



CAPTURE THE FRACTURE® PARTNERSHIP

ABOUT CAPTURE THE FRACTURE

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



Acknowledgements

Capture the Fracture Steering Committee:

- Prof Cyrus Cooper, President of IOF, MRC Lifecourse Epidemiology Unit, University of Southampton & University of Oxford, UK
- Dr Kassim Javaid, Co-Chair, CTF Steering Committee, University of Oxford, UK
- Prof Serge Ferrari, Co-Chair, CTF Steering Committee, Vice-Chair, Committee of Scientific Advisors of IOF, Geneva University Hospital, CH
- Prof Kristina Åkesson, Skåne University Hospital, Sweden
- Prof Thierry Thomas, University Hospital of St-Etienne, France
- Prof Willem Lems, VU University Medical Centre, Netherlands
- Prof Stefan Goemaere, Ghent University, Belgium
- Dr Paul Mitchell, Synthesis Medical Limited, New Zealand
- Dr Philippe Halbout, Chief Executive Officer of IOF

Slide Kit Breakdown

This slide kit covers:

- The need for secondary fracture prevention
- Capture the Fracture campaign
- How to get involved
- Evaluation methodology
- Results (initial)



'Over the next 20 years, 450 million people will celebrate their 65th birthday.

On account of this, absolute hip fracture incidence will remain high and costly in the West and presents a major threat to financing of health systems in the East.'

Cooper C, Mitchell P, Kanis JA. Breaking the fragility fracture cycle. *Osteoporosis Int.* Jul 2011;22(7):2049-2050.



Why the First Fracture is so Important

- 1st fracture doubles the risk for future fractures
- 2nd fracture often happens within 6-8 months
- 50% of all hip fractures come from 16% of the postmenopausal women with history of fracture



The Problem

Fragility fractures are common

- 1 in 3 women over 50 years of age
- 1 in 5 men over 50 years of age¹²

Fractures are costly

- Europe: estimated costs of 32 billion EUR per year³
- United States: estimated costs of 20 billion USD per year⁴

Fractures affect quality of life⁵

- Mortality
- Functional decline
- Loss of independence

1. Melton LJ, 3rd, Atkinson EJ, O'Connor MK, O'Fallon WM, Riggs BL. Bone density and fracture risk in men. *J Bone Miner Res.* Dec 1998;13(12):1915-1923.
2. Kanis JA, Johnell O, Oden A, et al. Long-term risk of osteoporotic fracture in Malmö. *Osteoporos Int.* 2000;11(8):669-674.
3. Kanis JA, Johnell O. Requirements for DXA for the management of osteoporosis in Europe. *Osteoporos Int.* Mar 2005;16(3):229-238.
4. Cummings SR, Melton LJ. Epidemiology and outcomes of osteoporotic fractures. *Lancet.* May 18 2002;359(9319):1761-1767.
5. Boonen S, Autier P, Barette M, Vanderschueren D, Lips P, Haentjens P (2004) Functional outcome and quality of life following hip fracture in elderly women: a prospective controlled study. *Osteoporos Int* 15:87-94

What we Know

Half of all individuals who will suffer hip fractures in the future bring themselves to clinical attention before breaking their hip, by suffering a prior fragility fracture¹²³⁴

1. Gallagher JC, Melton LJ, Riggs BL, Bergstrath E. Epidemiology of fractures of the proximal femur in Rochester, Minnesota. *Clin Orthop Relat Res.* Jul-Aug 1980(150):163-171.
2. Port L, Center J, Briffa NK, Nguyen T, Cumming R, Eisman J. Osteoporotic fracture: missed opportunity for intervention. *Osteoporos Int.* Sep 2003;14(9):780-784.
3. McLellan A, Reid D, Forbes K, et al. *Effectiveness of Strategies for the Secondary Prevention of Osteoporotic Fractures in Scotland (CEPS 99/03)*: NHS Quality Improvement Scotland; 2004.
4. Edwards BJ, Bunta AD, Simonelli C, Bolander M, Fitzpatrick LA. Prior fractures are common in patients with subsequent hip fractures. *Clin Orthop Relat Res.* Aug 2007;461:226-230.

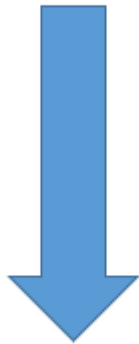
What we know

The Fracture cascade

+

The care gap

One Fracture



More Fractures



A Proven Solution

Fracture Liaison Services (FLS): Coordinator-based models of care

- facilitate risk assessment
- facilitate bone mineral density testing and osteoporosis education and care
- have been shown to be **cost-saving**



Also Known as

- **Fracture Liaison Services**
 - (UK, Europe and Australia)
- **Osteoporosis Coordinator Programmes**
 - (Canada)
- **Care Manager Programmes**
 - (USA)

The Link: A dedicated coordinator



Coordinator links:

- Patient
- Primary care physician
- Orthopaedic team
- Osteoporosis & falls team

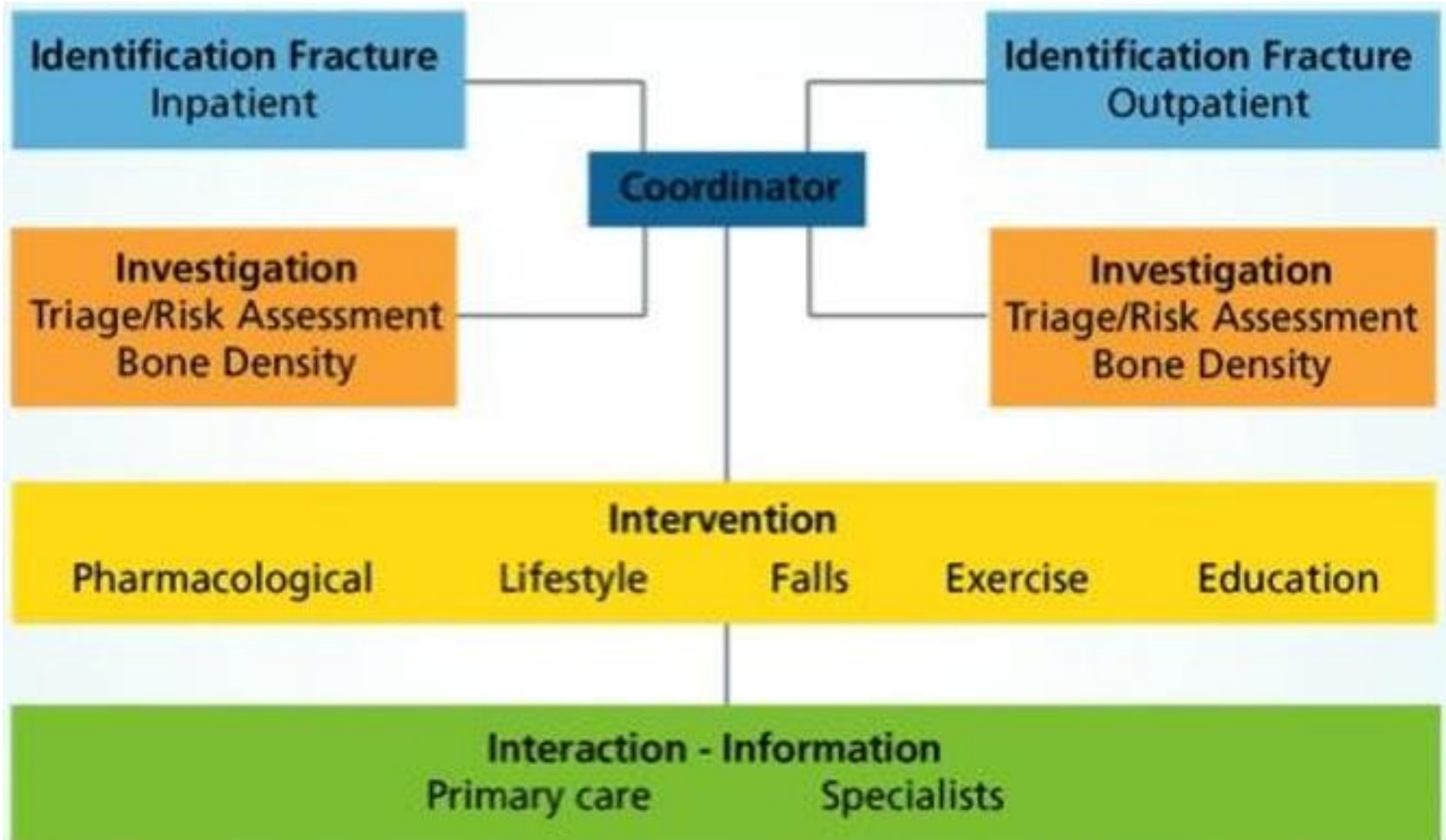


The Team

A dedicated team of stakeholders:



Coordinator-based System

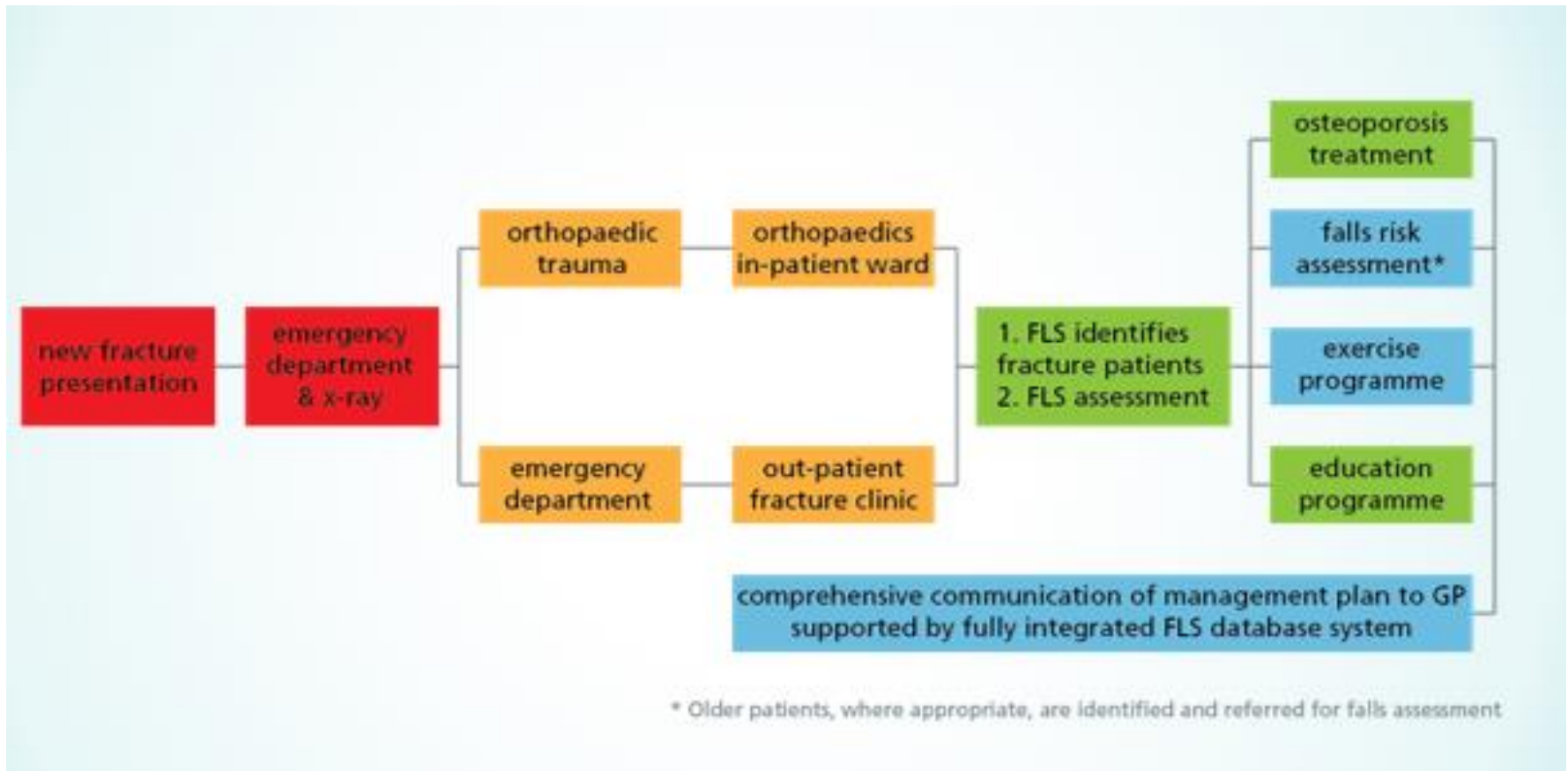


Adapted from McLellan et al OI 2003, 14:1028-1034.

Core Objectives of FLS

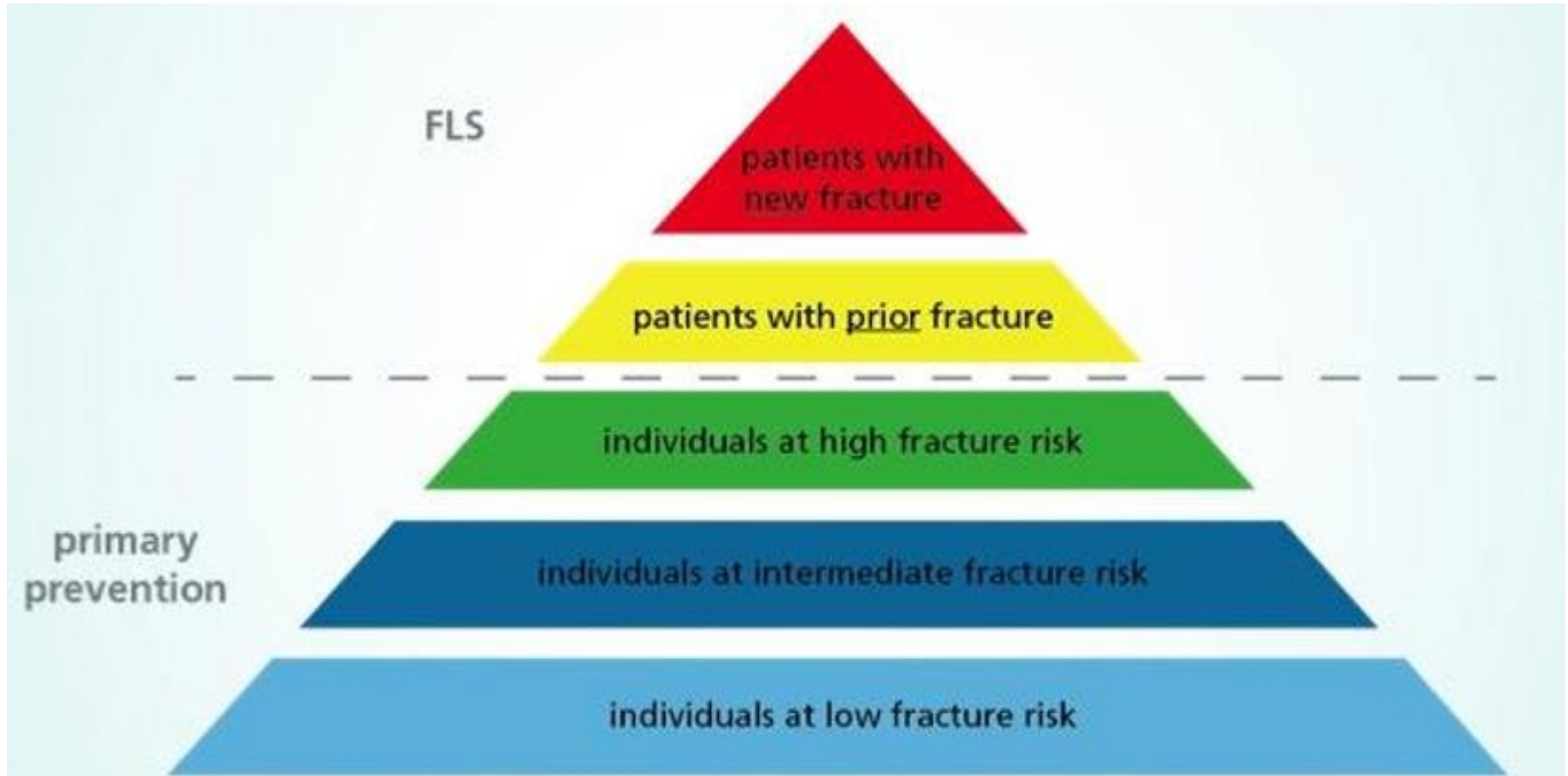
- Inclusive case finding
- Evidence-based assessment: stratify risk, identify secondary causes of osteoporosis, tailor therapy
- Initiate or recommend treatment in accordance with relevant guideline
- Improve long-term adherence with therapy

The Structure



1. British Orthopaedic Association, British Geriatrics Society. *The care of patients with fragility fracture 2007*.
2. McLellan AR, Gallacher SJ, Fraser M, McQuillian C. The fracture liaison service: success of a programme for the evaluation and management of patients with osteoporotic fracture. *Osteoporos Int*. Dec 2003;14(12):1028-1034.

Identifying Patients



Adapted from Curr Med Res Opin 2005;21:4:475-482 Brankin E et al * BOA-BGS 2007 Blue Book. <http://www.nhfd.co.uk>

FLS: effective and cost-saving

- Coordinator-based, post-fracture models of care have successfully closed the secondary fracture prevention care gap in many countries throughout the world and are highly cost-effective¹
- Governments and associated agencies have endorsed coordinator-based post-fracture models of care in national and regional healthcare policy²³⁴⁵⁶

1. Marsh D, Akesson K, Beaton DE, et al. Coordinator-based systems for secondary prevention in fragility fracture patients. *Osteoporos Int*. Jul 2011;22(7):2051-2065.
2. New South Wales Agency for Clinical Innovation Musculoskeletal Network. NSW Model of Care for Osteoporotic Refracture Prevention. Chatswood, NSW; 2011.
3. Department of Health. Falls and fractures: Effective interventions in health and social care. In: Department of Health, ed; 2009.
4. Ministry of Health and Long-term Care, Ontario Women's Health Council, Osteoporosis Canada. Ontario Osteoporosis Strategy. <http://www.osteostategy.on.ca/>. Accessed 9 February, 2012.
5. Department of Health in England. Prevention speech: old age is the new middle age, by the Rt Hon Alan Johnson MP, Secretary of State for Health, 21 May 2008. http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/MediaCentre/Speeches/DH_085020. Accessed 28-10-2011.
6. Department of Health. Fracture prevention services: an economic evaluation; 2009.

Capture the Fracture



A global campaign for the prevention of secondary fractures by facilitating the implementation of Fracture Liaison Services (FLS)

Capture the Fracture



- An initiative of the *International Osteoporosis Foundation (IOF)*
- Launched in 2012
- www.capturethefracture.org

Capture the Fracture Steering Committee:

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- Dr Philippe Halbout, Chief Executive Officer of IOF

Key Objectives

- Set Standards
- Facilitate Change
- Create Awareness

for secondary fracture prevention



Campaign Structure

Set Standards (main programme)

- Best Practice Framework (BPF)
- FLS Evaluation / questionnaire
- Best Practice Recognition/Map

Facilitate Change

- Mentorship programme (planned)
- Implementation guides & toolkits
- Facilitated grant support (planned)

Create Awareness

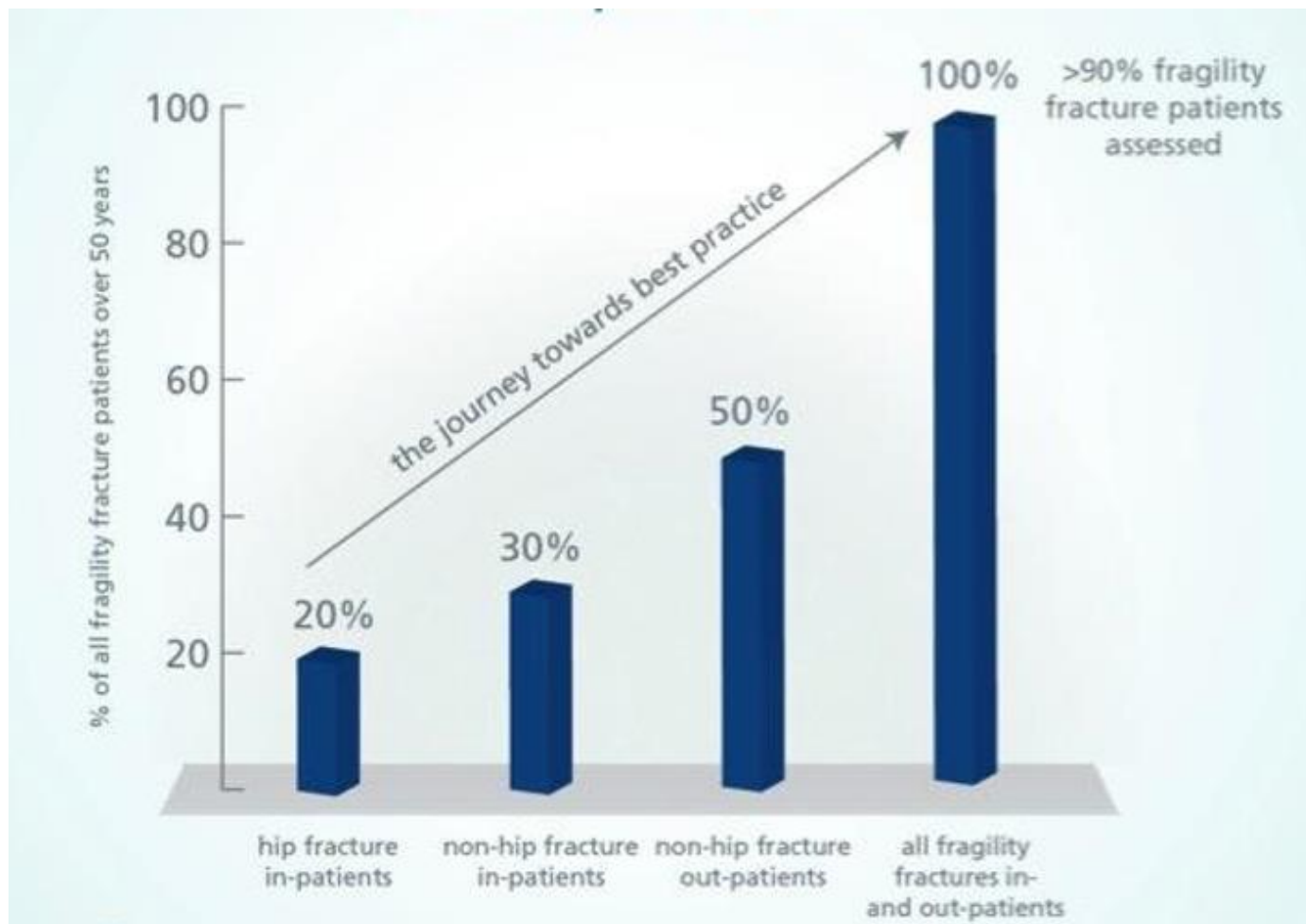
- Website www.capturethefracture.org
- Resources
- Communication/marketing
- Coalition of partners

Setting the Standards

Setting standards in health care and being measured against standards are powerful tools to improve patient management.

- Best Practice Framework (BPF) - sets the standard
- FLS evaluation/questionnaire - measures FLS against the standard (BPF)
- Best Practice Recognition/ Map- recognizes FLS and achievements on website map with a gold, silver or bronze star

Outcome Targets: Reaching for best practice



Purpose of the Best Practice Framework

13 internationally recognized & endorsed standards of care for secondary fracture prevention

1. Set the standard for FLS
2. Guidance
3. Benchmarking and fine-tuning

The BPF Standards: Achievable & ambitious

STANDARD	LEVEL 1	LEVEL 2	LEVEL 3
1. Patient Identification	Patients ID'd, <i>not</i> tracked	Patients ID'd, <i>are</i> tracked	Patients ID'd, tracked & <i>Independent review</i>
2. Patient Evaluation	50% assessed	70% assessed	90% assessed
3. Post Fracture Assessment Timing	Within <i>13-16 weeks</i>	Within <i>9-12 weeks</i>	Within <i>8 weeks</i>
4. Vertebral Fracture (VF) ID	<i>Known</i> VF assessed	<i>Routinely</i> assesses for VF	<i>Radiologists</i> identify VF

The BPF Standards: Achievable & ambitious

STANDARD	LEVEL 1	LEVEL 2	LEVEL 3
5. Assessment Guidelines	<i>Local</i>	<i>Regional</i>	<i>National</i>
6. Secondary Causes of OP	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

The BPF Standards: Achievable & ambitious

STANDARD	LEVEL 1	LEVEL 2	LEVEL 3
10. Medication Review	50% assessed	70% assessed	90% assessed
11. Communication Strategy	Communicates to primary and secondary care physicians	Communicates to primary and secondary care physicians w/ %50 criteria	Communicates to primary and secondary care physicians w/ %90 criteria
12. Long-term Management	1 year follow-up		6 month follow-up & 1 year follow-up
13. Database	Local	Regional	National



Getting your FLS Recognized on the Map

- Submit your application at www.capturethefracture.org



The Process

Step 1

FLS submits online Application



Step 2

FLS marked in green on the map while being reviewed



Step 3

BPF achievement level assigned



Step 4

FLS is scored and recognized on the map



Participation

Why apply?

- Showcase achievements
- Support FLS implementation worldwide
- Creates visual message of services & opportunities

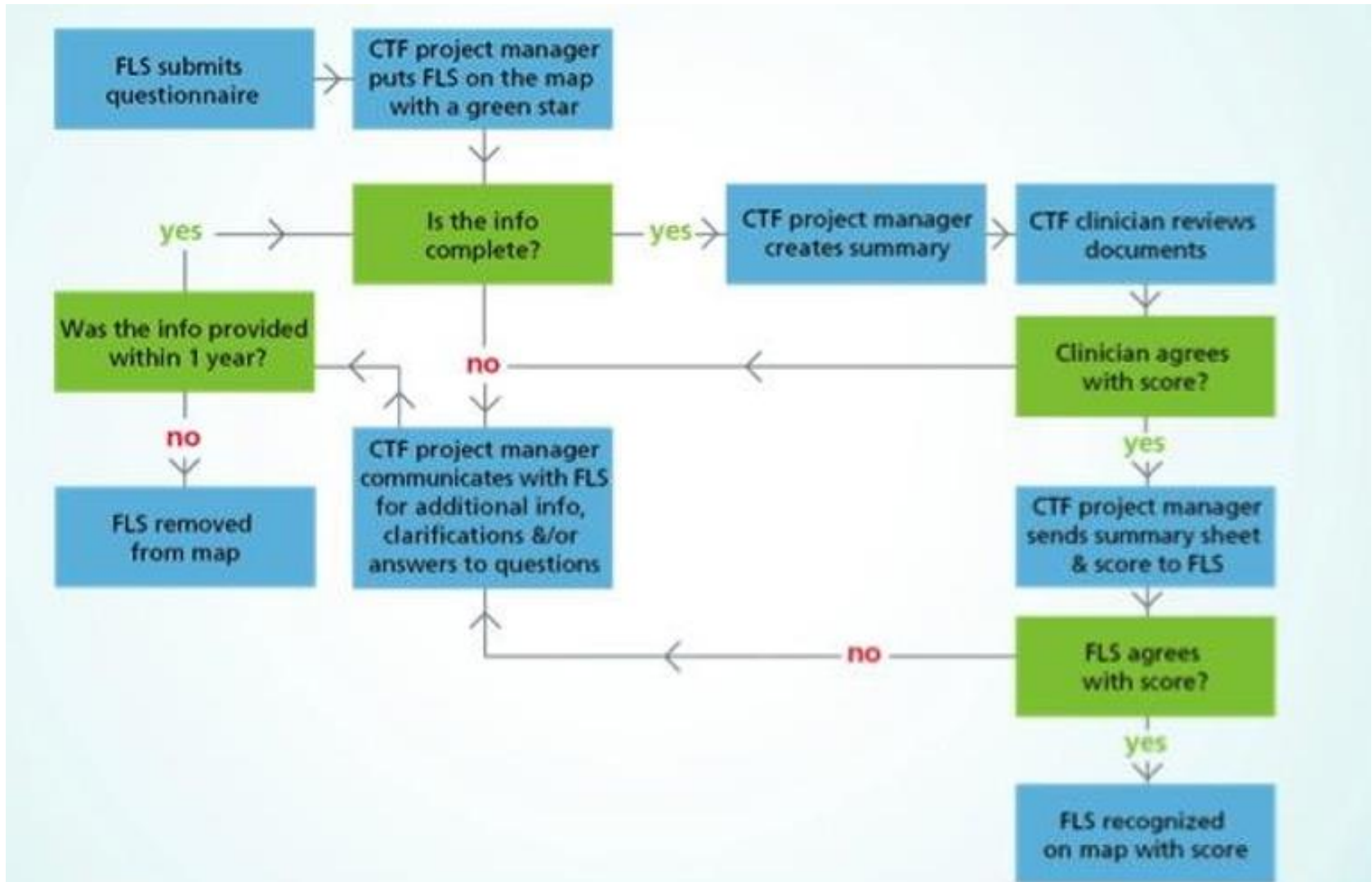
Who can apply?

- Coordinator-based 'systems' of care
- Inpatient and/or outpatient facility
- At any stage in development, but need enough data
- Worldwide

FLS can submit applications at

www.capturethefracture.org

FLS Evaluation Flow Chart



Evaluation Methodology

13 standards
5 domains
1 star

Fragility fracture domains	Achievement & Valuation
Hip	★ = >90%
Inpatient outpatient	★ = >70%
Vertebral	★ = >50%
Organizational	★ = 0-50%

FLS Overall Performance					Calculation	Score	Map Recognition
Star Grade							
Hip	Inpt	Outp	Vert	Org			
★	★	★	★	★	90+90+90+65+80		★ 83%

Evaluation Methodology: Example

Hospital Name: XXXX
 Location: ABC
 FLS Name: DEF
 Evaluate as a: A single hospital
 Population: 500000
 Service: Academic/university/teaching / PUBLIC
 Fracture type: Hip; Inpatient; Outpatient; Vertebral fractures
 Number of fracture patients last year: 800

Best Practices			FLS performance (Gold,Silver,Bronze or No Data) in accordance with each Standard					Comments	
	Standard		hip	inpatient	outpatient	vertebral	organizational	Capture the Fracture committee	FLS
H.	Standard 1: Patient Identification	1	Gold	Gold	Bronze	No Data	No Data		
I.	Standard 2: Patient Evaluation	2	Gold	Gold	Gold	No Data	No Data		
J.	Standard 3: Post fracture assessment timing	3	Gold	Gold	Gold	No Data	No Data		
K.	Standard 4: Vertebral Fracture	4	No Data	No Data	No Data	Gold	No Data		
L.	Standard 5: Assessment Guidelines	5	No Data	No Data	No Data	No Data	Gold		
M.	Standard 6: Secondary Causes of Osteoporosis	6	Gold	Gold	Gold	Gold	No Data		
N.	Standard 7: Falls Prevention Services	7	No Data	No Data	No Data	No Data	No Data		
O.	Standard 8: Multifaceted health & lifestyle risk-factor Assessment	8	Gold	Gold	Gold	Bronze	No Data		
P.	Standard 9: Medication Initiation	9	Gold	Gold	Gold	Bronze	No Data		
Q.	Standard 10: Medication Review	10	Gold	Gold	Gold	Bronze	No Data		
R.	Standard 11: Communication Strategy	11	No Data	No Data	No Data	No Data	No Data		
S.	Standard 12: Long-term Management	12	Gold	Gold	Gold	Gold	No Data		
T.	Standard 13: Database	13	No Data	No Data	No Data	No Data	Gold		

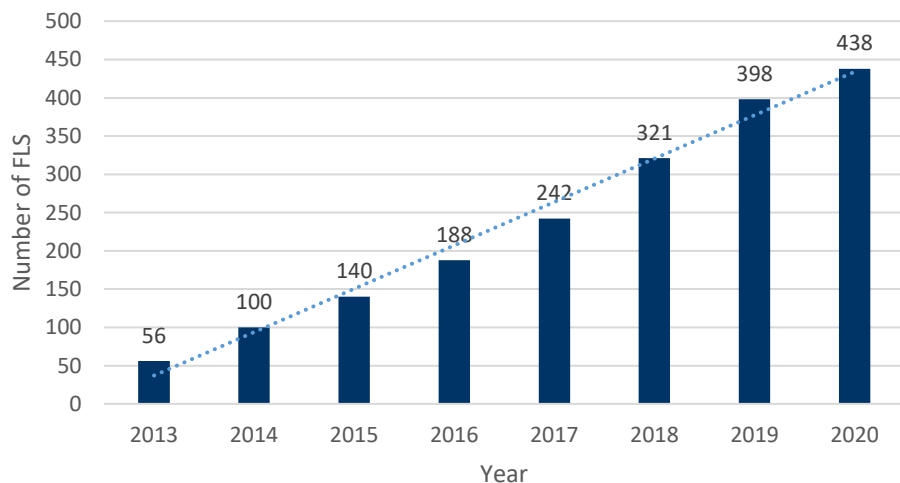
Colour coding	
Gold	Gold
Silver	Silver
Bronze	Bronze
No data	No data

Overall Performance (Gold = 5; Silver = 3; Bronze = 1; Black = 0)					Comments		Global Score
hip	inpatient	outpatient	vertebral	organizational	Capture the Fracture	FLS	
100	100	95	67	60			84.4



Results from 438 FLS part of CTF

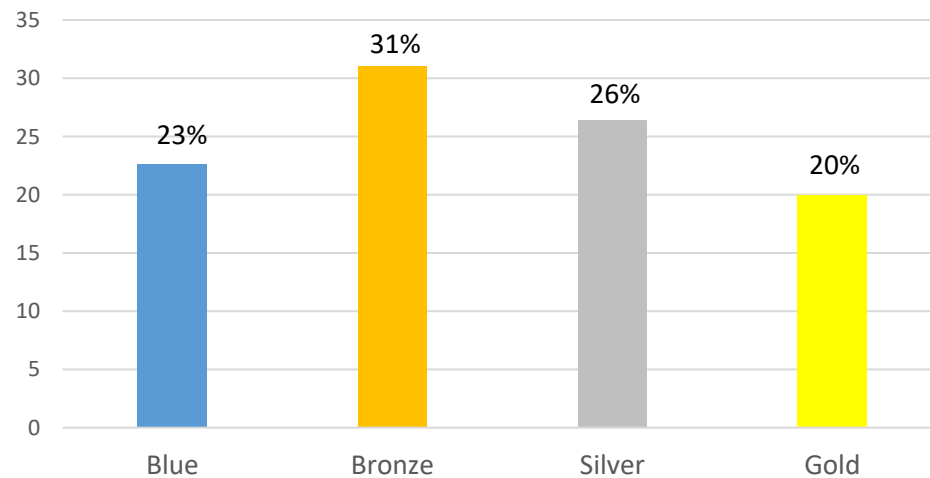
Growth of FLS Network



- Total catchment population:
>124,136,000
- Total fragility fracture patients
identified: > 425,400
- Hip fractures identified: >61,000

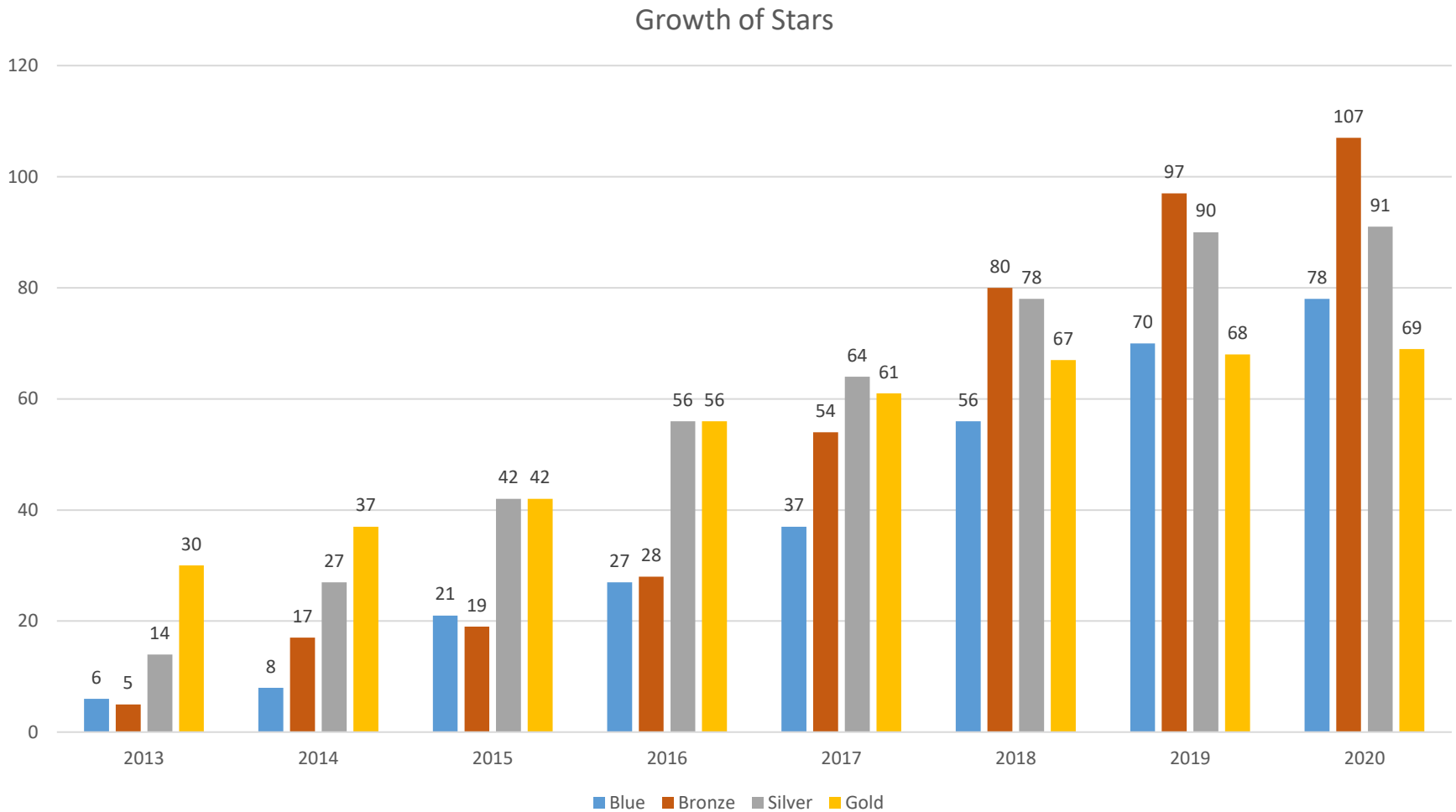
- 438 FLS from 49 countries across 6 continents
- Mix of private & publicly funded hospitals
- Mix of FLS that identify hip fractures, inpatients, outpatients and/or vertebral fractures

Overall FLS Scores
%s reaching blue, bronze, silver, gold



Results According to Stars

IOF-BPF Graded FLS across 438 Hospitals in 6 Continents



Recognizing Excellence: Awarding Certificates of Best Practice

- Graded FLS receive certificates and CTF Seals of Recognition reflecting the level of excellence obtained (gold, silver or bronze)



Submit Your Application

GET MAPPED

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

