

Broca living lab: Lessons from 10 years of co-design and participatory design with older adults in the field of Gerontechnology

M. Pino, S. Benveniste, S. Damnee, B. Charlieux, E. Berger, A. S. Rigaud

Pino et al. (2020). *Gerontechnology* 19(Suppl); <https://doi.org/10.4017/gt.2020.19.s.69979.6>

Purpose Older adults are more likely to experience loss of functional independence, social isolation, and economic marginalization than persons from other age groups. In this context, gerontechnology offers diverse solutions that can help them live actively, safely, and independently in the community. Nevertheless, the design and development of technological solutions for health and independent living truly adapted to the needs, wishes, and living conditions of older adults is a complex process. Some of the factors that should be considered in this process are (a) the heterogeneity observed among older adults in terms of abilities, experiences, motivations, and lifestyle; (b) psychosocial, socioeconomic, and other con-textual factors; and (c) meanings, significance, values, and beliefs related to the use of technology. Since the process of design, assessment, and implementation of gerontechnology solutions involves multiple actors (end-users, caregivers, clinicians, industry representatives, researchers, decision-makers, funding bodies representatives...) research methodologies have been developed in order to collect and take into consideration the points of view of these different actors. Living Labs (Bergvall-Kåreborn, Eriksson, Ståhlbröst & Svensson, 2009) provides concepts and concrete methods to support co-creation of knowledge, products, and services in different sectors such as health and social care. **Method** In this communication, we present the 10-year experience of the Broca Living Lab (Pino, Benevinste, Picard & Rigaud, 2014), a Paris-based Living Lab developed to provide the infrastructure, knowledge, services, and flexibility needed to promote the user-centered innovation in the context of geriatrics and health and social care provision for persons with neurocognitive disorders (dementia). Broca Living Lab missions are: (a) to address the needs and interests of key end-users (older adults, patients with neurocognitive disorders, families, care providers) and other relevant stakeholders in the health ecosystem; (b) to encourage the active participation of end-users in all stages of the design and development cycle of gerontechnology products and services; (c) to conduct field experiences and assessments in real-life conditions, and (d) to encourage value creation incorporating individual, social and economic dimension. **Results and Discussion** We describe Broca Living Lab activities and methods used and refined over the past years. We identify the factors that have influenced the success or failure of innovation practices in this context. Finally, we suggest promising avenues for the future development of Living Labs working in the field of health and autonomy for the elderly population. Living Lab methods provide many opportunities regarding user participation, co-design, and co-creation in the field of gerontechnology. Our experience in this area allows us to confirm the creative potential of end-users and the importance of co-creation processes involving all stakeholders. In this dynamic, the more accurately we target potential users' priorities (patients, entourage, professionals), the more we can create value through the use of a product or service that truly matches their needs.

References

- Bergvall-Kåreborn, B., Eriksson, C.I., Ståhlbröst, A. & Svensson, J. (2009). A milieu for innovation: defining living labs. In ISPIIM Innovation Symposium: 06/12/2009-09/12/2009.
- Pino, M., Benveniste, S., Picard, R. & Rigaud, A.S. (2014). User-driven innovation for dementia care in France: The LUSAGE living lab case study. *Interdisciplinary Studies Journal*, 3(4), 251.

Keywords: co-design, Living Lab, geriatrics, stakeholders, health, independent living

Address: Broca Living Lab, France

Email: maribel.pino@aphp.fr



Figure.1 Co-design activities with older adults in Broca Living Lab