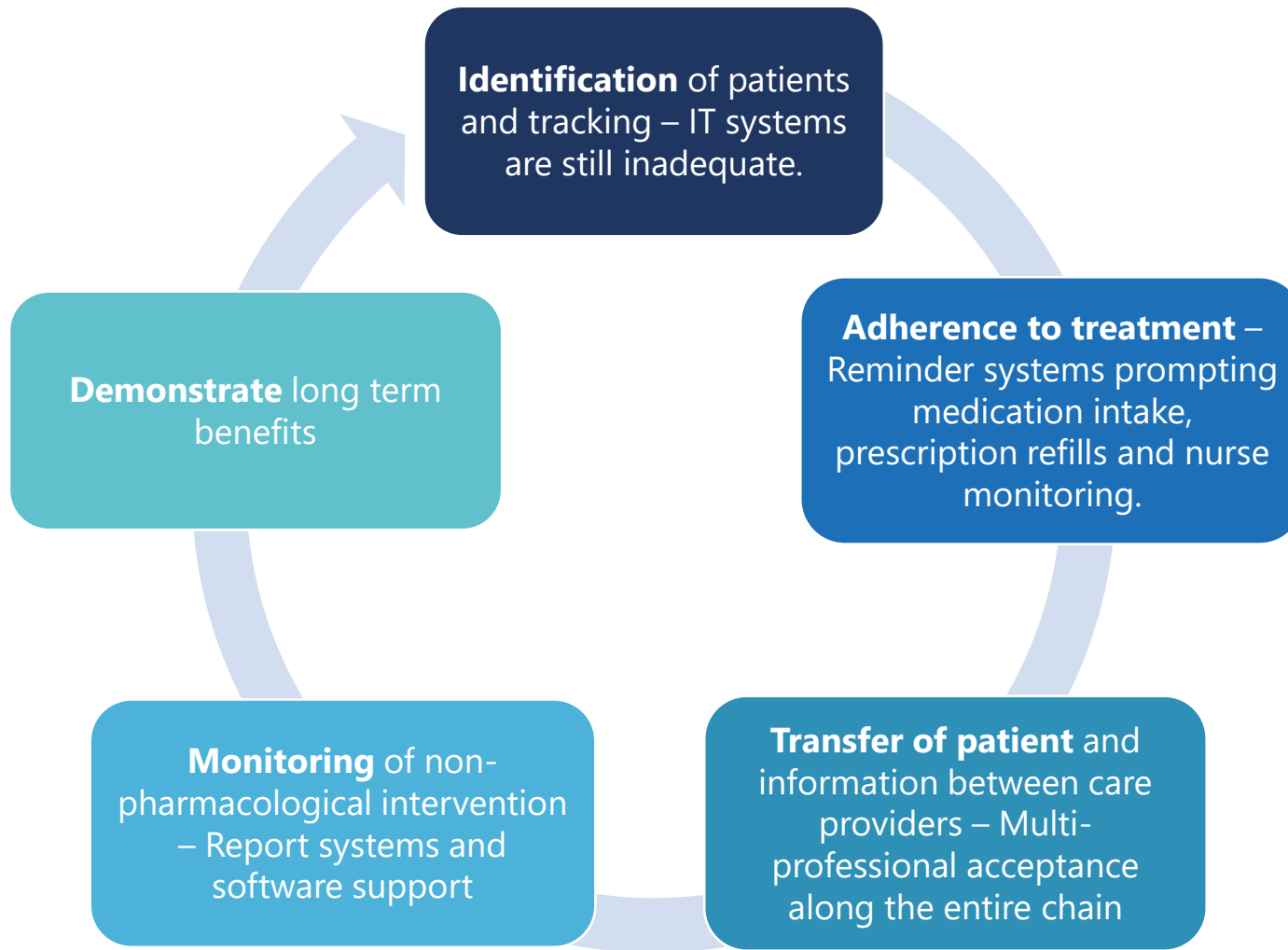
# Multi-sector FLS coalition

## ADVOCACY AT A NATIONAL LEVEL

- Establish Pilot FLS systems
- Data collection to show clinical and cost effectiveness of FLS
- Form a coalition of relevant professional/patient societies
- Define national implementation guidelines
- Conduct national audit of all current secondary fracture prevention units
- Seek government-supported policy working group to achieve uniform best practice
- Implement national policy



# Challenges to maintain a sustainable FLS



# Facilitators in establishing successful FLS



Awareness of the benefits in targeting secondary prevention



Identifying who pays for FLS and conducting a baseline audit to be cost-effective



Available therapies have reached cost advantages



Increasing interest in the orthopedic community



Laying out the patient pathway from admission to discharge



Advances in surgical management of fragility fractures leading to overall better outcomes



Ortho-geriatrics gaining ground



Developing a database to identify and track patients



Demographics – it is necessary! Patient / public demand!



# Conclusion

- Major gap for patients with broken bones
  
- Fracture liaison services (FLS)
  - Streamline patient care pathway
  - Effectively manage high risk patients
  - Coordinates multiple specialties to work together
  
- Proven model that can be adapted to the resources available at each institution



[www.capturethefracture.org](http://www.capturethefracture.org)



[www.osteoporosis.foundation](http://www.osteoporosis.foundation)



[www.ox.ac.uk/](http://www.ox.ac.uk/)

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