

Remote rehabilitation can be done!

Pubblicato: Lunedì 6 Aprile 2020



The testing is already in progress, and patients with particularly severe chronic diseases, who continually have to carry out rehabilitation activities, can now do so at home.

The **SIDERA^B platform** can guarantee the continuity of home care, with the support of innovative technologies, for **people with chronic obstructive pulmonary disease, Parkinson's disease, neurodegenerative disorders and chronic heart failure.**

These patients can now follow personalised rehabilitation programmes at home, under the constant supervision of healthcare professionals, who can check how well they follow the programme, and also some vital signs. Indeed, **the system gives the opportunity to modify patients' rehabilitation plans** in real time, in the event of difficulties or problems.

At this time of emergency, all patients that are using the SIDERA^B platform are carrying on the remote study and monitoring by doctors, without any risk to them and without interrupting the service, as, unfortunately, chronic patients following a traditional course of rehabilitation and treatment are experiencing.

Today, anyone who needs outpatient rehabilitation cannot be guaranteed the service; however, anyone who is an in-patient in a rehabilitation facility, cannot be visited by his or her relatives, and, as a result, may suffer a negative psychological impact. **In crisis situations like the current one, the implementation of hi-tech, digital solutions is essential**, to change the current care model and guarantee the normal checking and monitoring of patients who, otherwise, would slow down or stop moving all together. These telemedicine-based solutions make it possible to free up valuable resources in the hospital, to be able to focus more on the patients affected by COVID-19, and to reorganise internal hospital processes, and avoid any infection between COVID-19 and non-COVID patients as much as possible.

The technological possibilities with remote monitoring, thanks to the **presence of devices that guarantee constant traceability and transmission of patient data**, could enable the healthcare workers to follow several patients remotely, at the same time; if the condition of a patient at home suddenly becomes worse, the healthcare workers have all of the information necessary to intervene promptly and to schedule any hospital visit, planning the routes, and thereby ensuring greater safety for the patients and for the hospitals.

Should we consider this ability to extend the current level of application of these smart solutions to patient care utopian?

“Not at all, in fact, we're seeing a real change in the care model, which can only bring advantages, to the patients and to the healthcare organisations. **It's called telemedicine**, and it's a set of medical techniques which, together with hi-tech, digital applications, make it possible to guarantee healthcare services remotely, so not only in the rehabilitation field, but also for many, different diseases,” explained **Elisabetta Garagiola, Marzia Bonfanti and Emanuela Foglia, from the Centre on Economics and Management in Health and Social Affairs of the LIUC Business School**. “In this

global emergency situation, this solution could be extended also to the urgent check-ups that can't be postponed. With remote systems, visits to the hospital can be avoided as much as possible, thereby preventing dangerous situations of infection and, at the same time, guaranteeing the continuity of a service that can't be provided at this moment in time."

The LIUC University is greatly involved in the evaluation and proposal of advanced, hi-tech solutions that move us towards a change in the current care model. We are involved in assessing the economic and organisational viability and sustainability of the telerehabilitation system using the project SIDERA^B (the name comes from Sistema Integrato DomiciliarE di Riabilitazione Assistata orientate al Benessere – integrated home system of assisted rehabilitation for wellbeing), with a broad multidisciplinary partnership of industrial (Telbios S.r.l. Amiko S.r.l. Grifo Multimedia S.r.l. Tenacta Group S.p.A.) and research organisations (the non- profit Don Carlo Gnocchi Foundation; the Polytechnic of Milan; Milan's Bicocca University) and the involvement of an extensive, nationwide network of stakeholders, local health authorities and health protection agencies.

di Translated by Pelusi & Seveso (Reviewed by Prof. Rolf Cook)