



Was bringt ein Fracture Liaison Service?

3. Mai 2025

Dr. med. Sigrid Jehle-Kunz,

Leiterin Osteoporose Zentrum Luzern & Fracture Liaison Service (FLS) St. Anna Klinik Hirslanden
Luzern

Fracture Liaison Services (FLS)



IOF-Project: **2012**, Swiss-FLS: **2014**

Fracture Liaison Services (FLS)

FLS centers enable **coordinated post-fracture care** through the identification, diagnosis and treatment of osteoporosis patients with **the aim of preventing further fractures** and their negative consequences for those affected and the healthcare system.

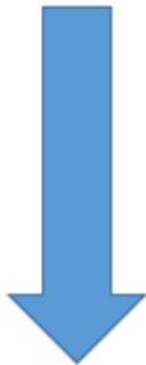
Fracture Liaison Services (FLS)

The Fracture cascade

+

The care gap

One Fracture

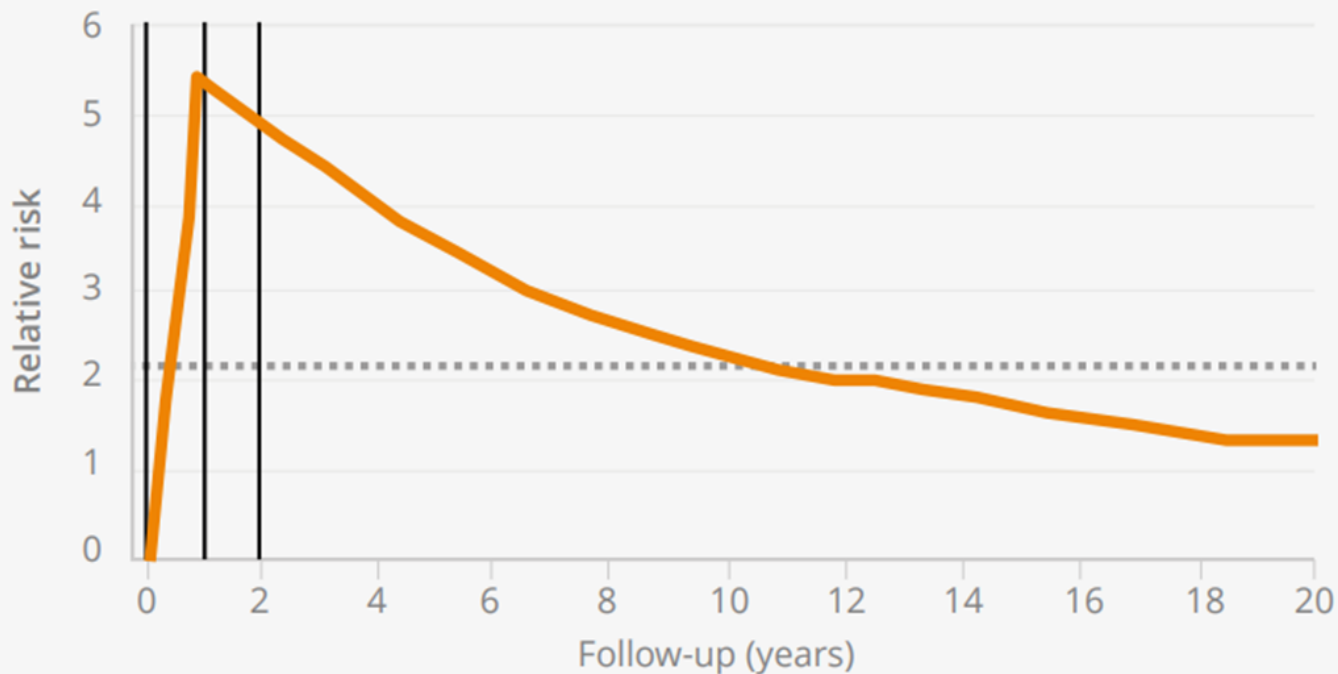


More Fractures



Prevent Re - Fractures

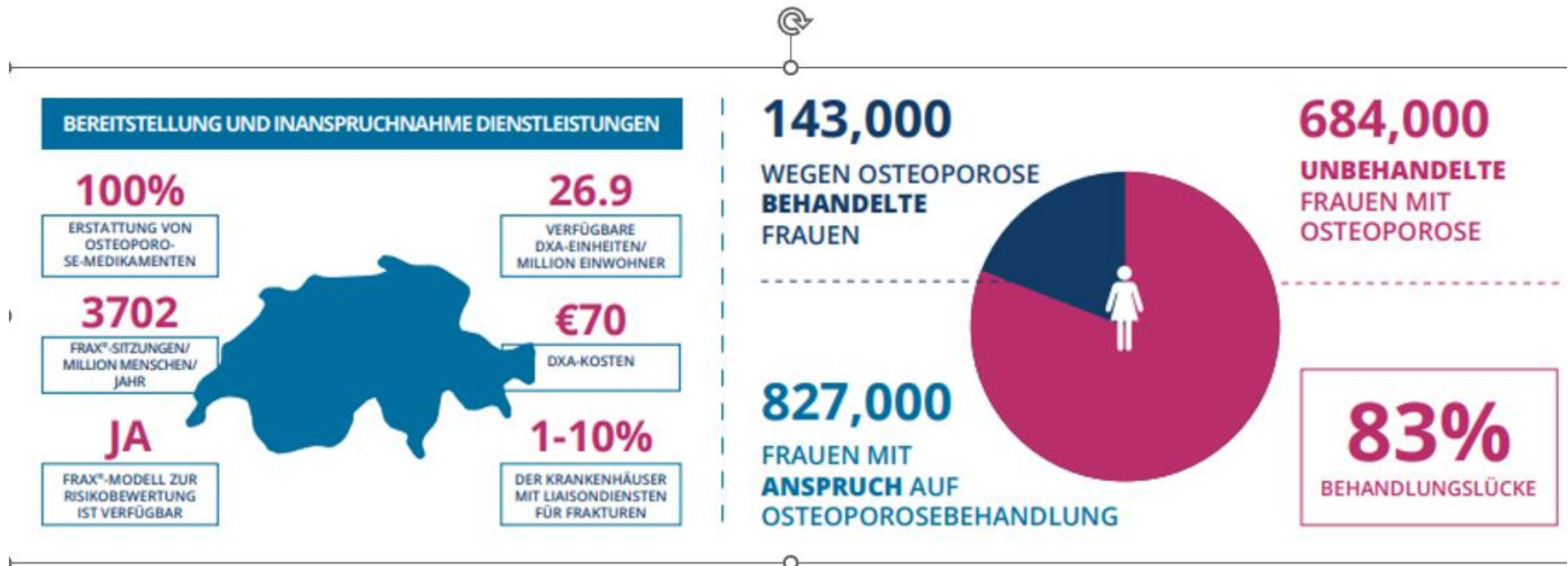
Relative risk of all subsequent fractures calculated as a mean from the first fracture (grey line) and per separate year of follow-up (orange line)



Treatment gap in Switzerland



+ SCHWEIZ
EINE NEUE SCORECARD FÜR OSTEOPOROSE IN DER EU 27+2
ZEIGT DIE KRANKHEITSLAST, LÜCKEN UND UNGLEICHHEITEN BEI DER PRÄVENTION UND VERSORGUNG VON OSTEOPOROSE UND KNOCHENBRÜCHEN AUF



Fracture Liaison Service (FLS)

Establishing an FLS center is complex but worthwhile to close the medical care gap in osteoporosis management.

FLS coordinators often play a key role in communication between doctors and those affected

Switzerland (**2014**): **first FLS centers** university hospitals

Fracture Liaison Service (FLS) - Models

A meta-analysis demonstrated that adoption of the 3 "I" model, with core priorities of Identify, Investigate and Intervene, offered greater effectiveness in patient assessment and treatment than 0-2 "I" models



3 "I" model
Identify,
Investigate,
Intervene

79% receive BMD testing
46% receive osteoporosis
treatment



2 "I" model
Identify,
Investigate

60% receive BMD testing
41% receive osteoporosis
treatment



1 "I" model
Identify

43% receive BMD testing
23% receive osteoporosis
treatment



0 "I" model

No studies on BMD testing
8% receive osteoporosis
treatment

Adapted from Ganda *et al.*³⁸

FLS - Klinik St. Anna Hirslanden

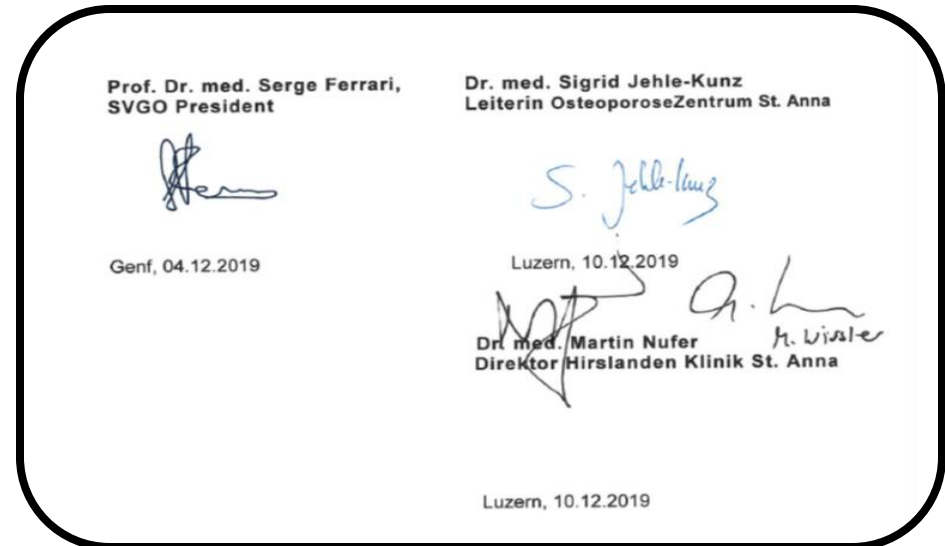
- public / privat hospital (80000)
- DVO-certified competence center for osteoporosis and metabolic bone diseases
- 2000-2200 DXA's/year (2017)
- **FLS-“Awariness”** (ASBMR / IOF-Meetings / colleagues / ...)

Project (03/2017) →

FLS - Klinik St. Anna Hirslanden

Project (03/2017) → Contract (12/2019) → Start (06/2020)

04.03.2017: email M. Nufer (Konzept FLS)
 04.05.2017: Gespräch N. Suhm (SVG0 Tagung) Aufbau/Besuch FLS BS/USB
 23.05.2017: **Besuch FLS USB/BS** Frau Kungler/Koordinatorin
 25.05.2017: **SJ email "Capture the fracture"** (FLS: fracture liaison service):
 Orthopädie, Traumatologie, Wirbelsäulenchirurgie, Geriatrie und Notfallzentrum Hirslanden Klinik St. Anna: Antworten: **Pintelon, Messmer, D. Krapf, Mutter, Nufer, Lagiarde, Rvf**
 01.06.2017: Gespräch Traumatologie (Messmer)
 06.06.2017: **Link/vorhandene Dokumente «FLS» by UL/RK erhalten**
 12.06.2017: Gespräch WS-Chirurgie (Hausmann, Mutter, Gautschi, Fekete)
 19.06.2017: Gespräch «Spitalleitung» (Nufer, Röllin: **Traumadaten/Jahresbericht 2016**)
 29.06.2017: Gespräch Radiologie (Kos, Schirp, Reisinger)
 03.07.2017: Zugang zu Patienten Daten/Liste/Notfallberichte/...IT (Tina Koch)
 26.07.2017: Gespräch Fusszentrum Bhf (Krapf, Brunner, Majewski)
 25.09.2017: Vorstellung OKL (durch Klöti)
 10.11.2017: Gespräch Traumatologie (Rvf, Röllin)
 20.11.2017: **Traumaleitungssitzung**
 27.11.2017: Vortrag OKL (Linus Jankauskas, Morgenrapport)



OSTEOPOROSEZENTRUM

FRACTURE LIAISON SERVICE (FLS) AB JUNI 2020 IN DER KLINIK ST. ANNA

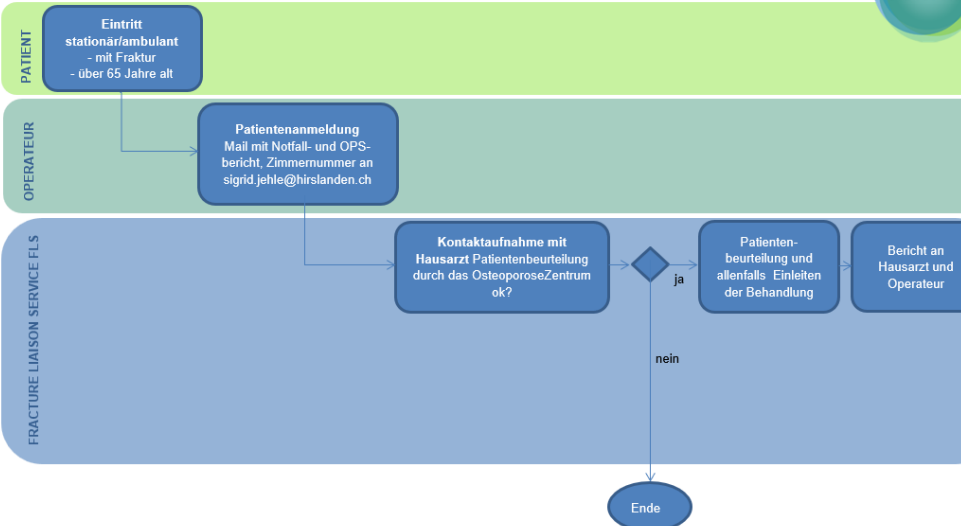
Der demografische Wandel führt zu einer Zunahme von Knochenbrüchen. Bei älteren Menschen ist die häufigste Ursache die **Osteoporose**, die – trotz zahlreicher präventiver Möglichkeiten – viel zu selten diagnostiziert und fachgerecht behandelt wird. Das liegt oft daran, dass Kommunikation und Zusammenarbeit zwischen Klinik, niedergelassenen Ärztinnen und Ärzten und den Osteoporose-Spezialisten zu wenig etabliert sind. Die Einrichtung eines **Fracture Liaison Service (FLS)** kann diese Versorgungslücke schliessen, eine engere Zusammenarbeit zwischen Klinik und Hausarzt ermöglichen und Folgefrakturen vorbeugen.

Ab Juni 2020 werden in der Klinik St. Anna deshalb **sämtliche Patienten über 65 mit osteoporoseverdächtiger Fraktur nach einem genau definierten Ablauf evaluiert**. Nach Rücksprache mit der zuständigen Hausärztin oder dem zuständigen Hausarzt wird das Team des OsteoporoseZentrums allfällige Schritte zur Osteoporoseabklärung und -behandlung in Angriff nehmen.

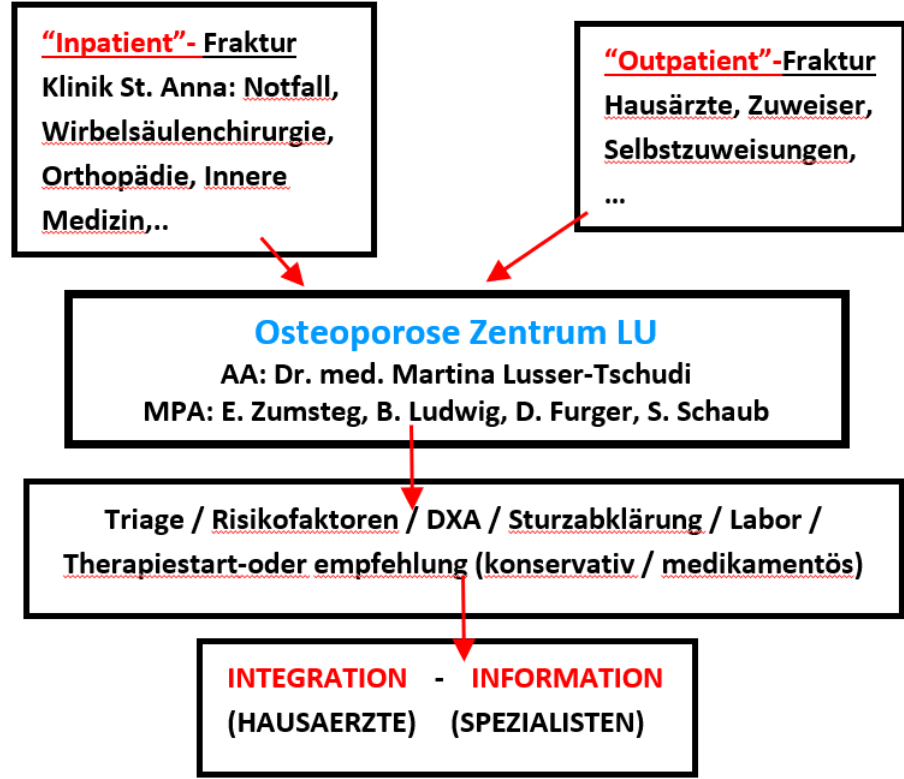
Dr. med. Sigrid Jehle-Kunz, Leiterin OsteoporoseZentrum St. Anna / Koordinatorin FLS

FLS - Klinik St. Anna Hirslanden

OsteoporoseZentrum/AlterstraumaZentrum
Gesamtablauf bei Frakturpatienten über 65 (Fracture Liaison Service FLS)



ORGANISATION



FLS-Application (12/2020) → 01/2021)



Evaluated as : A single hospital
Service : Public/private – mixed funding
Population : 800000
670 fracture patients in the past year

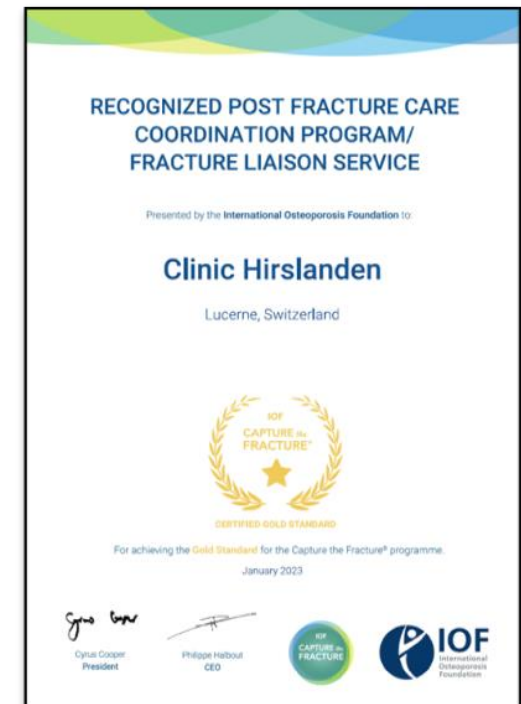
FLS performance

(★ Gold, ★ Silver, ★ Bronze or ★ Black)
 in accordance with each standard

	HIP	INPATIENT	OUTPATIENT	VERTEBRAL	ORGANISATION
Standard 1 : Patient Identification	★	★	★		
Standard 2 : Patient Evaluation	★	★	★		
Standard 3 : Post Fracture Assessment Timing	★	★	★		
Standard 4 : Vertebral Fracture				★	
Standard 5 : Assessment Guidelines					★
Standard 6 : Secondary Causes of Osteoporosis	★	★	★	★	
Standard 7 : Falls Prevention Services					★
Standard 8 : Multifaceted Health & Lifestyle Risk-Factor Assessment	★	★	★	★	
Standard 9 : Medication Initiation	★	★	★	★	
Standard 10 : Medication Review	★	★	★	★	
Standard 11 : Communication Strategy					★
Standard 12 : Long-term Management	★	★	★	★	
Standard 13 : Database					★
Overall Performance per Domain	★ Gold	★ Gold	★ Silver	★ Gold	★ Silver

Final Score

★ 87%



1. Swiss FLS Network **October 2021**



- **Erhöhung der Anzahl** großer Krankenhäuser und Kliniken mit einem **leistungsfähigen FLS in der Schweiz**
- Ziel ist es nicht nur, die Leistung der bestehenden FLS zu verbessern, sondern auch einen **Dominoeffekt zu erzeugen**, bei dem führende Krankenhäuser regionale Krankenhäuser beim **Aufbau eigener FLS unterstützen**
- Hauptziel ist es, die **Anzahl der durch FLS identifizierten und behandelten Patienten zu erhöhen**

2. Swiss FLS Network Oct 2022



2ND SWISS/Alps FLS NETWORK MEETING

Keynote speakers/hosts:
 Prof. Serge Ferran, HUG Geneva, CH
 Prof. Kassim Javaid, University of Oxford, UK

Kongresszentrum
 Allresto
 Effingerstrasse 20
 3005 Bern



AGENDA

- 10:00 – 12:00 Opening
 Keynote lecture: FLS achievements and perspectives
 Introduction of the FAN-platform incl. Q&A
Networking lunch
- 13:00 – 15:00 Parallel workshops incl. live-use of the FAN-platform
 Parallel workshop 1: Implementing your FLS
 Parallel workshop 2: Improving your FLS
Coffee break
 Workshop feedback and summary
- 15:30 – 17:30 Discussion: update and progress of ongoing FLS-centers
- Outlook and closing
- 18:00 *Networking apéro*
- 19:00 *Networking dinner (registration required)*

Prof. Serge Ferrari
 Prof. Kassim Javaid

Prof. Thierry Chevalley (Geneva)
 Dr. Sigrd Jehle-Kunz (Luzern)
 Dr. Daniel Kraus (Vienna)

Sponsored by



3. Swiss FLS Network **Nov 2023**



03.11.2023
11 - 17h
+ Aperó

3rd SWISS/ALPS NETWORK MEETING

Keynote speaker:

Prof. Serge Ferrari, CH
Prof. Thierry Chevalley, CH
Prof. Piet Geusens, Belgium
Michael Lange, Denmark

KKL Luzern
Terrassensaal
Europaplatz 1
6005 Luzern

AGENDA:

10.30 – 11.00	Welcome & Coffee	
11.00 - 11.45	Introduction & State of Swiss FLS's	Prof. Serge Ferrari / Prof. Thierry Chevalley
11.45 – 12.30	The Dutch FLS experience	Prof. Piet Geusens , Belgium
12.30 – 13.30	Networking lunch	
13.30 - 15.30	FLS-Centers: Poster presentation & discussion	All Centers
15.30 - 16.00	Panel Summary & feedback around Posters	National & International Experts
16.00 – 16.15	Coffee break	
16.15 – 17.00	Coordinated care policy strategy Switzerland	Michael Lange
17.00 - 17.05	Summary & "Best FLS Poster Award"	Prof. Serge Ferrari
17.05 -	Networking Apéro	

Sponsored by:



Registration to:
katy.giroux@unige.ch

4. Swiss FLS Network **Oct 2024**



25.10.2024
10.30 - 17h
+ Aperó

4th SWISS/ALPS NETWORK MEETING

Keynote Speaker:

Dr. Ane Djuv, Norway
Prof. Johannes Bastian, CH
Dr. Sigrid Jehle-Kunz, CH
Prof. Thierry Chevalley, CH

Location: Punkt.Null
Maulbeerstrasse 10
3011 Bern

AGENDA:

10.00 – 10.30	Welcome & Coffee	
10.30 - 11.15	Introduction & State of Swiss FLS	Dr. Sigrid Jehle-Kunz / Prof. Thierry Chevalley
11.15 – 11.45	Reassure quality at your FLS – "3 in 1 system"	Dr. Ane Djuv (Norway)
11.45 - 12.15	FLS meets FFN – the Trauma Surgeon perspective	Prof. Johannes Bastian, Bern
12.15 – 13.30	Networking lunch	
13.30 - 15.30	Presentation & exchange (Tools, Tips, Pathways, Documents)	All Centers
15.30 - 16.00	IOF update (national/international FLS)	Eric Brúlié (IOF)
16.00 – 16.15	Coffee break	
16.15 – 17.00	Update AgO (Alliance against Osteoporosis)	AgO Spokesperson
17.00 - 17.05	Summary & "Best FLS –supporting tool" Award	Prof. Thierry Chevalley/ Dr. Sigrid Jehle-Kunz
17.05 -	Networking Apéro	

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Registration to:
katy.giroux@unige.ch

Capture the Fracture® International Map of Best Practice

International recognition for PFC/ Fracture Liaison Services in Switzerland 























As of Oct 16th, 2024

22
PFC/FL
S
mappe
d from
CH

 x4  x10  x8



5 new FLS & 1 re-submission since last year

	Latest submission
 Center of Bone Diseases - Lausanne University Hospital	10.02.2021
 Geneva University Hospitals: Division of Bone Diseases	18.12.2020
 Endonet AG Basel & University Hospital Basel	27.08.2013
 Klinik St. Anna, Hirslanden	13.12.2022
 Spitalzentrum Oberwallis	14.06.2024
 HFR Fribourg	22.09.2020
 Clinica Luganese Moncucco	08.05.2023
 Klinik Kloster Katharinental	26.07.2022
 Orthopädie Sonnenhof & OsteoRheuma Bern	28.11.2022
 Hôpital du Jura- HJU site de Delémont	15.12.2022
 Stadtspital Zürich	05.07.2023
 Leukerbad Clinic	07.07.2023
 Kantonsspital Baselland, Standort Bruderholz	30.08.2024
 Kantonsspital Olten	18.01.2024
 Geriatric Trauma Centre, University Hospital Zurich	28.04.2015
 Ambulatory FLS in Geneva	16.06.2022
 Universitäre Altersmedizin Felix Platter	12.05.2021
 Centre Hospitalier du Valais Romand	28.03.2022
 RHNE (Réseau Hospitalier Neuchâtelois)	15.12.2022
 Clinique la Colline (Hirslanden)	08.07.2024
 Kantonsspital St.Gallen	05.01.2024
 Kantonsspital Graubünden	08.07.2024

Swiss FLS report 2023

Swiss FLS Network – 3rd evaluation: Main parameters

12 FLS: Zurich, Lucerne, Brig, Rheuma Bern, En. Basel, St.Katheri., Neuchâtel, Fribourg, HUG, CHUV, Jura, Valais

Period: 2023, assessed mid-June 2024

	Nb Pts	Hip	Vert ¹	Non-surgical ²	DXA	TTT Rec.	TTT start ³	12m-adher. ⁴	Falls eval. ⁵
Total	5023	1598	792	916	2097	3307	1794	1454	2548
% Nb Pts		31.8	15.8	18.2	41.8	65.8 ^a	35.7	29.0	50.7
% Nb Pts <u>FLS concerned</u>				32.7			41.3	44.0	58.7

^aMeets the IOF recommended min. 50%

¹VFX: 9/12 centers

²Non-surgical: 6/12 centers

³TTT start: 1 center (Neuchâtel) not accounting

⁴12m-adherence: 3 centers (Zurich, Endonet, Neuchâtel) not accounting

⁵Falls eval: 1 center (Neuchâtel) not accounting

Swiss FLS report **2023** /2022

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<u>% Nb Pts FLS concerned</u>				32.7			41.3	44.0	58.7
Total (year 2022)	3254	1116	855	813	1192	1807	1073	943 (6m)	2090
% Nb Pts		34.4	26.3	25.0	36.6	55.5 ^a	33.0	29.0	64.2

^aMeets the IOF recommended min. 50%

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²Non-surgical: 6/12 centers

³TTT start: 1 center (Neuchâtel) not accounting

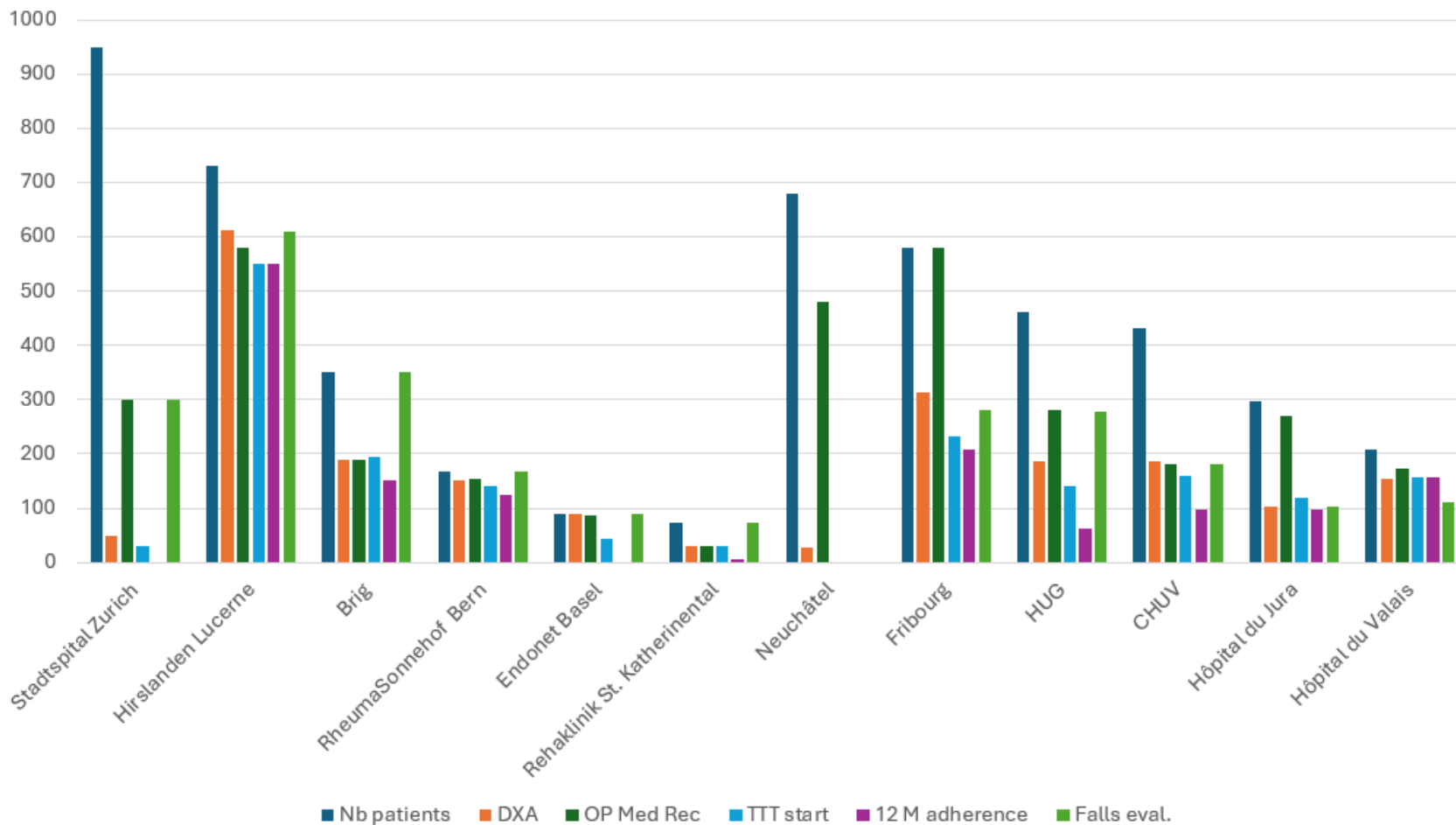
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⁵Falls eval: 1 center (Neuchâtel) not accounting



Swiss FLS report 2023

Swiss FLS -2023 activity



Evaluation/Questions

from participants of the FLS meeting 2024

- How to find **better ways to identify patients** with fractures
- **How to get funded** (application, different approaches, processes)
- **Solution for Data collection** (free or low-cost data bases)
- Solutions for cross sectoral **engagement hospital – ambulatory sector**
- How to **better follow up after fx**
- How to **be sustainable**
- **Exchange**
- What are **meaningful milestones**
- **Help in challenging situations (advice/input)**
- **Presenting Data of Cost of fractures in CH** (incl. tx days, nurses at home)

Coaching Clinics (virtual)

10.02.2023 **French**, 10.03.2023 **German**



FLS/FAN Coaching Clinic

10 march 2023

Prof. Serge Ferrari

Dr. med. Sigrid Jehle-Kunz

Polo Looser

Coaching Clinics (virtual)

28.06.2023 English



FLS/FAN Coaching Clinic

Webinar, 28. June 2023

Prof. Thierry Chevalley

Dr. Sigrid Jehle

Polo Looser

Coaching Clinics (virtual)

28.06.2023 English

Agenda

- ✓ FLS Information material for GPs & patients
- ✓ Capture the fracture website; Best Practice Framework
- ✓ Data to collect (based on Key performance indicators (KPI))
- ✓ How to follow up patients (mail, phone, person.....)
- ✓ Identification of previously Unrecognized Vertebral Fracture
- ✓ Cost / effectiveness of FLS (review of main publications)
- ✓ FAN (FLS Academy and Network)
- ✓ **Questions and discussion**

FLS-Landschaft in der Schweiz Januar 2023











<https://www.buildbetterbones.org/>

available as of May 4th 2023

BUILD BETTER BONES

- For people **at all stages of life**, the campaign will focus on the **building blocks of good bone health** (diet, exercise, vitamin D, avoidance of alcohol or smoking, and healthy body weight) as well as early awareness of personal risk.
- For **people with osteoporosis**, we will spread understanding about how to build better bones through exercise and **good nutrition**, as a way to maintain mobility and independence.
- For **patients who have fractured** – information about how targeted exercise and good post-fracture nutrition can support and speed recovery, as well as the importance of secondary fracture prevention.
- **Falls prevention**: tips on how to make a home falls-proof (especially important for people with osteoporosis).
- **Caregivers** play an important role, and we'll provide insights and guidance that helps families or friends support their loved ones.

TOPICS

-  BUILD BETTER BONES **NEW 2023**
-  STEP UP FOR BONE HEALTH
-  RISK
-  THAT'S OSTEOPOROSIS
-  OSTEOPOROSIS & ASSOCIATED DISORDERS
-  MEN
-  WOMEN
-  NUTRITION
-  VERTEBRAL FRACTURES
-  BURDEN

CATEGORIES

- Posters
- Campaign Tools
- Social Media
- Fact Sheets
- Infographics
- Reports
- Brochures



BUILD BETTER BONES



STEP UP FOR BONE HEALTH



THAT'S OSTEOPOROSIS



RISK



NUTRITION



VERTEBRAL FRACTURES



Capture the fracture website; Best Practice Framework

www.capturethefracture.org



Scan the QR code!
Visit the Capture the Fracture® website



[My BPF account](#)

Resource Center

A comprehensive collection of free resources to support those who want to implement, improve, or advocate for Post-Fracture Care Coordination Programs (PFC) / Fracture Liaison Services (FLS).

Click below to find your resources



Follow Us

Was bringt ein Fracture Liaison Service?

Was bringt ein Fracture Liaison Service? (1)

1. Reduktion von Folgefrakturen

- Durch systematische Identifikation und Nachsorge von Patienten nach der ersten Fraktur wird das Risiko weiterer Frakturen um bis zu 30–60 % gesenkt.

Ganda K, Puepperr C, Shibuya N et al. Impact of fracture liaison services on subsequent fractures and mortality: a systematic literature review. *Osteoporos Int.* 2013;24(5):1509–1518. doi:10.1007/s00198-012-2171-4

2. Verbesserte Diagnostik und Therapie

- Osteoporose und andere Risikofaktoren werden frühzeitig erkannt.
- Zielgerichtete Therapie (z. B. Knochenaufbau-Medikamente) wird konsequent eingeleitet und überwacht

McLellan AR, Reid DM, Forbes K et al. The Fracture Liaison Service: success of a program to improve osteoporosis care in a district general hospital. *Osteoporos Int.* 2003;14(12):1022–1027. doi:10.1007/s00198-003-1470-8

3. Kosteneinsparungen im Gesundheitssystem

- Verhinderte Folgefrakturen vermeiden teure stationäre Aufenthalte, Rehabilitation und Pflege.
- Studien zeigen meist eine Nettokostensparnis durch geringere Folgekosten.

Solomon DH, Morrissey MA, Goulding MR et al. Cost-effectiveness of a fracture liaison service program for the prevention of osteoporotic fractures. *Osteoporos Int.* 2014;25(9):2117–2125. doi:10.1007/s00198-014-2712-5

Was bringt ein Fracture Liaison Service? (2)

4. Interdisziplinäre Koordination

- Orthopäden, Rheumatologen, Endokrinologen, Physiotherapeuten
arbeiten in einem definierten Workflow zusammen.
- Klare Verantwortlichkeiten/Kommunikationswege: bessere Behandlungsqualität.

Mitchell PJ, Porter K, Paskins ZWP et al. Models of care for fracture liaison services: optimising coordination between primary and secondary care. *J Multidiscip Healthc.* 2019;12:425–433. doi:10.2147/JMDH.S200615

5. Steigerung der Patientenzufriedenheit und –Compliance

- Gezielte Aufklärung und koordinierte Nachsorge erhöhen die Therapietreue.
- Patientenschulung zu Sturzprävention & Lebensstilanpassung reduziert RF.

Banerjee R, Nunan D, Allsop J et al. Improved adherence and outcomes in patients with osteoporosis managed within a fracture liaison service. *Arch Osteoporos.* 2020;15:90. doi:10.1007/s11657-020-00793-5

6. Langfristige Gesundheitsoutcomes

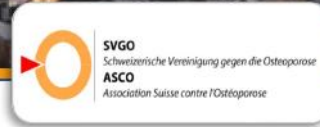
- Erhalt der Mobilität und Selbstständigkeit älterer Menschen.
- Verringerung von Mortalität und Pflegebedürftigkeit nach osteoporotischen Fx

Johansson H, Kanis JA, Odén A et al. Mortality and quality of life following hip fracture in elderly men and women. *Osteoporos Int.* 2017;28(8):2419–2430. doi:10.1007/s00198-017-4005

Swiss FLS Network **Ziele**

- Daten erheben und **den Nutzen von FLS im Vergleich zu anderen Prioritäten** (Diabetes, koronare Herzkrankheit, ...) für die Gesundheitsbehörden **aufzeigen**
- Als Netzwerk **mit stärkerer Stimme** für die Bedeutung einer angemessenen Behandlung von Patienten mit Fragilitätsfrakturen in der Schweiz **einzutreten**

5. Swiss FLS Network 7. November 2025



07.11.2025
10.30 - 17h
+ Apero

SAVE THE DATE

5th SWISS/ALPS NETWORK MEETING

Kursaal Bern

Kornhausstrasse 3
3013 Bern

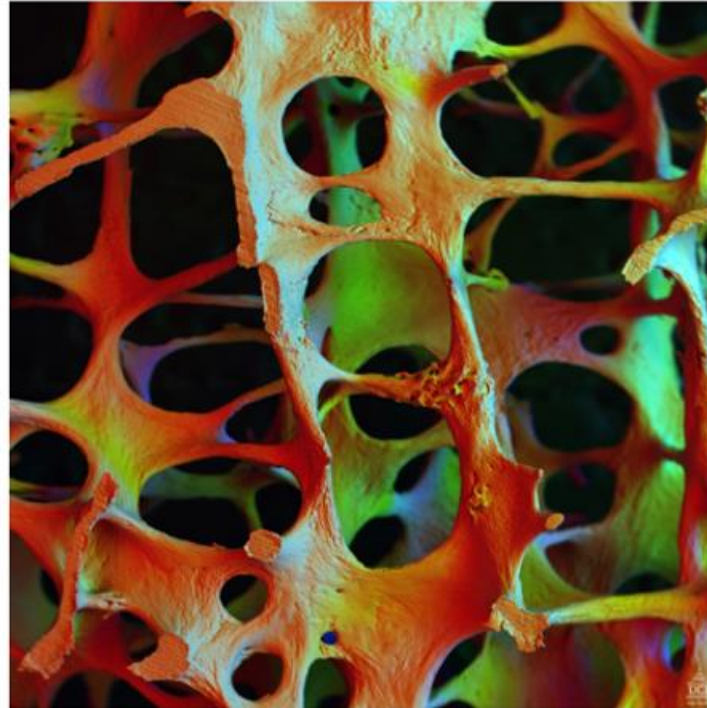
Keynote Speaker from UK:
Prof. Kassim Javaid
how to save resources &
the value of digitalization

IOF – update
Insights and exchange on
IOF-CTF re-evaluation

Workshops:
Improve Patient
identification & long
term follow up

Interactive exchange:
Develop Strategies to
start and optimize
your FLS

Thank you for your attention



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