Appendix

Structure of the first workshop I

A. Introduction
1. Description of the project "EMPATIA@Lecco"
2. Instructions for the participants:
    a. We encourage the discussion and participation of the whole group
    b. We ask participants to speak one a time and listen to interventions of the other participants
3. Presentations by participants
   a. We ask participants to present themselves and their role within the project.

B. Introduction of the Living Labs
1. Introduction of the concept of Living Lab and sharing of some Living Lab experiences in healthcare
2. Introduction of the different types of Living Lab starting from the classification by Schuurman et al 2013.
3. Discussion on the concept of Living Lab
    a. Brief brainstorming about Living Lab
    b. We ask participants to describe what the LILL is and to indicate what category it better fit
    c. We ask to explain their answers

C. The Living Lab key elements
1. Presentation of the Living Lab elements and categories identified from the literature. Each LL element is presented as a puzzle piece.
2. Discussion on the Living Lab elements and category
    a) Brief brainstorming about the topic presented
    b) We ask participants' agreement on the elements and on the study guide
    c) We ask participants to prioritize the Living Lab elements in relation to the LILL

D. Conclusion
   Facilitator makes a brief summary of the insight discussed
   Facilitator explains the next steps of the project
   Facilitator thanks and greets participants before closing the workshop.

Structure of the workshops II

A. Introduction
1. Overview of the state of the project activities and a brief summary of the first workshop
2. Instructions for the participants:
    c. We encourage the discussion and participation of the whole group

    d. We ask participants to speak one a time and listen to interventions of the other participants

B. Presentation of the interview results and
   1. Presentation of the interview: methodology, data analysis, and results
   2. Discussion on the stakeholder needs identified for all the 3 main elements
      a. We ask for their agreement on the needs and a brief discussion on them
   3. Focus on the first key element: the multi-stakeholder network
      a. We ask participants to focus on the first key element and to prioritize the needs identified

C. Co-creation of the activities – focus on the multi-stakeholder network
   1. Suggestions for defining activities to enclose the LL approach within the innovation process
      d) We ask participants to plan and design concrete activities to enclose the LL approach and to answer the needs
      e) We ask participants to identify some pilot applications
      f) We ask participants to identify the most important dimensions to consider in setting rules and guidelines

D. Conclusion
    Facilitator makes a brief summary of the activities proposed converging them in a unique solution
    Facilitator explains the next steps of the project
    Facilitator thanks and greets participants before closing the workshop.

Interview guide

A. Introduction
- Explanation of the purpose of the interview
- Brief explanation of the interview structure
- Basic data: name, contact, role, type of partner (research, clinical, user association, territorial agency, technical partner)

Part I: LL Key elements
    The interviewer provides a brief description of the LL key elements and categories
    Q1: Considering these key elements, do you agree with their prioritization concerning the LILL? What is the main important and why?
    Q2: Would the building of the LILL help you in achieving your goals? What are your wishes and expectations in this regard?

Part II: Multi-stakeholder network
    The interviewer provides a very brief description of the element.

Q3: In the view of synergistic collaboration between partners and asset sharing, do you think it could be important having the possibility to provide internally and externally to the LILL your advanced technical, clinical-rehabilitative, managerial, evaluation, or other skills as well as assets and infrastructure?

Q4: For the following categories - technologies, service, clinical studies, infrastructure - please answer the following questions?

- What asset would you be willing to share within the LL?
- In what way?
- Are there existing sharing modalities already in use among partners? If present, could they be extended within the LILL?

Q5: Based on your personal experience, what are the main issues and barriers that may arise for such sharing logic? What are the main drivers that facilitate collaboration among stakeholders?

Part III: Involvement of End User

The interviewer provides a very brief description of the element.

Q6: Within the innovation process, what type of user involvement are you mainly interested in (e.g. patient data to analyse, testing and evaluation phase, involvement in co-creation workshops, other...)?

Q7: Base on your personal experience, are there already used ways to access the end users and to involve them in the co-creation process? If present, could they be extended within the LILL?

Q8: What are, in your opinion, the most important issue associated with?

Part IV: Real-life environment

The interviewer provides a very brief description of the element.

Q9: Within the LILL, how the real-life environment could be implemented (e.g. physical space, showroom or simulation environment, daily life environment for testing and validation with users, physical or virtual environment for dissemination activities, other..)'

Q10: What could be the advantages for you of having such a physical space? What space could be allocated for this function?

Framework for coding

First-order Concept (examples)	Second-order Themes	Aggregate need Dimensions
* Existence of personal conflicts within the research network * Importance of the personal relationship in assets and competencies sharing	Internal human factors and relationships within the network	Improving stakeholders' commitment and building trust
* Importance of sharing common goal and vision	Internal commitment among actors within the network	

* Importance of keeping stakeholders motivated and engaged * Willingness to participate in the LILL		
* Perception of unclear terms of use and access as a barrier * Difficulties in understanding the workload changes	Internal organizational aspects competences and knowledge sharing	Defining guidelines/rules
* Importance of recognizing responsibilities and safety measures * Importance of recognizing IPR and other intellectual properties rights * Importance of presenting LL an a neutral and safe place	Internal legal aspects in building an open LL network	
* Perception of difficulties due to the LILL network dimension * Identification of the difficulties in interacting with the other partners * Difficulties in understanding the different stakeholders' grade of openness	Complexity and diversity of the network	Managing differences among institutional identities
* Leadership asymmetry among actors involved * Identification of differences in the institutional nature (e.g. private, public) of the actors involved	Institutional diversity of the actors involved in the network	
* Difficulties in understanding what assets and infrastructures can be shared within the network	Lack of knowledge regarding colleagues competences and technologies	Mapping competencies/technologies
* Difficulties in finding information about other competences * Difficulties to standardize the competences	Lack of standardising tool to browse competences and technologies within the network	
* Privacy and use of patients' data * Legislation on data sharing	Legal aspects of engaging end users (patients)	Defining patient recruitment protocols (e.g., ensuring

* Difficulties in involving patients for non-clinical partners	Access aspects	General Data Protection Regulation [GDPR])
* Importance of including different targets to be engaged in different projects * Identification of different types of end users	Involving a big panel of user covering different target condition	Creating different communities of patients, caregivers, and volunteers
* Difficulties in identifying and reaching end user (patient and citizens) * Difficulties communicate with end user	End user identification and involvement	
* Physical space to make the network tangible * Physical space as room and dissemination place * Physical space as testing and validation environment	Physical space functionalities	Identifying resources and infrastructures of the physical space
* Difficulties in identifying a physical space suitable for the aims * Difficulties in involving patients out of the hospital setting	Physical space disponibility	