

M. MOHAMMADI, J. VAN DE KOPPEL, M. VAN BEEK, H. GODFROIJ. **Future smart (care) homes: An explorative research into the future trends regarding strategies for the smart living environment for older citizens.** *Gerontechnology* 2012;11(2):186; doi:10.4017/gt.2012.11.02.469.00

**Purpose** The double issue of aging and the rising costs of healthcare with fewer staff, demands societal change<sup>1</sup>. One of the most promising solutions is the facilitation of smart technological innovations at home<sup>2-3</sup>. These innovations should enhance the resident's quality of housing, care, and life through the empowerment of the user, i.e. the inhabitant and the (in)formal care givers, allowing older citizens to live autonomously longer and put less of a burden on the care sector. Due to the potential of these various implementations and applications, a literature review into the current smart homes for independent living in the Netherlands, together with an inquiry into the upcoming trends, is essential in order to assess future plans. The purpose of this paper is to identify criteria to plan smart living environments by analyzing the present state-of-the-art smart technological innovations regarding care and living environments and to explore the future trends in its developments. **Method** This exploratory research is based on literature reviews, trend analysis, and semi-structured interviews. The research was divided into two phases: investigations into the (future) needs of the target group and an investigation of the spatial and technological capabilities. By charting key patterns and defining the drivers and chances, criteria that help formulating strategies for the future designs of smart living environments for aging-in-place were developed.

**Results & Discussion** Our exploration of the literature shows that (building) projects, especially in the case of housing for older adults, are becoming more complex, integral, output-oriented, risk-avoidant, and lifespan-oriented. This means that the roles of the stakeholders in care, construction, as well as the government sectors should change. Sustainability is a recent added consideration in the building and care fields. In the future not only the quality and accessibility need to be considered, but also the efficiency of the concepts by means of smart applications. New collaboration strategies and a paradigm shift within these fields are needed in order to make (existing) homes suitable for the ongoing and emerging social and societal changes based on an open and integral approach in the field of aging in place, energy efficiency, and possibilities for tele-services. These trends will result in a shift in focus from smart homes to smart neighborhoods, smart districts, and smart cities.

### References

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**Affiliation:** Eindhoven University of Technology, Eindhoven, Netherlands;

**E:** m.mohammadi@tue.nl

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