
POSTER ABSTRACT**An integrated, holistic, evidence-based, interdisciplinary approach to digital monitoring and remote care in patients with highly infectious diseases: TeleCovid.**

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During the first waves of the SARS-CoV-2 pandemic, hospitals were overrun with patients. To cope with this high influx of infectious patients, hospitals needed to postpone elective care. Additional ICU beds had to be opened, and the number of isolation units had to be increased. All of this placed considerable strain on the nursing and medical staff. At that time, the idea was launched to keep as many patients as possible at home and prevent their hospital admission through the use of a remote care program. Based on our previous experience with transmural care programs, we quickly developed a digital monitoring program to track the health status of Covid-19 infected patients at home.

Patients could be registered for follow-up by their primary care physician or specialist. After registration, patients received access to a secured digital platform. They first had to complete an extensive survey in order to identify their medical and surgical history, as well as the symptoms present at that time. The severity of symptoms was also evaluated at the moment of the initiation of the digital monitoring. On the basis of the responses to the introductory questionnaire, a global personalized risk score was compiled. After this initial step was concluded, the patient was contacted by the medical monitoring team to arrange for the delivery of telemetric devices (such as peripheral oxygen saturation). Patients were monitored through a 4-layer system, consisting of diaries, validated surveys, telemonitoring of vital signs, and a digital communication system included in the digital platform. This resulted in close cooperation with GPs, home nurses, physiotherapists, and other caregivers. The remote care team monitored the condition of the patients on a 24/7 basis. If needed, they contacted the home caregivers with specific demands or instructions (e.g. administration of oxygen at home, blood sampling, administration of medication).

In the spring of 2022, Paxlovid became available in Belgium for ambulatory treatment of Covid-19 symptoms in high-risk patients. It was quickly decided that we would also include the follow-up of Paxlovid treatment regimens within our care pathway. This created an entirely new approach to our remote monitoring since we had to tackle specific problems like drug-drug interactions but also therapeutic monitoring of certain specific drugs.

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TeleCovid was perceived as an integrated, comprehensive remote care program for Covid-19 patients. At first, this digital care program was perceived in such a way that we could prevent the hospitalization of Covid-19 patients. But very soon after its activation, GPs started to include patients so that they focus their attention and time on other patients. They could rely on the remote care program to be notified when the medical conditions of their patients deteriorated. The care program provided support and guidance to the patients AND their families so they felt safe while staying at home. We provided all possible care right at the home of the patients. This was only possible through intensive and continuing cooperation between many different healthcare providers, such as nurses, physiotherapists, social workers, GPs, and hospital specialists.