

# Froedtert and The Medical College of Wisconsin: Study finds home-based remote patient monitoring for COVID-19 associated with lower hospitalization, intensive care unit stay and length of stay rates

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**Milwaukee, Wis. (July 7, 2022)** — The Froedtert & the Medical College of Wisconsin health network published a [study](#) today in The Journal of the American Medical Association Network Open that concluded COVID-19 patients who activated remote patient monitoring (RPM) had a 32% lower rate of being hospitalized, and when hospitalized, had stays that were on average 2.7 days shorter with fewer days in intensive care.

“In the study, our objective was to see how a daily remote monitoring program for patients with COVID-19 helped with managing symptoms from home,” said Bradley Crotty, MD, MPH, Chief Digital Engagement Officer for the Froedtert & the Medical College of Wisconsin health network.

Crotty added, “We particularly sought to assess the impact that RPM had on health care services. Would the program help us find sicker patients more quickly and bring them to the hospital, or could we help people safely recover at home? We ultimately found that we were able to safely keep more people at home, supported by our nurses, through technology.”

The COVID-19 remote monitoring program was an automated engagement solution,

supported by nurses across the Froedtert & MCW health network, designed to improve the patient experience, coordinate care, and improve outcomes for COVID-19 patients. On March 30, 2020, the health system began the program using GetWell Loop ([Get Well](#)) monitored by a centralized team of Froedtert & MCW nurses.

Between March 20, 2020, and December 15, 2020, 5,363 patients either used a responsive web application or downloaded a mobile application to track their symptoms, temperatures, and pulse oximetry readings. The Froedtert & MCW health network provided pulse oximeters for patients who tested positive for COVID-19. The program provided 14 days of check-ins related to progress and symptoms, in the form of questions and structured responses, while also providing a space for free-text comments. The program also provided educational guidance related to COVID-19, including caring for themselves at home, minimizing spread, and stress management.

“Patients were connected to a centralized ‘virtual care team’ (VCT) who monitored patient check-ins and free-text comments 24/7,” said Erin Green, RN, executive director of clinical operations at Inception Health, the innovation arm for the Froedtert & Medical College of Wisconsin health network, and one of the co-authors of the study. “VCT nurses reacted to these additional “signals” independent from alerts to provide education and coaching, such as how to incorporate proning (laying on one’s stomach to help the lungs better exchange air) and deep breathing exercises into their daily care, as well as to identify the need for triage and escalated support.”

Abnormal survey responses (e.g. breathing issues or fever has worsened) alerted VCT members on their dashboard. Upon reviewing the alert, the VCT contacted patients to initiate an escalation of care or to conduct further medical evaluation if warranted.

“Addressing the significant strain on our health system with telemedicine measures to match patients with the most appropriate care gave people at home the tools they needed outside of the hospital and clinic environments,” said Karen Fickel, MD, Medical Director of the Virtual Care Team, and another co-author of the study.

The study was supported by the Medical College of Wisconsin’s Collaborative for Healthcare Delivery Science (CHDS), a program created in 2017 to improve the value delivered to patients through the intersection of healthcare operations,

improvement methodology, and rigorous research and analytics. CHDS is supported by the Advancing a Healthier Wisconsin Endowment and MCW.

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The full study is available on JAMA Network Open. [[LINK](#)]