

Preface

When national authorities responded to the Covid-19 pandemic, the main goal was to create and prepare acute disease care facilities. The huge impact on long-term care (LTC) became the focus when the high number of deaths in nursing homes was reported.

The EU directives (Lisbon Strategy and European Strategy) mention the concept of social innovation, which aims to provide answers to social needs, to offer effective solutions, to improve the social skills of caregivers and to act more efficiently. The first step of social innovation in long-term care is through “process innovation”, defined as a synergy of financing, organizing, managing, monitoring and evaluating with different stakeholders providing formal and informal care, social and health care. Consequently, this process innovation feeds a “product innovation” focused on the elimination of barriers in long-term care, self-care, quality of care (e.g., certification of healthcare professionals) and in prevention. The result is a preventive and proactive approach to improve the quality of life and to reduce costs.

The national healthcare system is fragmented and decentralized, and the healthcare policy is implemented at regional level. During the pandemic, structural shortcomings became evident. The unavailability of personalized medicine remains an open problem in many countries.

Barrier-free LTC access is a very important demand in Germany and Italy. The strategic implementation of the policy and also the natural development of regional responsibilities show several similar aspects in which both countries can learn from each other.

Social innovation in long-term care (LTC) through digitization has been faced in a three-day workshop organized in Ancona, Italy, on November 2–4, 2021 (<https://www.dii.univpm.it/LTC2021>, <https://uc-lab.in.htwg-konstanz.de/news/532-ltc2021.html>). The project has been funded by the DAAD Joint Mobility Program: Italy-Germany cooperation project (<https://www.daad.de/en/>).

The participants presented their process innovations regarding LTC and then compare them. Digital social innovation roadmaps will be derived from individual definitions. Furthermore, innovative approaches will be elaborated in cross-national

working groups and with the involvement of young scientists. Subsequently, individual concepts for traceable process evaluation and sustainability have been discussed.

This book reports the results of the work presented at the LTC 2021 workshop.

The focus of the workshop is on LTC relevant approaches with special emphasis on the following hot topics:

Comparison of LTC, exchange and networking processes

The Italian and German process innovations are presented with reference to the LTC and then compared. This includes assessing the degree of digitization, current best practices and innovations, and identifying cultural differences. Important is the cultural exchange and sociopolitical exchange, e.g., to understand or take into account particularities, preferences and general conditions (e.g., the care of people living together with the family, the professional activities of relatives, self-determined housing models, budgets and budget sovereignty, etc.).

Definition of roadmaps for digital social innovation, search for innovative problem-oriented solutions.

Effective digital health services need frameworks in which they can be implemented. This concerns the basic attitude and training of citizens, patients and professionals, but also the organization and financial arrangements, as well as technological offers and possibilities.

Concepts for understandable process evaluation and sustainability.

An evaluation consists of the interweaving of monitoring and downstream evaluation: (i) monitoring (collects evidence-based data on the implementation of the intervention) and (ii) evaluation (verifies how well the intervention achieves the results—desired impact/impact, e.g., through relevant scoreboards).

During the workshop, the round table “*Comparison of the Long-Term Care processes*” has been organized with the participation of expert in the area. The presentations, in Italian language, are available at the conference web site (<https://www.dii.univpm.it/LTC2021>).

Michele Caporossi (Director of Ospedali Riuniti Ancona, Italy) evidenced that the concept of hospital as a single place where the patient goes to face health problems is now obsolete. It is necessary to take overall care of people with pathologies that are increasingly chronic pathologies. A figure is needed who takes care to accompany people in the different stages of life according to his need for health and well-being. Covid-19 highlighted the need for a more effective organization.

Andrea Giovagnoni (Director of Dip. Scienze Cliniche Specialistiche ed Odontostomatologiche, Università Politecnica delle Marche, Ancona, Italy) evidenced the fundamental role of the Faculty of Medicine in research and integrated assistance for the treatment of long-term pathologies. The contamination of medical skills with other skills and the use of advanced technologies such as artificial intelligence and remote monitoring devices is increasingly important. But such technologies must integrate and not replace physical contact with people, as has

been highlighted in this pandemic period. The patient, especially patients with chronic pathologies, has to be at the center.

Umberto Nizzoli (President SISDCA, Società Italiana dei Disturbi dell'Alimentazione) remembers that after the lockdown due to Covid-19, there was an increase in the number and a consistent aggravation of the pathology of more fragile people with mental, emotional and nutrition disorders, such pathologies. An increase of at least 30% was observed in eating disorders, anxiety crises, depressive states, sleep disorders, abuse of substances such as alcohol, psycho-drugs and drugs.

Lorena Rossi (IRCCS INRCA, Istituto di Ricovero e Cura a Carattere Scientifico, Ancona, Italy) presented the research on “technology to support people with cognition decline”—one of the many research activities of INRCA. The impact of dementia is relevant in European countries. The service and systems of the projects developed allow a slowdown of the progress of the disease, provide a support of life style and allow lifestyle monitoring.

Giovanni Lamura (IRCCS INRCA, Istituto di Ricovero e Cura a Carattere Scientifico, Ancona, Italy) highlighted that loneliness in old age and especially in the period of non-self-sufficiency is predominant in the quality of the assistance provided. Social innovation must avoid the psychological and real loneliness of patients who require long-term care.

Francesca Scocchera (COOSS, Cooperativa Sociale) presented the experience of COOSS Marche in providing services for young and aging people, persons with disabilities, mental health problems, and, generally speaking, in need of care. It provides home and residential services in cooperation and support with public healthcare and local authorities; as well, it manages research projects and experimental pilots to promote innovation in services.

Natividad Martínez Madrid (Professor, Reutlingen University, Germany, coorganizer of LTC2021) presented the activities of the IoT laboratory in the development of smart textile devices with applications in health care, sport and fitness.

Ralf Seepold (Prof. HTWG, Kostanz, Germany, coorganizer of LTC2021) presented the expertise of HTWG in long-term care: hardware and software development, sleep research (non-invasive sensor technology), stress research (cardiological parameters) and health platforms. His research group is now working the “Morpheus” project with goal of development of a non-invasive system for measuring parameters relevant to sleep quality, funded by Carl Zeiss Foundation, in cooperation with the Università Politecnica delle Marche (I), Charité - University Medicine Berlin (D), Université Paris 1 Sorbonne (F), University of Seville (E), University of Reutlingen (D) and University of Kempten (D).

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