Swiss Frailty Network update

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Basel, 29 January 2019
What is **Frailty**?

- ...**medical syndrome** associated with health and aging
- ...**highly prevalent** in European seniors (10-30% in c-d’s)
  - 40% **being at risk** for the condition
- ...**better predictor** of adverse outcomes than chronological age
- ...**multiple tools** for screening available
- ...**paradigm** risk → preventive strategies
What is Frailty?

Clinical Frailty Phenotype

- Weakness
- Slowness
- Exhaustion
- Low Activity Level
- Weight loss

Physical Frailty

Negative Outcomes

- Risk of disabilities in everyday activities: +62%
- Risk of Falls: +25-56%
- Risk of Fractures: +59%
- Hospital Re-Admission: +24%
- Longer length of stay: +150%
- Risk of Cognitive Decline: +47%
- Risk of Nursing Home Admission: +65%
- Risk of Mortality: +15 - 83%

Frailty-Index (Accumulation of Deficits)
Electronic Health Records

Why is Frailty Important?

**Knowledge Gaps**

- No universal agreement on definition
- No standard operationalization in clinics and research
- Instrument library not standardized
- Best treatment?
- Best secondary prevention?

**Chances**

- Improving hospital outcomes
- Reducing costs
- Improving Quality of Life
- Nationwide Swiss research consensus
- Prolonging healthy lifespan
- Primary prevention
Partners Network

All 5 Swiss Academic Geriatric Centers involved

- Trois-Chêne Hospital HUG
- Spital Tiefenau INSELGruppe
- FELIX PLATTER USB
- CHUV
- sciCORE BioMedIT Node
- USZ

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The SFNR Governing Board

Prof. Heike Bischoff-Ferrari
Prof. Christophe Büla
Prof. Gabriel Gold
Prof. Reto W. Kressig
Prof. Andreas Stuck
5 Main Goals

1. **Consensus** on how to assess frailty *clinically* for research- *cFI*
2. **Harmonization** of EHR-derived *electronic frailty index* = *eFI* from real-world patient data
3. **Frailty data hub** from all 5 University Hospitals Centers including both *cFI* and harmonized *eFI* (*all patients age 65+*) at sciCORE
4. **Validation** of *cFI* against the *eFI* within the pooled data (*Validation Study 1*)
5. **Validation** of the predictive ability of the *cFI* and *eFI* against (1) length of stay (2) in-hospital mortality (*Validation Study 2*)
# SFNR General Timeline

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<th>YEAR 1</th>
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<td>WP1</td>
<td>1.1 Overall Coordination</td>
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<td>5.2 Project communication and dissemination via national/international symposia</td>
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<td>5.3 Data sharing beyond duration project</td>
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Present State of our Project - SFNR

Current Status

• Consensus on clinical instrument plus eFI-variables
• eFI codebook / cFI codebook in final development
• Adaptations of IT-architecture/CIS
• Preparation ethical project plan
• SOPs development

Ongoing Challenges

• Multiple Stakeholders
• Three languages (ENG/FRE/GER)
• Definition of variables/coding
• Adaptations of IT-architecture/CIS
• 5 complex IT-environments
Next Steps

- Submission of **Project Plan** to Ethics Committee (asap)
- Finalization of **eFI-codebook** (February)
- Test run of **REDCap database** (March)
- **Staff training** locally (April-May 2019)
- Estimated **start of data collection** 1 June 2019 (M15)
Acknowledgements

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Thank you for your attention.