

D.3.3.3 Pilot Implementation Report on the solutions co-developed within Health Living Labs





Pilot Implementation Report: Value-Based Health Care Service Delivery and Living Lab Methodology

Introduction

In scope of the Health Labs4Value pilot actions, partners tested previously developed Living Labs methodology and the Value-Based Health Care (VBHC) service delivery system, designed to support the development of health-related innovation technologies.

All the pilot actions demonstrated the Living Lab methodology in practice, showcasing how multi-stakeholder innovation platforms can drive digital transformation in healthcare across Central Europe. The process was structured to ensure co-creation, iterative testing, and joint stakeholder involvement from conception to deployment. All the elements of the Living Lab methodology were applied and tested.

Over the first two years of the project, all participating partners successfully executed the primary pilot activities, laying a solid foundation for the development of value-based healthcare services. Throughout this phase, the core elements of the VBHC service delivery system and the Living Lab methodology were consistently integrated into all stages of implementation. This comprehensive approach ensured a robust framework for piloting and positioned the consortium to advance toward the development of the final solutions.

The pilot was split into several phases:



Phase 1: Initial exploration phase

At the onset, each piloting Healthcare Organization (HCO) selected a relevant condition—either episodic or chronic—for targeted intervention. Patient groups and/or family members affected by the selected condition were recruited alongside internal multidisciplinary teams comprising both clinical and non-clinical staff. Members of the regional Quadruple Helix (QH) Core Groups were also actively involved.

To foster user-centred innovation, each territory hosted Open Innovation Camp 1 (OI Camp 1)—a structured co-creation sprint following the OI 2.0 framework. These events facilitated the collaborative identification of challenges and the joint development of initial solution concepts. Where feasible, data collection included Patient-Reported Experience Measures (PREMs) and Patient-Reported Outcome Measures (PROMs) to better understand user needs and expectations.



This process culminated in the development of the State of the Art, a comprehensive summary of challenges, user needs, and draft solutions for each territory. These drafts served as a blueprint for further development within the Living Labs.

Chronic disease or Condition Selection by Country

Partners selected pilot conditions based on several factors, primarily: 1) the potential for a holistic and wide-reaching impact; 2) previous stakeholder engagement experience and 3) hospital data indicating areas in need of improvement.

The selected conditions were as follows:

- **Czech Republic:** Spinal Cord Injury (SCI) patients
- **Hungary:** Surgical patients
- **Germany:** Hip osteoarthritis patients
- **Slovenia:** Post-injury patients aged 20-60
- **Poland:** Patients of all ages with chronic cardiovascular and metabolic diseases

Recruitment and Participant Diversity

Participant recruitment began following OI Camp 1 and employed a multi-channel communication strategy, including digital platforms, social media, healthcare networks, and most importantly direct outreach that was underlined as the most effective. Despite some logistical challenges—such as schedule coordination and venue selection—diverse groups were engaged. Predominantly, participants included patients (the largest group), relatives, and healthcare professionals. Representation varied by territory and condition, with a wide age range and a slight predominance of female participants. Minimally 20 patients or family members were recruited from each pilot site.

Phase 2: Prototype Development

Building on the needs and draft solutions outlined in the State of the Art, the co-design and co-creation phase marked the official launch of prototype development. Where necessary, external technical solutions were sourced through open calls targeting SMEs and start-ups. These external partners (SMEs, start-ups) played a vital role in co-development of the prototypes by providing innovative technical inputs and the development itself.

Prototypes underwent several rounds of feedback and evaluation:

- Territorial focus groups with QH Core Group members
- Transnational Network Workshops to facilitate cross-regional peer review and knowledge sharing

Feedback was carefully analysed and incorporated to ensure alignment with stakeholder needs and expectations. The revised, co-designed prototypes were then prepared for real-world testing in territorial Health Living Labs.



The partners prepared the prototypes that will lead to the following final solutions:

Czech Republic

New technology will enable systematic physiotherapy of patients after surgery in hospital and homecare.

Hungary

The new solution will optimize the processes of in- and outpatient care by automating case management and innovative, digital systems.

Germany

The solution will improve pre- and post-operative care for older adults undergoing hip replacement surgery through a digital app that will support rehabilitation and promote independent living.

Poland

The solution will improve digitalization and will reduce patient service time

Slovenia

The solution will enable patients with injuries to improve the quality of their rehabilitation in their home environment.

Coordination and Monitoring

Project progress was consistently monitored through regular monthly transnational coordination calls, bi-annual project meetings and territorial focus groups. These meetings ensured clear communication, timely task execution, and coherent development across regions. The Work Package T3 leader played a pivotal role in overseeing and facilitating all implementation efforts.



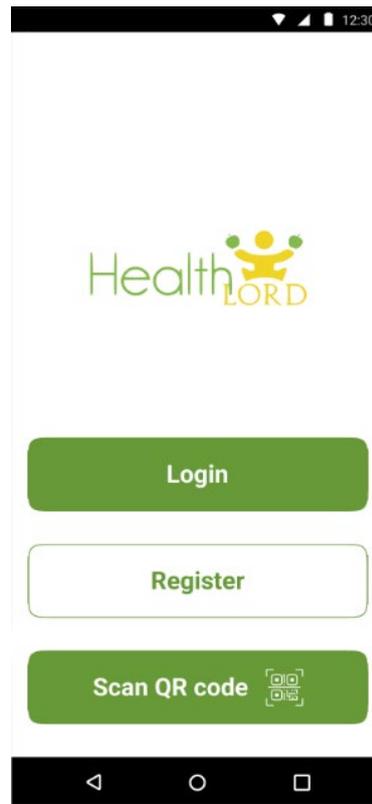
Phase 3: Testing and Evaluation

The testing phase involved real-world experimentation of the refined prototypes across all five pilot regions. These activities were conducted within Health Living Labs, enabling authentic user engagement and validation of the solutions under real-life conditions.

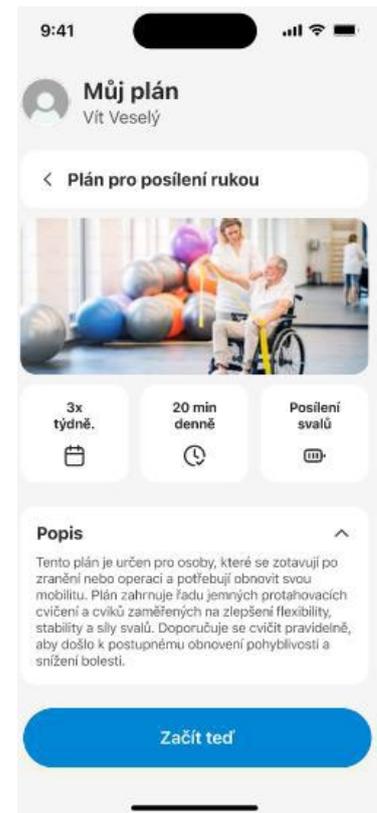
German prototype:



Slovenian prototype:



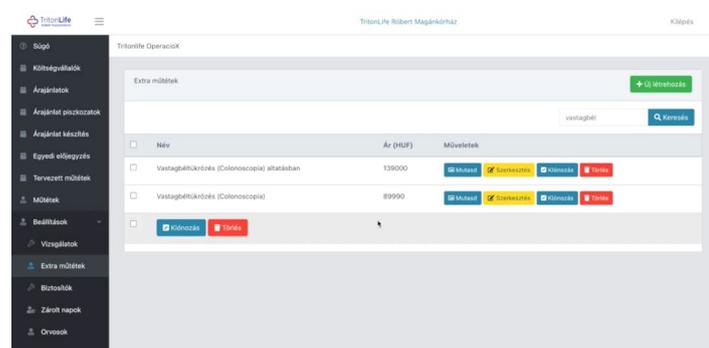
Czech prototype:



Polish prototype:



Hungarian prototype:



Upon completion of the testing phase, Open Innovation Camp 2 (OI Camp 2) was held in each territory. These camps served as platforms to evaluate testing outcomes and gather user feedback—both qualitative and quantitative—regarding the effectiveness and usability of the solutions.



User-testing:



Impact Evaluation and Knowledge Transfer

Throughout the pilot and testing phases, opportunities for upscaling and knowledge transfer were continuously explored. Evaluation outcomes highlighted key areas for future development and supported the identification of best practices for broader application.

The project's knowledge partners played an instrumental role in supporting HCOs during this critical phase, offering strategic guidance and ensuring smooth coordination among all stakeholders.



Conclusion and Outlook

As a result of the multi-phase, collaborative process described above, the final co-designed and co-created solutions were successfully developed and prepared for implementation. The process demonstrated the effectiveness of Living Labs methodology, and transnational collaboration in delivering tailored, value-based healthcare solutions with the potential for broad societal impact.

Main learnings from the pilot actions were following:

- **Stakeholder engagement and ownership**

Effective co-creation was achieved through active engagement of diverse stakeholders—including healthcare providers, patients, relatives, companies, and policymakers—at all project stages and territorial levels. Strong leadership and a shared sense of ownership among these groups were crucial for sustained motivation and successful implementation.

- **Adaptation to local contexts**

Each Living Lab demonstrated that tailoring activities and solutions to the specific needs and challenges of local communities (such as home care delivery, chronic disease management, or administrative digitization) is essential. Adaptability, rather than a one-size-fits-all model, enabled higher relevance and greater acceptance of results.

- **Continuous end-user involvement**

Involving end-users—particularly patients, relatives and healthcare professionals—not just during the initial design but throughout testing, evaluation, and scaling phases led to more person-centered, practical solutions and strengthened trust in innovations. Participatory testing accelerates acceptance and impact, enhancing usability and relevance, particularly in complex healthcare settings.

- **Timing, continuity, and openness to change**

Projects benefited from realistic timelines, consistent engagement, and a culture that encouraged openness to new approaches. Addressing external challenges (such as participant turnover or unexpected delays) required flexibility and transparent communication.

- **Knowledge sharing and strategic alignment**

Working within a transnational network enabled the exchange of lessons and good practices, helping create momentum for collective learning. Embedding Living Labs methodologies and results in broader regional or national health innovation strategies could foster long-term impact and scalability.

- **Real-world testing and iterative evaluation**

Solutions were rigorously tested in real-life environments, with feedback loops allowing for continuous refinement. Measuring both the feasibility and acceptance of innovations was essential in adapting interventions and ensuring their effectiveness.”

The solutions presented above will be put into life in the next phase of the project and will be published on the project website in autumn 2025.