Designing new technological solutions for health and autonomy impose to revise the methods used by the industry, integrating the new role of the patient within the health system. The report published in 2011 by the General Council of Economy about “Living Labs” opens new ways in this respect. This work has been followed by a Collective, recognized by the French institutions in November 2013 under the name of Forum LLSA. The resources of the Forum are limited to collaborative tools aimed to facilitate interactions, information, exchanges between members. These concern: good practices in open innovation; implementation of living labs teams and facilities; search for experts in animation or in legal issues (intellectual property, patient rights, etc.); strategic intelligence; design methods and tools, etc.

The Living Lab approach is a reality today in the health sector, in Europa and in France. Living Labs in health and autonomy are supported by a growing number of health regional agencies and regional authorities. They refer to various methods and tools, this resulting from the history and the culture of the territory where they are implemented—and also from the profile of the leader. But they combine always, at different levels, techno-economical innovation and innovation within the health and social field. Both are reconciled at the territorial level.

The Living Lab approach makes it possible to associate people right from the beginning of the design, and to capitalize on their experience. What is at stake now is to follow up the collective adoption of the proposed solutions and to measure the resulting impacts. By doing this, it will be possible to see Living Labs and their Forum LLSA as an instrument for public policies, in the field of health democracy and innovation.

**Keywords** Living Lab; Innovation; Health democracy; Technology for Health & Autonomy

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**CO10-004-e**

**Open innovation methods in co-design: Example project**

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**Aim** The projects developed in a living-lab are first collaborative and pluridisciplinary projects with different users in a real condition of life. In practice, Autonom.lab has developed a process of study that aimed to integrate codesign. Usually, the co-design can be used for the elaboration of products or services and also for products evolution.

**Method** Autonom.lab used this process in thematic studies to improve the subject by new approaches and therefore added value. For example, this methodology used in a study on adapted collective housing and follow 7 stages:

- define scope of intervention with partners;
- exploration of the thematic with several limited group;
- share experiences and knowledges;
- detect new ideas by codesign;
- analyse the production;
- development: value, cost...;
- promotion.

**Results** Usually, housing is considered using a technical approach. With the living-lab, this approach is radically different, highlighting values and uses expected by users. This led to think new services and products tailored according to the needs.

**Keywords** Living-lab; Co-design; User; Adapted housing; Value; Multidisciplinary

**Disclosure of interest** The author has not supplied his/her declaration of conflict of interest.

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**The Medical Assistive and Transactional Technologies (MATT): A case study of co-conception design**


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**Introduction** The development of Assistive Technology (AT) is an answer for disabled persons if it meets their needs. Even when technological barriers are overcome, users often abandon their devices. Many studies show high abandon rate of AT. The reasons are: misunderstanding of AT, unfitting devices to the personal needs of very demanding users, low adaptive performances of AT to worsening disabilities.

Therefore, we wanted an end-user of the MATT (a Locked-in patient with partial functional abilities of one left hand finger) to participate actively in co-design and assess this AT.

**Co-design approach** MATT is an interactive system of environment control and communications, connected to bedroom objects—lights, roller shutter, TV, radio station, nurse warning—, all in one, designed for people with motor and sensory impairments. Firstly, the needs—communication, environment control, Internet applications, audio message, etc.—were identified by the patient, her husband and the occupational therapist team. Secondly, an efficient prototype of the MATT virtual interface was quickly designed by the Software KEYboard Toolkit [1] which also allows choosing several parameters: type of interaction—pointing or scanning—and its settings—scanning frequency, command mode, etc. Thirdly, MATT was experimented by the patient. From this observation phase, a new cycle of iteration—requirement defined by the user feedback together with her occupational therapist, prototyping and test—is set up, and so on.

**Discussion** This case study has demonstrated that co-design is an appropriate method to design adapted and adaptable AT for severe disabled patients. Specific requirements such as text input function, serious game, repetition command facility, timeout to avoid involuntary command were easily added. Currently, the patient enjoys the use of MATT and is requiring for new developments in her daily living activities. The next step is to assess the use of MATT with qualitative and quantitative criteria and its contributions for rehabilitation.

**Keywords** Co-design; Assistive technology; Rehabilitation; Locked-in syndrome (LIS)

**Disclosure of interest** The authors have not supplied their declaration of conflict of interest.

Reference

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**CO10-006-e**

**Use values: The value added for citizen inclusion**

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Whether we consider illness, disability or aging, we are or we will be all, at some point in our lives, affected by the theme of this...