

G.J. GELDERBLOM, A. RENSMA. *Robotics for elderly care: A roadmap study for the European Commission. Gerontechnology 20109(2):212; doi:10.4017/gt.2010.09.02.294.00* **Purpose** To gain an understanding of the potential of robotics in healthcare, the European Commission issued a roadmap study. This paper reports on the main characteristics and results of this study. The complete study covered the wider domain of healthcare this paper focuses on the domains relevant to elder care. The focus of this study is on solutions for (i) contributing to the quality, safety and efficiency of care (ii) promoting preventive and personalized care and (iii) the availability of long-term care for people in need. Attention was paid not only to technology; special attention was paid to societal acceptance, safety and reliability issues and regulation as well. TNO Vilans (the Netherlands) was the main research partner, supported by Fraunhofer – ISI (Germany) VTT (Finland) and EuroAct (Japan). **Method** The project methodology was a combination of desk research and expert consultation. During the project, over 50 international experts were consulted. The study produced a state of the art report concerning (i) the development of healthcare related to robotics applications, (ii) health care related needs and (iii) the ongoing development of technology required for robot development (e.g. battery technology). The results were then projected into the future and concept roadmaps were reported¹. **Results & Discussion** For elder care, 6 robotic areas are of relevance. The Commission selected (i) robotized patient monitoring, (ii) socially assistive robotics, (iii) robotized physical rehabilitation therapy and, to a lesser degree, (iv) intelligent prosthetics. We consider (v) ADL supporting robotics and (vi) care supporting robotics (nursing care and other paramedical activities) to also be of high relevance. For the different stakeholders, it appears that most of them see the developments as very interesting for the future, but very few of them show an urgent drive to adopt these new applications now. Suppliers play a supporting role, but patient involvement in research and development (R & D) is (too) little. Although government may not be a key player, governmental funding for related R&D is crucial. This field is still in its infancy, although some products are already commercialized. This indicates that there is a market, just entering its growth phase. It will need time before important innovations find their way into regular healthcare. Some ideas will not even be realized within the study's time horizon of 2025.

References

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