GER-E-TEC: TELEMONITORING PROJECT FOR ELDERLY RESIDENTS IN NURSING HOMES

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To the Editor,

Year on year, the number of patients in the emergency departments from nursing homes continues to grow. It is necessary to provide tools to health care teams for these nursing homes, such as assistance in the prevention of decompensation of some geriatric syndromes.

The aim of the GER-e-TEC™ project is to study the contribution of telemonitoring residents in nursing homes of Rouen University Hospital, with a structuring and recording of medical care in order to avoid situations of acute decompensation and complication of geriatric risks.

The objective of the project is to experiment with recorded personalized medical monitoring of the residents of the Rouen University Hospital nursing homes using the E-care intelligent telemedicine platform, winner of the Investissements d'Avenir in 2012 and then of the Fondation d'Avenir (Future Foundation) in 2015 and 2017. The latter assists caregivers by automating the processing of information from sensors and from questionnaires in order to detect and make an early diagnosis of medical risk situations. E-care will provide personalized care for the main geriatric risks, to avoid the occurrence of an acute decompensation factor in the elderly patient. The information collected will be supplemented by codified therapeutic management, following international recommendations, directly usable in nursing homes. The E-care platform uses an intelligent algorithm to process the data and generate alerts based on medical knowledge of the pathologies treated and modeled by ontologies. The general principle adopted by this platform is the anticipation of decompensation through the detection of warning signs that ultimately lead to hospitalization. The E-care platform was tested at the Strasbourg University Hospital from 2013 to 2014 and then in homes in 2015. It is currently deployed in the PRADO-INCADO project in Strasbourg, a collaborative project between the Strasbourg University Hospital, the Bas-Rhin Medical Insurance and the Grand-Est Regional Health Agency to monitor heart failure patients where they live. This platform is in the process of being certified as an EU Medical Device. In addition, the DIABETe platform has just been accredited by the Alsace BioValley competitiveness and innovation centre (1-2-3-4)

The collection of information by the platform will increase knowledge of the patients and provide a particularly effective tool for transmission between nursing staff in nursing homes, thus allowing a continuity of care. This information collection will also allow the extraction of markers to improve the early detection of any decompensation and thus improve patient monitoring and reduce the number of hospitalizations. The platform will also provide any paramedical and medical health professional with the resident's geriatric data, which will be updated regularly, including the anthropometric, nutritional, cognitive and iatrogenic data, constituting a real illustration integrated into the electronic platform of the standardized gerontological evaluation, thanks to simple and non-time-consuming measures. Geriatric risks will include the risk of falling, constipation, dehydration, confusion, iatrogenicity, undernutrition, heart failure, diabetes, infections and bedsores.

Conclusion

This study will start in January 2019.

Conflict of Interest: None

Reference

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