

ARMS4elderly

Advanced remote medical services for elderly people - a pilot program focused on remote medical care for elderly populations in Europe aimed at reducing hospital admissions

KEYWORDS

Remote Medical Care, Continuous Monitoring, Geriatric Facility, Elderly Population, Video Telemedicine, Unnecessary Hospitalization, eHealth

DURATION

24 months

ABSTRACT

Advancements in medical care have increased life expectancy and led to a growing elderly population in developed countries. This demographic shift brings complex healthcare needs and challenges for healthcare systems, requiring innovative solutions to provide quality care for older adults. Nursing home residents' facilities and other home services, who are vulnerable to various medical conditions, often face limited treatment options within their facilities. As a result, they frequently need to visit the emergency room, which can have detrimental effects on their well-being, including physical decline, infection risk, cognitive decline, and emotional distress. ARMS4elderly aims to provide a solution for an integrated and efficient innovative remote medical care, with the primary goal of reducing unnecessary hospitalization for elderly population. It will design new protocols for distant diagnosis and treatment based on implementation of advanced technology and accelerate change in healthcare systems through research and best practice sharing. In addition to improving the efficiency of diagnosing and treating elderly patients, the project also seeks to prioritize the well-being and dignity of frail and vulnerable senior citizens, who are ideally cared for in their own home, care home, or nursing home. Overall, the primary goal of the proposed project is to make a substantial impact on triage, allowing these residents to remain in their familiar surroundings while receiving highly advanced medical care from the hospital. On the system side, distant diagnosis and treatment protocol will allow to hospitalize only the urgent cases reducing the pressure on the hospitals optimizing bed places. The proposed platform comprises three components: a geriatric facility care team, a communication platform, and a dedicated hospital team. In the event of an acute medical event requiring emergency room evaluation, the geriatric care team will communicate with a dedicated hospital team which - using predetermined inclusive and exclusive criteria will determine whether the patient is suitable for remote treatment and to be recruited to the study. ARMS4elderly plans to conduct a prospective, multi-center, international, single-arm proof of concept clinical study to demonstrate the safety and efficacy of remote hospital care for patients in a geriatric facility as an alternative for hospitalization. The number of subjects will be determined by each consortium participant relative to local hospitalization volumes. Patients enrolled in the study will receive treatment from the hospital's dedicated team and the geriatric care team, utilizing advanced telemedicine tools with encrypted communication protocols to ensure personal identity protection. The successful outcome will be defined as the ability to treat the acute event without transferring patients to the hospital. The ARMS4elderly system will be implemented through large-scale pilots in 4 countries, involving over 40 Healthcare professionals from hospitals and nursing homes. The objective is to develop

protocols for integrated work between medical teams and healthcare systems, utilizing innovative, interoperable electronic health records (EHRs). By establishing a coordinated system that promotes evidence-based practices and implements advanced telehealth platforms, ARMS4elderly aims to enhance clinical responsibilities allocation and diagnostic approaches, leading to cost reductions in public healthcare systems. The system's effectiveness will be evaluated in terms of patient and caregiver outcomes. Through partnerships with hospitals, nursing homes, NGOs, and SMEs, the project strives to showcase how intelligent, collaborative protocols assisted by advanced digital solutions can reduce unnecessary hospitalizations, alleviate the burden on medical teams, and improve care for the elderly, especially by minimizing hospitalization implications.

PARTNERS

PI	Organisation	Country
Levy	Assuta Samson University Hospital	Israel
Argseal	ROHEALTH - Clusterul pentru Sănătate și Bioeconomie	Romania
Cremene	Cămin pentru persoane vârstnice Târgu Mureș	Romania
Crimi	Net-Medicare SRL	Italy
GÎRBOVAN	Spitalul Clinic Judetean Mures	Romania
Kidholm	OUH Odense University Hospital	Denmark