

Research Project

Digitalizing Elderly Care in Switzerland: Opportunities and Challenges

Third-party funded project

Project title Digitalizing Elderly Care in Switzerland: Opportunities and Challenges

Principal Investigator(s) Wangmo, Tenzin ; Ienca, Marcello ;

Co-Investigator(s) Kressig, Reto W. ; Caon, Maurizio ;

Project Members Schneble, Christophe Olivier ;

Organisation / Research unit

Ethik / Bio- und Medizinethik (Elger)

Department

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Status Completed

Population aging and its associated increase in healthcare costs and decrease in care delivery solutions pose an historical challenge to the Swiss healthcare system. In absence of prompt and innovative responses, the long-term sustainability of the solidarity-based Swiss healthcare will jeopardize the delivery of adequate care and the very idea of fair access to high-quality healthcare services will be put at risk. An emerging approach in response to this national and global crisis is the integration of innovative digital technology solutions into elderly care. These include assistive robotics, smart care environments, wearable computing and sensing as well as intelligent medical assistants. While the digital transformation in elderly care holds the potential of optimizing healthcare expenditures, enhancing care provision and improving the quality of life of elderly patients, it will have an impact on essential aspects of the medical profession, particularly on the patient-health professional relationship. In fact, critical care tasks performed by health professionals will be increasingly taken over by assistive robots, with the double consequence of alleviating the burden on health professionals but also reducing opportunities for patient-professional interactions. Similarly, smart care environments will delay the need for institutional long-term care, consequently reducing the dependency of patients on health professionals – but will also produce new opportunities for remote medical supervision through telepresence and telemedicine solutions. Doctor-patient confidentiality and the privacy of patient records will be challenged by the widespread availability of electronic records, especially in the current transitional phase in which data security standards in the medical setting are reportedly inadequate and unsecured uses of medical technology are frequent. Concurrently, the increasing use of artificial intelligence tools in prevention and diagnostics will reshape physician responsibility and the communication of medical results or decisions.

Objectives and Expected Outcomes

This project will explore the views and needs of older patients and health professionals in relation novel digital technologies for elderly care and assess the impact of these technologies on the patient-health professional relationship. In particular, this study has two main objectives:

- a) Exploring the views of elderly patients and health professionals in Switzerland on perceived care needs as well as their wishes concerning the introduction of digital technology in elderly care; and b)
- Anticipating and assessing the impact of new digital technologies used in elderly care on the patient-health professional relationship.

The achievement of these two research objectives is instrumental to the production of the main expected outcomes of this project:

- (i) Providing an evidence-based and human-centered roadmap for the responsible introduction of new

digital technologies in a manner that safeguards and benefits both patients and health professionals;
(ii) Orienting the transformation of the patient-health professional relationship in the digital age according to the needs and wishes of relevant stakeholders and in conformity with medical ethics.

Financed by

Foundations and Associations

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Published results

4488825, Ienca, Marcello; Lipps, Mirjam; Wangmo, Tenzin; Jotterand, Fabrice; Elger, Bernice; Kressig, Reto W., Health professionals' and researchers' views on Intelligent Assistive Technology for psychogeriatric care, 1569-1101 ; 1569-111X, Gerontechnology, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4523819, Wangmo, Tenzin; Lipps, Mirjam; Kressig, Reto W.; Ienca, Marcello, Ethical concerns with the use of intelligent assistive technology: findings from a qualitative study with professional stakeholders, 1472-6939, BMC Medical Ethics, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4627680, Ienca, Marcello; Schneble, Christophe; Kressig, Reto W.; Wangmo, Tenzin, Digital health interventions for healthy ageing: a qualitative user evaluation and ethical assessment, 1471-2318, BMC GERIATRICS, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

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