



Ortho-Geriatrie: “Taking care Tomorrow for the people of Yesterday”

Dr. Koen Liekens

ORTHO.TOMORROW 25.11.23

Are we ready for Tomorrow??



Wat brengt “Tomorrow” in Heupchirurgie?

- Japan: 80.000 100-jarigen!



- Negatieve bevolkingsgroei: 125 → 100 miljoen tegen 2050

- België:



- 2700 100-jarigen



Heupchirurgie bij ouderen: Ortho.Tomorrow

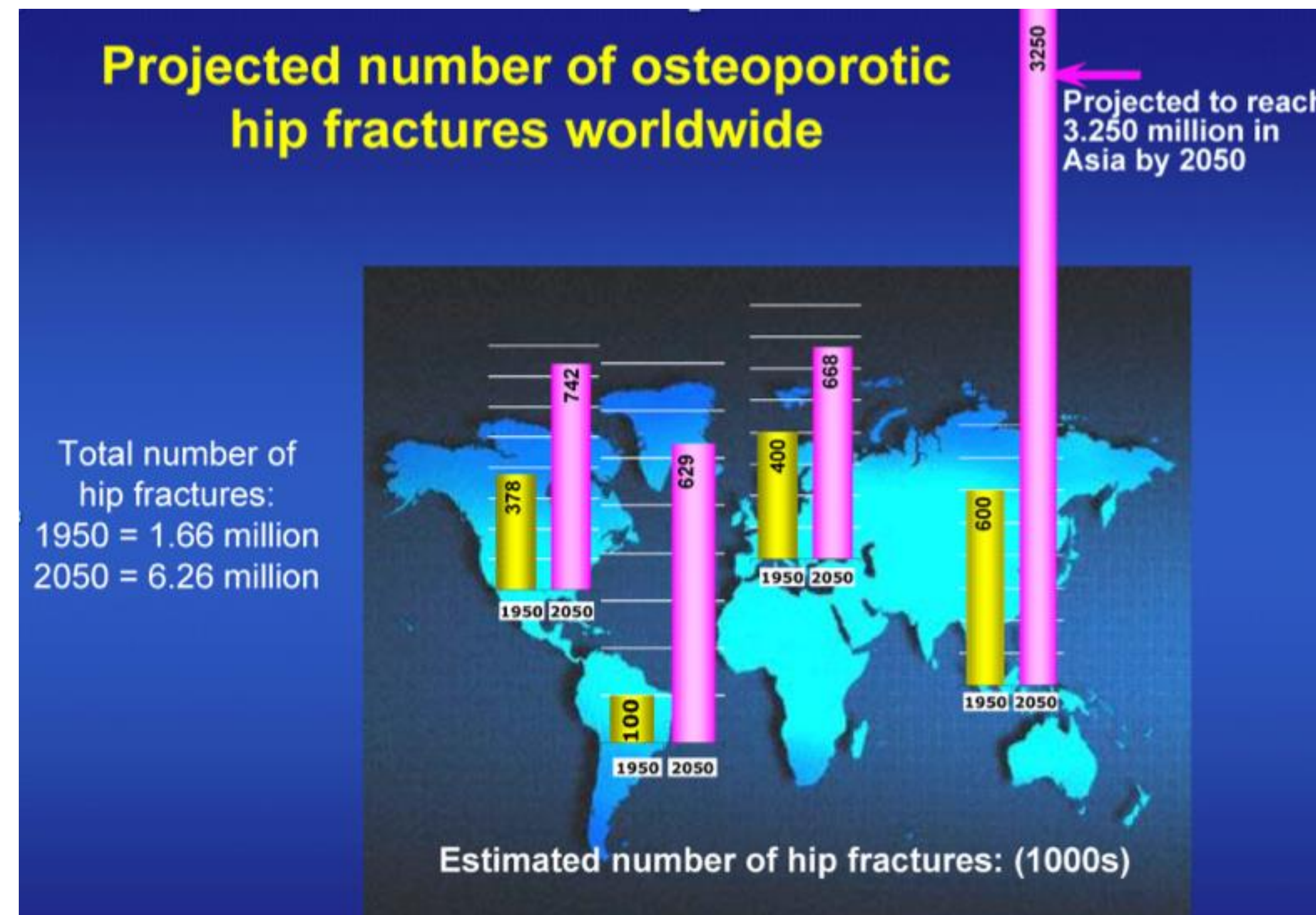
Heupfracturen –
Ortho-G!!

Electieve THP bij
80-90-(100?)-
jarigen –
Ortho-G?



“Fragility Fracture Crisis”

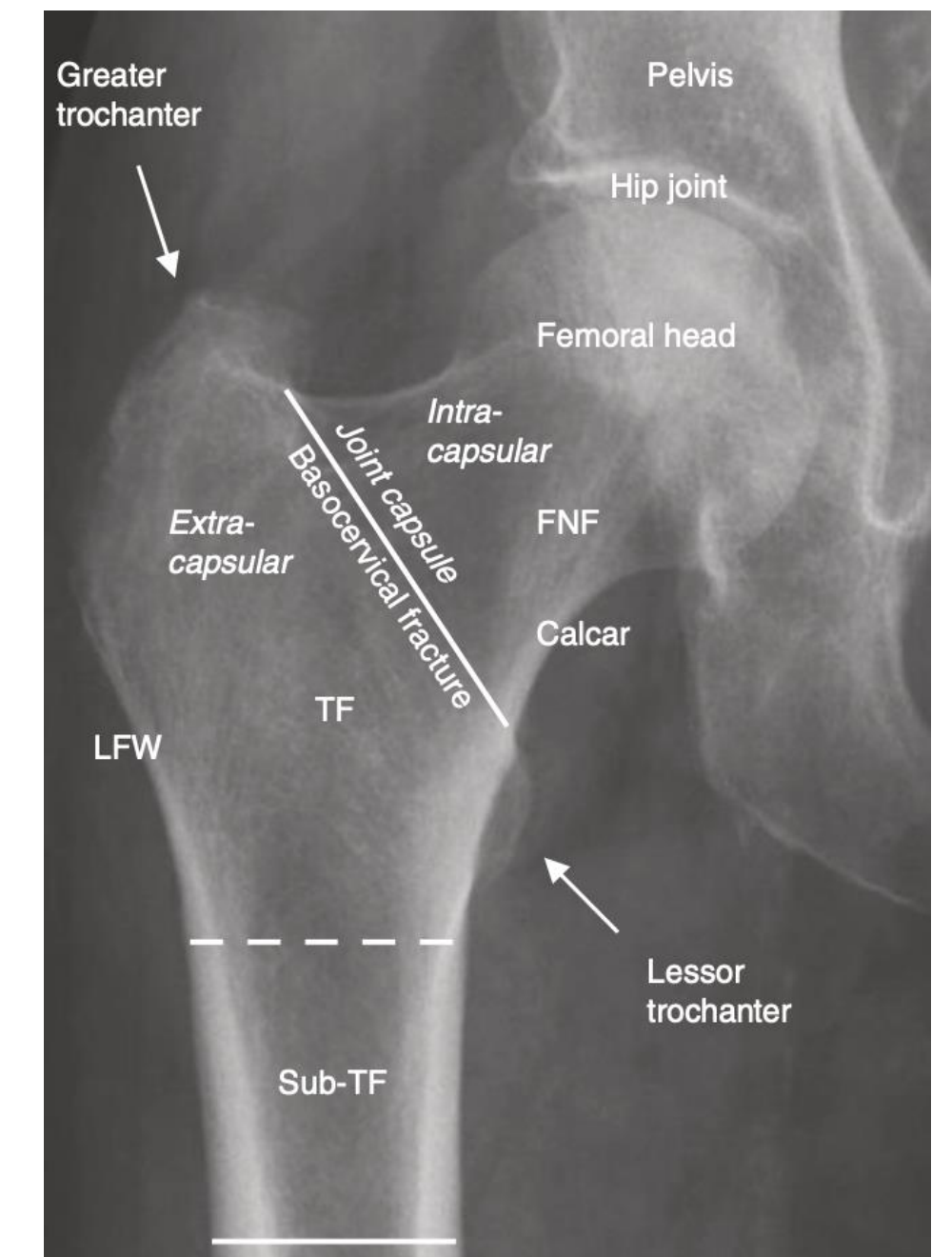
- Tegen 2050 → 6.3 miljoen heupfracturen wereldwijd
- VS 2040: 512.000 (> 14.000.000.000 \$)



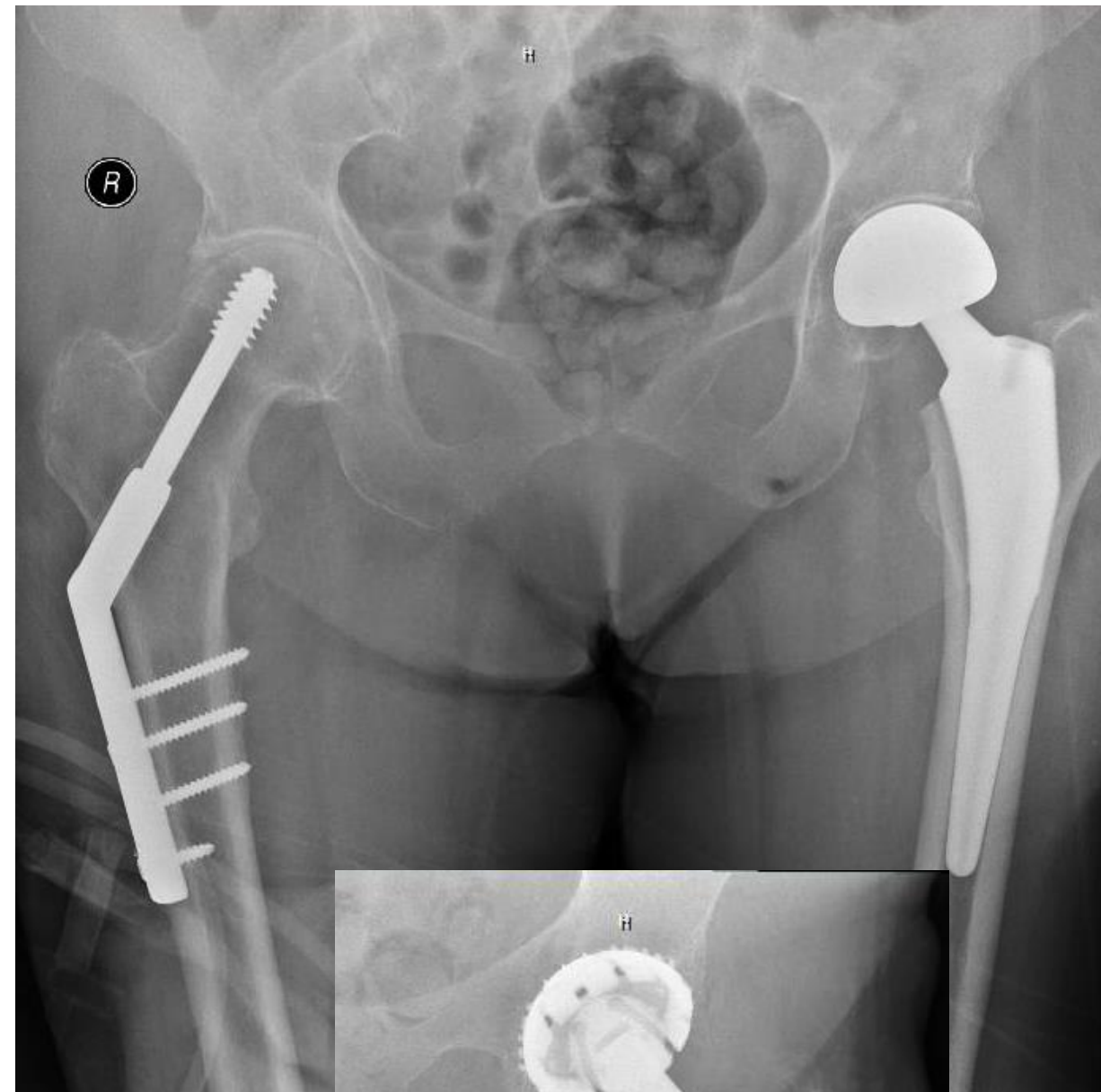
Behandeling heupfractuur = meestal operatief

- Risico's van langdurige immobilisatie:
 - Trombo-embolische verwikkelingen, pneumonie, urineweginfectie, decubitus, spieratrofie, ...
 - Mortaliteit!
- Snelle mobilisatie nodig! (zeker bij ouderen)
 - Heelkunde om mobilisatie toe te laten
 - 1^e behandeling liefst definitief (heringrepen worden slecht verdragen)

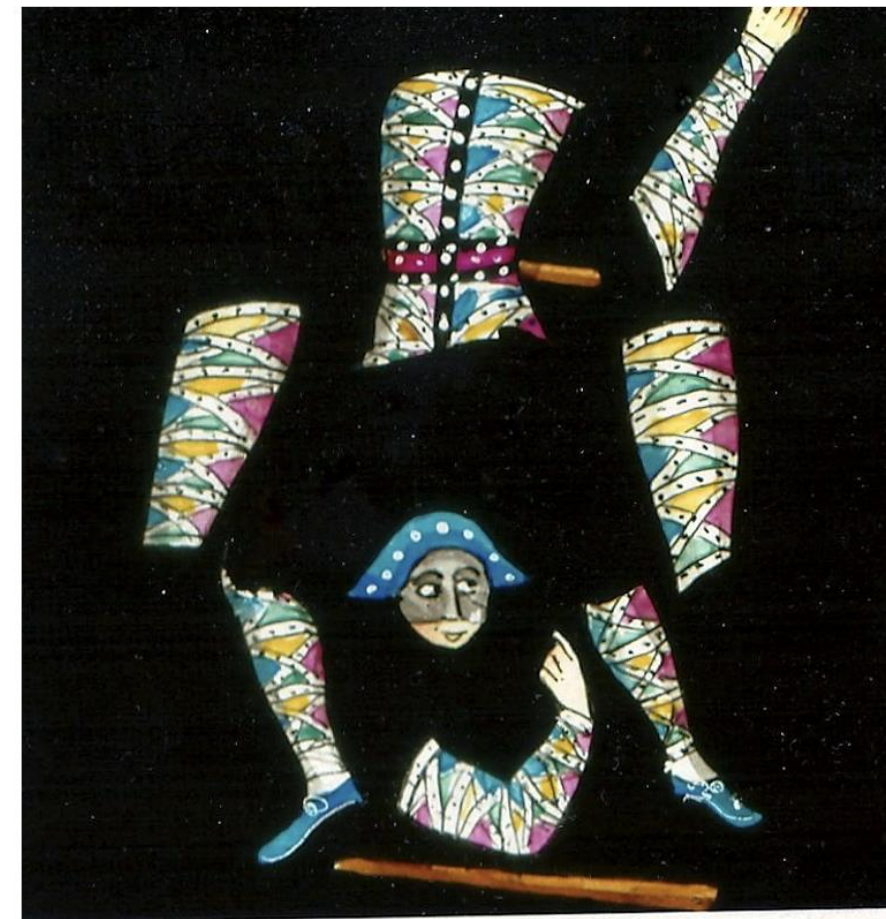
→ *Get it right the first time!*



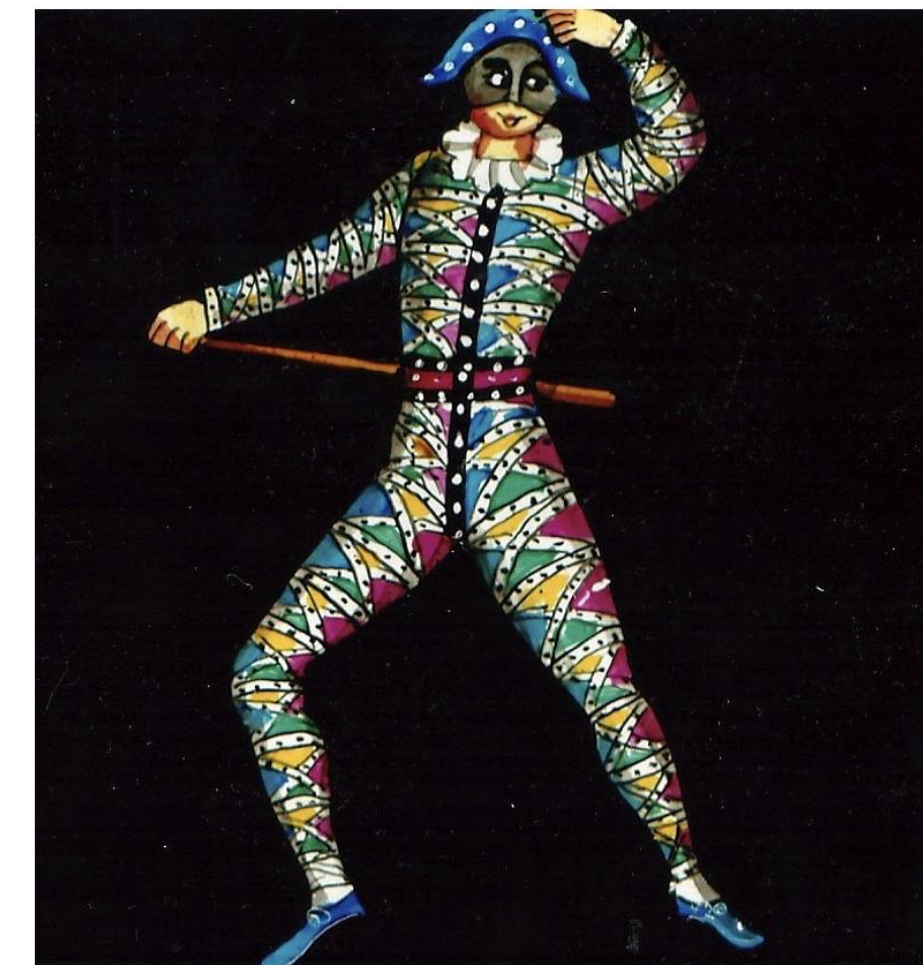
Orthopedisch chirurg = "The Fixer"



Fracture fixed... Happy?



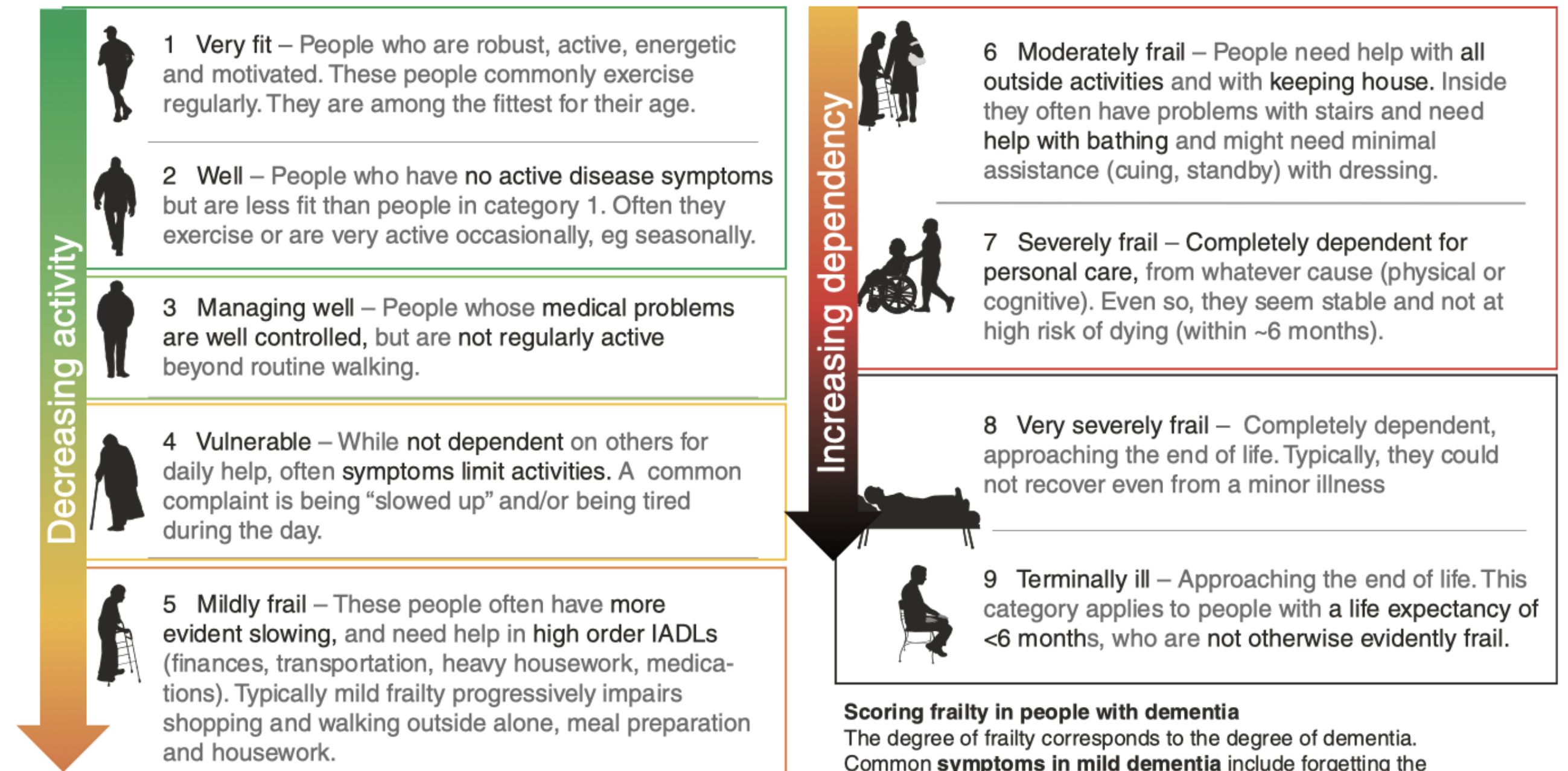
*dear Mr. Liekens and
UCH team...I arrived
in pieces and you put me
back together.....*



*Thank You!!
With great appreciation of your
skilled profession
en veel succes in 2012!
Joost Hunningher (nov.18)*

Typische patient met heup#: “Frailty”

- Vaak slechte algemene toestand (“Frailty”)
 - 60% = ASA 3 & 4
- Mortaliteit op 1 jaar: 20 %
 - Cave dementie: hogere mortaliteit



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 Geriatric Medicine Research,
 Dalhousie University, Halifax, Canada.
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Scoring frailty in people with dementia
 The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal. In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting. In **severe dementia**, they cannot do personal care without help.

Mortaliteit: Timing matters!

OPEN ACCESS Freely available online

PLOS ONE

Timing Matters in Hip Fracture Surgery: Patients Operated within 48 Hours Have Better Outcomes. A Meta-Analysis and Meta-Regression of over 190,000 Patients

Lorenzo Moja^{1,3*}, Alessandra Piatti⁴, Valentina Pecoraro², Cristian Ricci³, Gianni Virgili⁵, Georgia Salanti⁶, Luca Germagnoli³, Alessandro Liberati^{7†}, Giuseppe Banfi^{2,3}

European Journal of Orthopaedic Surgery & Traumatology (2023) 33:751–757
<https://doi.org/10.1007/s00590-022-03250-x>

GENERAL REVIEW

What do hip fracture patients die from?

Spyridon Katsanos¹ · Spyridon Sioutis⁴ · Lampros Reppas⁴ · Evanthia Mitsiokapa² · Aikaterini Tsatsaragkou³ · Dimitrios Mastrokalos⁴ · Dimitrios Koulalis⁴ · Andreas F. Mavrogenis⁴ 

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Prognose: Wat te verwachten achteraf?

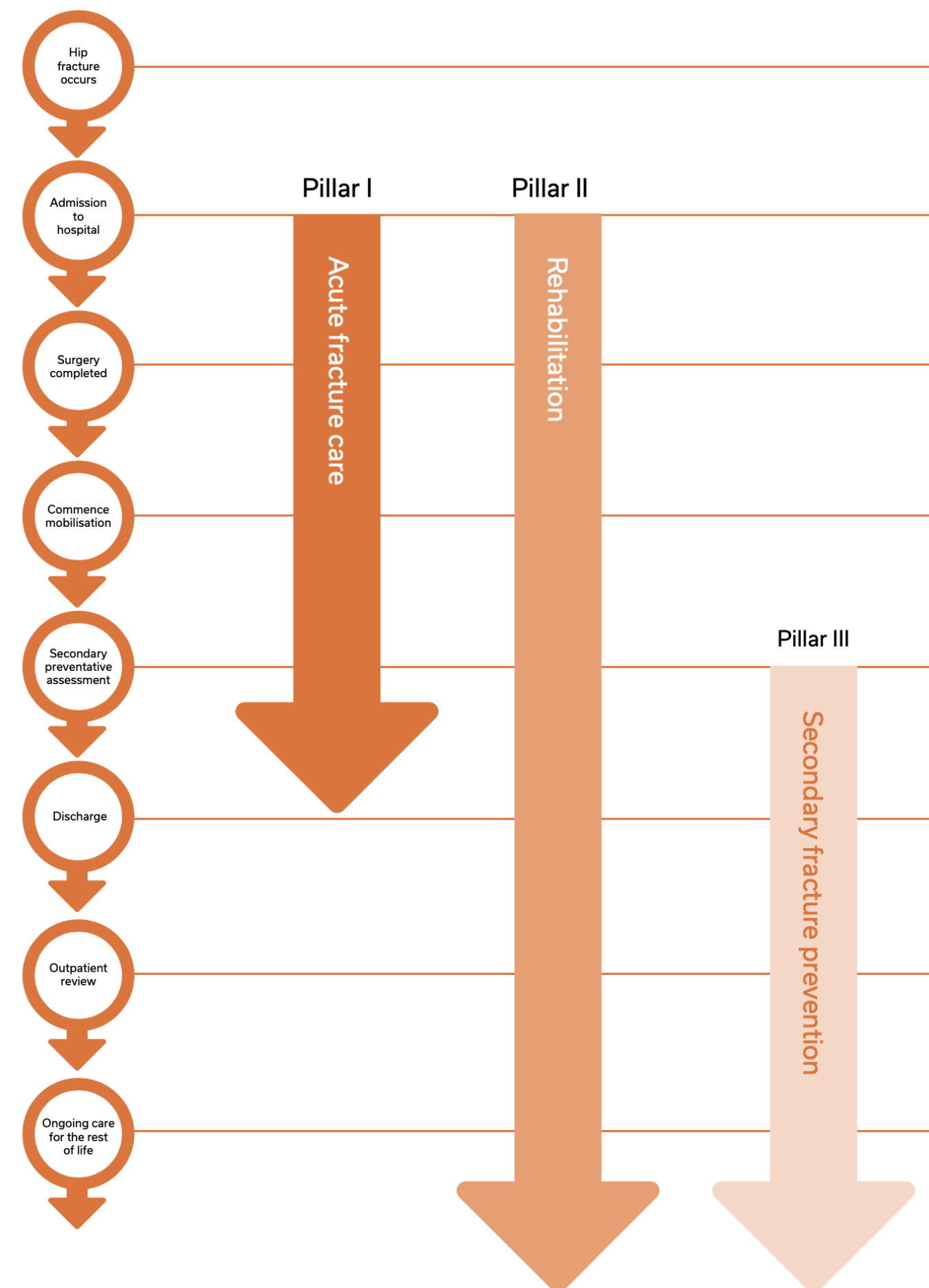
- Heupfractuur = “Life changing event”!
- Heupfractuur = vaak een symptoom van algemene achteruitgang
- Heupfractuur = heel vaak “stap achteruit”:
 - Slechts ongeveer 50% haalt functioneel niveau van voordien



2018: “Global Call to Action”



The temporal relationship of the three Clinical Pillars during acute and long-term care



<https://fragilityfracturenetwork.org/>

Injury International Journal of the Care of the Injured

Articles Publish About Contact

RESEARCH ARTICLE | VOLUME 49, ISSUE 8, P1393-1397, AUGUST 2018

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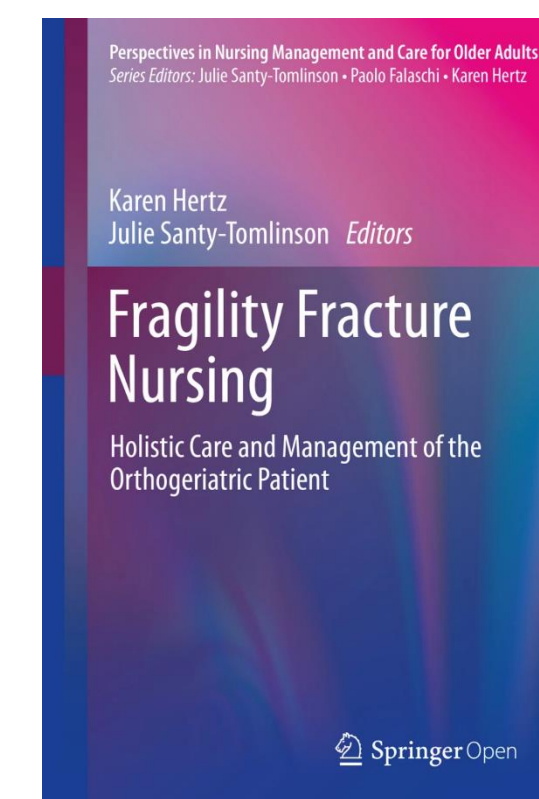
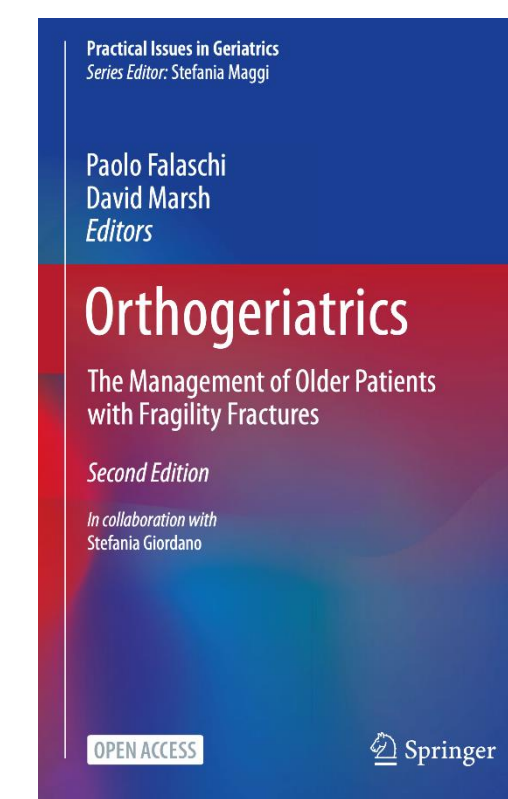
A global call to action to improve the care of people with fragility fractures

K.E. Dreinhöfer • P.J. Mitchell • T. Bégué • ...

the International Collaboration of Orthopaedic Nursing (ICON) • the International Geriatric Fracture Society (IGFS) • the International Osteoporosis Foundation (IOF) •

Show all authors

Published: June 23, 2018 • DOI: <https://doi.org/10.1016/j.injury.2018.06.032> • Check for updates



Orthogeriatrics = Booming “Business”

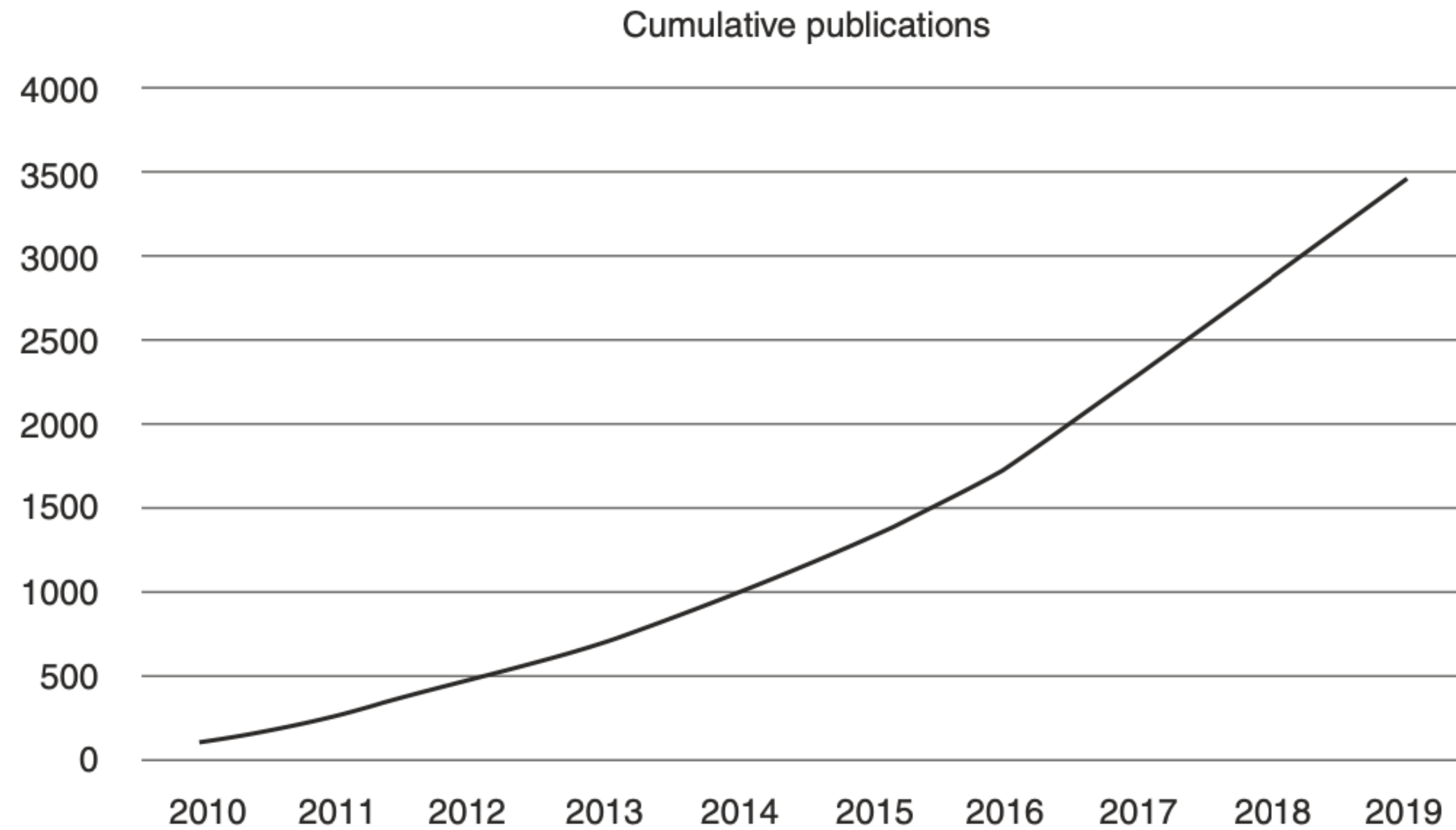
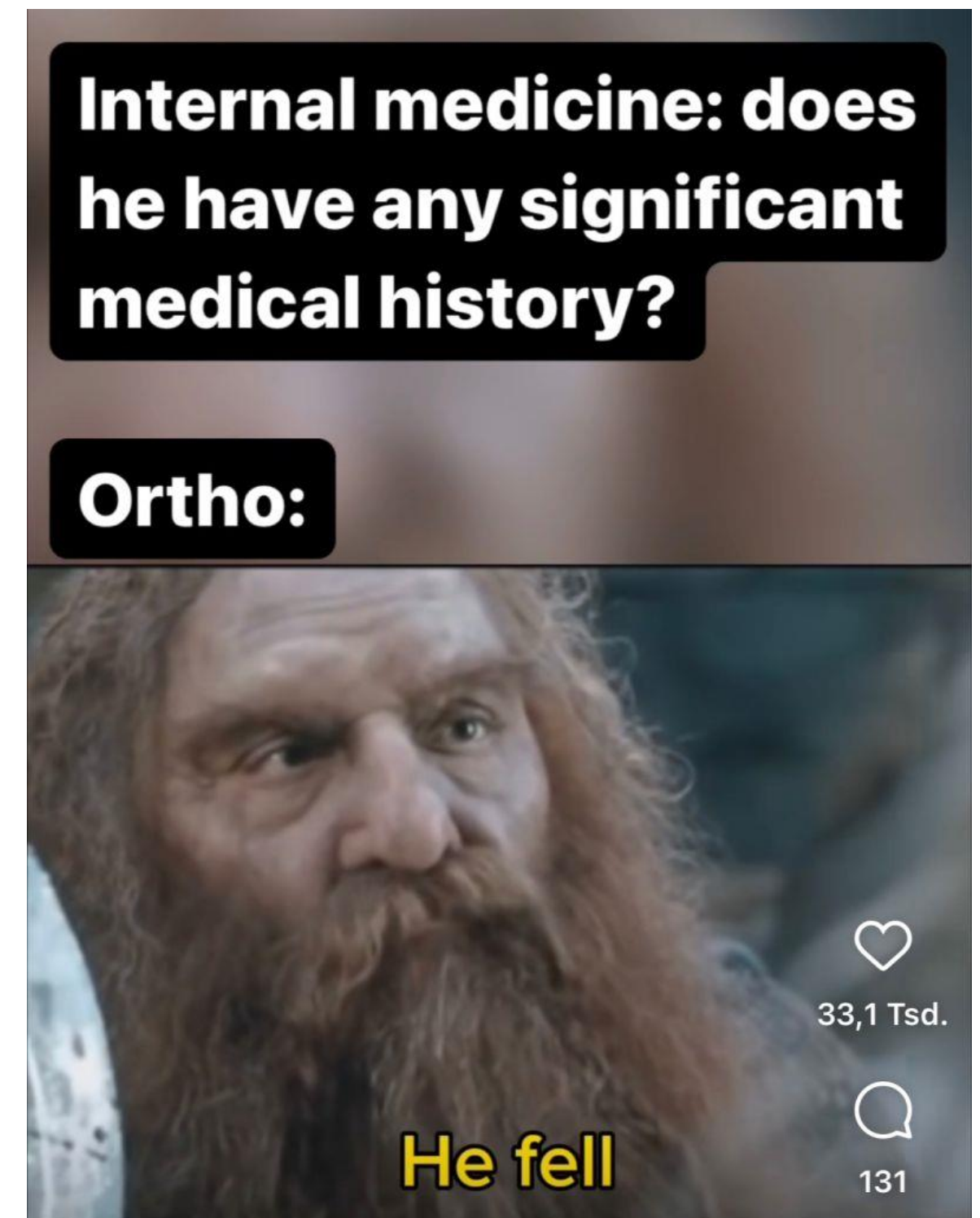


Fig. 1.1 Cumulative numbers of citations for keyword ‘orthogeriatrics’ in Google Scholar

Ortho-Geriatrie: sedert 2018

- Fragility Fracture → Orthopedisch chirurg
 - Beslissing welke behandeling en wanneer
 - Type fractuur → Type behandeling (oa prothese of osteosynthese?)
 - Antico (cave NOACs)
- Frailty → Geriater
 - Intake voor opname en beleid pre- en postop
 - Secundaire fractuurpreventie



Wie komt op Ortho-G terecht?

- **Elke patient > 75 jaar met een orthopedische fractuur**
 - Dus niet alleen heupfracturen!
 - Ook indeukingsfracturen wervelkolom, periprothetische fracturen, pubistakfracturen, proximale humerusfracturen,...
 - Ook conservatief beleid

Heupfractuur = Multidisciplinair +++

Snelle operatie =
essentieel!
→ Chirurgisch traject

- Bij voorkeur binnen de 48u
- Minder complicaties en mortaliteit
- Verder: minder pijn, herwinnen zelfredzaamheid

Ortho-G patient =
typisch multipathologie
→ Geriatrisch traject

- Uitwerking reden van de val + Valpreventie
- Comorbiditeiten en geriatrische complicaties opvangen
- Osteoporose: secundaire preventie
 - Eerdere fractuur = sterkst voorspellende factor voor toekomstige fractuur!

"Ortho-G
Heupfractuur" = breed
traject

- Huisarts - Spoedarts – Radiologie - Anesthesie - Cardiologie
- Kine
- Verpleegkundigen (spoed/OK/afdeling/thuis)
- Familie, WZC, kortverblijf, ...

Innovatie en Standardisatie!

- Spoed: Bij diagnose onmiddellijk locoregionaal pijnblok – geen tractie meer indien mogelijk
- Anesthesie: Locoregionale technieken, Safe Brain Initiative
- Chirurgie:
 - Tranexaminezuur (exacyl®) → Transfusieratio ↘
 - Minimaal invasieve technieken
- OrthoG/reva:
 - Rapid Recovery Principe THP/TKP (2014): Snelle mobilisatie → minder complicaties en sneller zelfstandig

Anaesthesia 2021, 76, 225-237

doi:10.1111/anae.15291

Guidelines

Guideline for the management of hip fractures 2020

Guideline by the Association of Anaesthetists

R. Griffiths,¹ S. Babu,² P. Dixon,³ N. Freeman,⁴ D. Hurford,⁵ E. Kelleher,⁶ I. Moppett,^{7,8}
D. Ray,⁹ O. Sahota,¹⁰ M. Shields¹¹ and S. White¹²





Safe Brain Initiative

SBI Core Recommendations

The SBI core recommendations aim to monitor, detect and ultimately decrease and avoid the adverse side effects of surgery and anaesthesia in our daily routine care.

Thereby guiding clinicians on the least invasive and least side effect-prone pathway through the perioperative process.

Currently, the Safe Brain Initiative has 18 core recommendations available. All recommendations are non-invasive by nature, with the primary goal of detecting and preventing/reducing adverse outcomes.



Recommendations

<https://safebraininitiative.com/>

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Preoperative

The SBI recommendations focusing on the pre-surgical period



Intra-operative

The SBI recommendations focusing on the intra-operative period



Postoperative

The SBI recommendations focusing on the postoperative period in the PACU and on ward



Perioperative

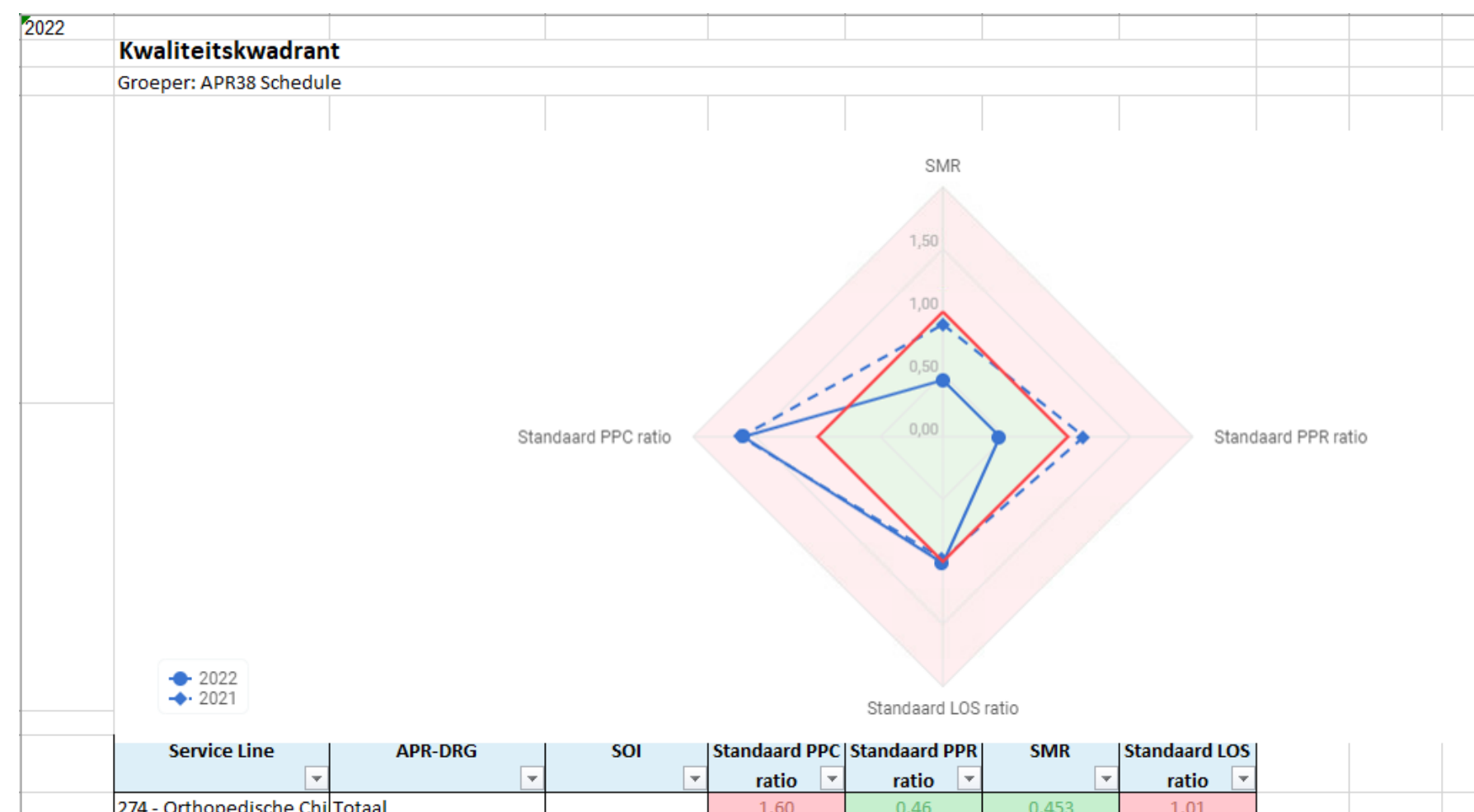
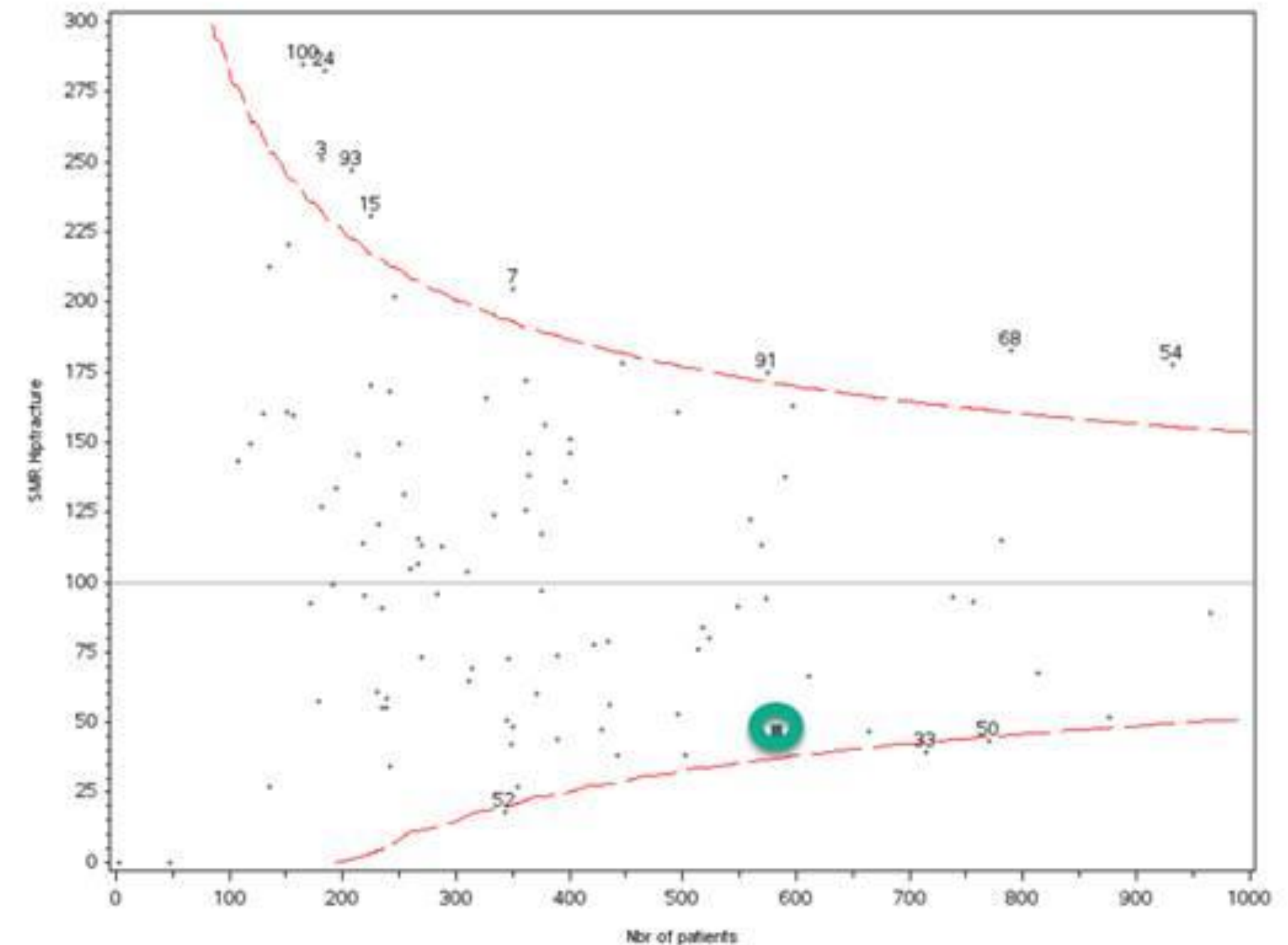
The SBI recommendation relevant for all peri-operative phases (pre-, intra- and postoperative)



Kwaliteitsindicatoren - Mortaliteit

- SMR = Standardized Mortality Ratio
- AZ SL: zeer goede outcome op mortaliteit

FIGUUR 4: FUNNEL PLOT INDICATOR MORTALITEIT NA HOOFDDIAGNOSE VAN HEUPFRACTUUR



Heupchirurgie bij ouderen: Ortho.Tomorrow

Heupfracturen –
Ortho-G!!

Electieve THP bij
80-90-(100?)-
jarigen –
Ortho-G?



Electieve THP bij 80-90-(100?)-jarigen?

- Leeftijd = onafhankelijke risicofactor voor geriatrische complicaties (oa delier, ANI, ...)
- Risico stijgt significant met comorbiditeit
- Complicaties → Mortaliteit ↑
- Overleving na 1 jaar: 95%
- Zelfs mét complicaties is de overleving hoger dan in controlegroep

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A commentary by Christopher T. Holland, MD, MS, is linked to the online version of this article.

Is Elective Total Hip Arthroplasty Safe in Nonagenarians?

An Arthroplasty Registry Analysis

Vincent J. Leopold, MD, Paula Krull, Sebastian Hardt, MD, Christian Hipfl, MD, Oliver Melsheimer, Dr. rer. nat., Arnd Steinbrück, MD, Carsten Perka, MD, and Gregor M. Giebel, MD

Investigation performed at the Center for Musculoskeletal Surgery, Charité - Universitätsmedizin Berlin, Berlin, Germany

“Worse than death”



■ ARTHROPLASTY

‘Worse than death’ and waiting for a joint arthroplasty

C. E. H. Scott,
D. J. MacDonald,
C. R. Howie

From Royal Infirmary
of Edinburgh,
Edinburgh,
United Kingdom

Aims

The EuroQol five-dimension (EQ-5D) questionnaire is a widely used multiattribute general health questionnaire where an EQ-5D < 0 defines a state ‘worse than death’ (WTD).

The aim of this study was to determine the proportion of patients awaiting total hip arthroplasty (THA) or total knee arthroplasty (TKA) in a health state WTD and to identify associations with this state. Secondary aims were to examine the effect of WTD status on one-year outcomes.

Patients and Methods

A cross-sectional analysis of 2073 patients undergoing 2073 THAs (mean age 67.4 years

Conclusion

In total, 19% of patients awaiting THA and 12% awaiting TKA for degenerative joint disease are in a health state WTD. Although specific comorbidities contribute to this, hip- or knee-specific function, mainly pain, appear key determinants and can be reliably reversed with an arthroplasty.

Cite this article: *Bone Joint J* 2019;101-B:941–950.

THE LANCET

Volume 370, Issue 9597, 27 October–2 November 2007, Pages 1508–1519



Review

The operation of the century: total hip replacement

Prof Ian D Learmonth, FRCS^a,  , Claire Young, FRCS^b, Prof Cecil Rorabeck, FRCS^c

 [Show more](#)

Orthogeriatric = Gouden standaard! (Today, and Tomorrow)

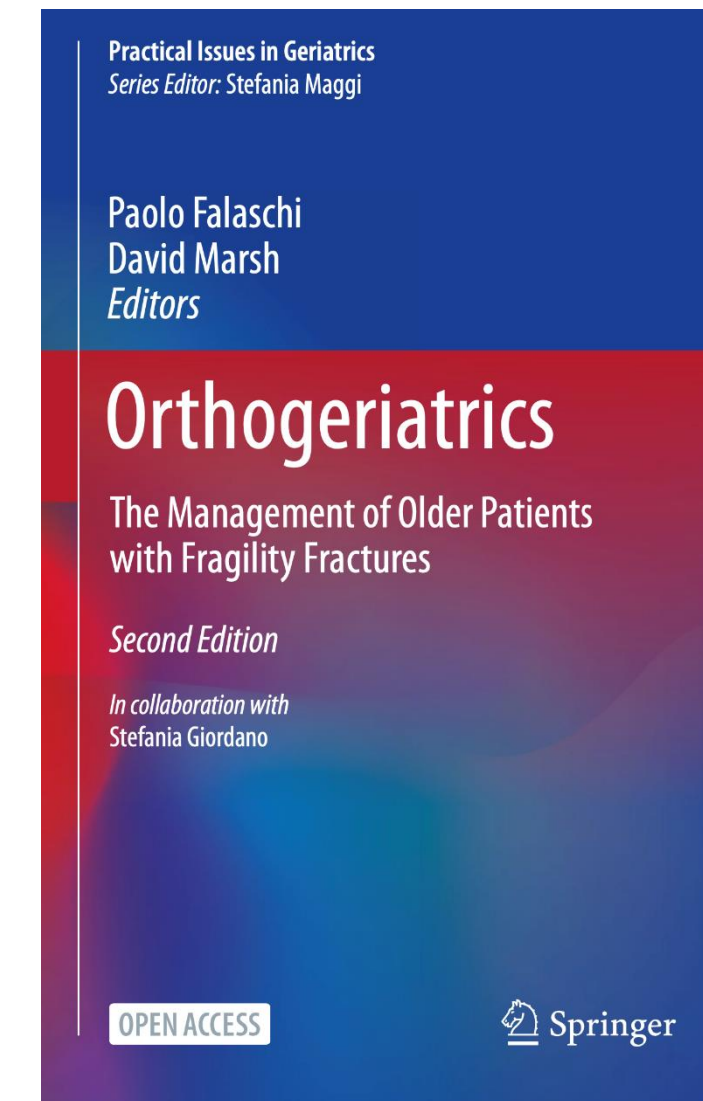
- Bij ouderen: verlies van functie = verlies van zelfstandigheid
- Geen enkele patiënt is te oud om te kunnen genieten van pijnverlichting dankzij heekunde
- De fractuur mag niet behandeld worden los van de andere medische en sociale problematiek van de patiënt
- Deze globale aanpak kan best bereikt worden door een multidisciplinair team



Ortho.G = Multi Team Work!



Hartelijk
dank!



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ORTHOPEDIE & TRAUMATOLOGIE

