

Conference abstract

## **A collaborative design method to support integrated care. An ICT development method containing continuous user validation improves the entire care process and the individual work situation**

*Isabella Scandurra, PhD, Chief Science Officer, APRI | eHealth, Själevad, Sweden*

*Maria Hägglund, PhD, Researcher, Health Informatics Centre, Karolinska Institute, Stockholm, Sweden*

*Correspondence to: Isabella Scandurra, E-mail: [isabella.scandurra@aprigroup.se](mailto:isabella.scandurra@aprigroup.se)*

---

### **Abstract**

**Introduction:** Integrated care involves different professionals, belonging to different care provider organizations and requires immediate and ubiquitous access to patient-oriented information, supporting an integrated view on the care process [1].

**Purpose:** To present a method for development of usable and work process-oriented information and communication technology (ICT) systems for integrated care.

**Theory and method:** Based on Human-computer Interaction Science and in particular Participatory Design [2], we present a new collaborative design method in the context of health information systems (HIS) development [3]. This method implies a thorough analysis of the entire interdisciplinary cooperative work and a transformation of the results into technical specifications, via user validated scenarios, prototypes and use cases, ultimately leading to the development of appropriate ICT for the variety of occurring work situations for different user groups, or professions, in integrated care.

**Results and conclusions:** Application of the method in homecare of the elderly resulted in an HIS that was well adapted to the intended user groups. Conducted in multi-disciplinary seminars, the method captured and validated user needs and system requirements for different professionals, work situations, and environments not only for current work; it also aimed to improve collaboration in future (ICT supported) work processes. A holistic view of the entire care process was obtained and supported through different views of the HIS for different user groups, resulting in improved work in the entire care process as well as for each collaborating profession [4].

### **Keywords**

**ICT development method, participatory design, interdisciplinary cooperative work, user validation**

---

### **References**

1. Scandurra I. Building usability into health informatics: development and evaluation of information systems for shared home-care. [Thesis]. Uppsala: Uppsala University; 2007.
2. Schuler D, Namioka A. editors. Participatory design—principles and practices. New Jersey: Lawrence Erlbaum Associates; 1993.
3. Scandurra I, Hägglund M, Koch S. From user needs to system requirements—multi-disciplinary thematic seminars as a collaborative design method for development of health information systems. *Journal of Biomedical Informatics* 2008;41(4):557–69.
4. Hägglund M, Scandurra I, Moström D, Koch S. Bridging the gap: a virtual health record for integrated home care. *International Journal of Integrated Care* [serial online] 2007 Jun 27;7: Available from: <http://www.ijic.org/>.

Presentation slides