Partner Profile – Horizon Europe Cluster 1 Health 2027

Human-centred integration of AI in clinical care: co-design, explainability, adoption and training

Organisation

Lucerne University of Applied Sciences and Arts (HSLU), School of Business, Institute of Communication and Marketing (IKM), Switzerland – PIC 998686781

Contact

Dr. Carmen Grebmer, carmen.grebmer@hslu.ch, +41 41 228 22 60, ORCID 0000-0003-3460-1907

Target topics

HORIZON-HLTH-2027-02-DISEASE-01-two-stage (Innovative healthcare interventions for NCDs)

HORIZON-HLTH-2027-02-TOOL-01-two-stage (Predictive biomarkers using AI for chronic NCDs)

Stage 1 deadline: 17 February 2027 (amended date, formal adoption pending)

Role sought

Work package or task lead for human-centred integration and SSH; we join an existing consortium with a clinical lead

What we contribute

- **End-user co-design:** mixed-methods mapping of competencies, intent, training needs and organisational resources with physicians, nurses, patients and caregivers (surveys, interviews, focus groups, diary studies, prototype testing, observation).
- **Explainable decision support that clinicians and patients can act on:** clinician- and patient-facing microtexts and

visualisations for scores, drivers, trajectories and uncertainty; evaluation of comprehensibility, trust calibration and over-reliance.

- **Adoption and work design:** AMO-based analysis of how AI changes autonomy, coordination, workload and technostress; design options that keep clinicians in the decision loop.
- **Role-based training and AI literacy:** progressive curricula for different professional roles, communication labs for explaining AI outputs, train-the-trainer formats, pre/post evaluation.
- **Trustworthy AI evaluation:** XAI methods, explainable recommender systems, performance and bias assessment; data science and machine learning support.
- **Sex and gender dimension** in risk communication, uptake and evaluation.
- **Implementation and sustainability:** workflow and reimbursement pathways, integrated care and nursing perspective; data governance aligned with the Swiss Personalized Health Network (SPHN) and FHIR.

Team

- **Dr. Carmen Grebmer** (lead) – behavioural science, patient–clinician communication, uncertainty framing, adoption and work design, mixed-methods evaluation
- **PD Dr. Luis Terán –** explainable and trustworthy AI, recommender systems, human-centred computing, e-health
- **Prof. Dr. Mirko Birbaumer –** statistics, machine learning, predictive modelling, computer vision, digital health
- **Prof. Fabio Knöfler –** healthcare organisations and nursing, integrated care, reimbursement structures

Background

- HSLU interdisciplinary acquisition project *CLINCH-AI – Clinical Integration for Human-Centred AI* (2026): integration, explainability and adoption of validated AI tools in transplant care and breast-cancer imaging.

- Established contacts with Swiss clinical, network and industry stakeholders in transplantation and digital health.
- Ready-to-use work package design for co-design, training and XAI evaluation, developed with Hogeschool Utrecht for a 2025 Horizon Europe consortium proposal.

Why this helps a consortium

- DISEASE-01 requires the effective contribution of social sciences and humanities; TOOL-01 asks for user-friendly, fit-for-purpose visualisation and decision-support tools and strong AI trustworthiness. We cover both.
- Switzerland is associated to Horizon Europe; HSLU is funded directly by the EU at the RIA rate.
- Indicative effort: 20–30 person-months, adaptable to the consortium's needs.

What we are looking for

A clinically led consortium in cardiovascular, chronic kidney (including transplantation), chronic respiratory disease or diabetes that brings a clinical study (DISEASE-01) or cohort and real-world data (TOOL-01) and needs a partner for human-centred integration, explainability and adoption.