



Home monitoring reduced short stay admissions in suspected COVID-19 patients: COVID-box project

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Shareable abstract (@ERSpublications)

Tele-monitoring during the COVID-19 pandemic is recognised as a safe strategy to monitor patients at home. This is the first controlled study that demonstrates the effectiveness of home monitoring to reduce hospital admissions during a 28-day follow-up. <https://bit.ly/39vvngH>

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To the Editor:

Most coronavirus disease 2019 (COVID-19) cases can be managed in the outpatient setting; however, ~10–15% deteriorate and require hospitalisation [1, 2]. Worldwide, including in the Netherlands, the COVID-19 pandemic is causing severe pressure on national healthcare systems and laboratory testing capacities [3]. Home monitoring has been suggested as potentially beneficial to monitor (suspected) COVID-19 patients while reducing hospital admissions and viral exposure of healthcare workers [4]. We performed a retrospective single-centre case-control study on the implementation of a home-monitoring programme of suspected COVID-19 patients presenting to the emergency department (ED) of the Leiden University Medical Center (LUMC; Leiden, the Netherlands). In this study, home monitoring referred to the clinical pathway (the COVID-box project) in which patients were given tools and devices (blood pressure monitor, pulse oximeter, thermometer and concomitant instructions) upon discharge from the ED to monitor their vital parameters at home three times a day, combined with daily teleconsultations (preferably video consultations) carried out by a healthcare professional, as reviewed extensively elsewhere [5]. The healthcare professional was a nurse practitioner or resident supervised by a medical specialist. When patients arrived home, e-health consultants contacted patients to ensure digital on-boarding of patients, giving instructions and guidance for adequate use of the devices. Thereafter, daily teleconsultations were conducted to assess patients' symptoms and vital parameters, based upon which an indication for reassessment at the ED was made. In addition, patients were given the possibility to actively contact our healthcare professionals in case of deviating measurements from personalised target values or progressive complaints. When reassessment was indicated, patients were seen at the ED of the LUMC. Home monitoring ended when patients recovered or were (re-)admitted to the hospital.

