



New Sheba Medical Center Study Validates Use of Wearable Telehealth Technology for Remote Patient Monitoring

Peer-reviewed study analyzes usability of a wearable RPM device, which detected early warning of risk for ABCNO deterioration in 75% of patients, 38 hours on average before actual clinical deterioration

RAMAT GAN, Israel – July 5, 2022 – [Sheba Medical Center](#), Israel’s largest medical center and a [Newsweek](#) top-10 ranked world’s best hospital for the last four years, announced today the results of a new study validating the use of wearable telehealth technology for monitoring hospitalized patients. The study, published in the peer-reviewed [JMIR Formative Research Journal](#), examined the effectiveness of a wearable Remote Patient Monitoring (RPM) device which monitored for early warning signs of clinical deterioration.

Using data collected from the wearable RPM, the study found the remote device, when measured using the NEWS method (National Early Warning Score), provided 67% of cases with an early warning of deterioration before it was detected by medical staff, at an average of 29 hours prior to actual clinical detection. That number rose to 75% when using the ABCNO criteria (Airway, Breathing, Circulation, Neurology, and Other), with deterioration detected an average of 38 hours ahead of time.

“With the rapid development of innovative telehealth technologies, it is important to consider the clinical barrier of validation which is vital for turning telehealth into evidence-based medicine,” said Prof. Gad Segal, Head of Internal Telemedicine at Sheba Medical Center and principal investigator of the study. “This study shows that disruptive telehealth can provide viable alternatives to clinical deterioration detection by medical staff. The output signals from remote monitoring can be equivalent to medical-grade ICU monitoring and that opens up the horizon for home hospitalization of true patients, aligning with Sheba Beyond’s vision of supporting the global transition to telemedicine.”

The wearable RPM provides continuous monitoring of blood pressure, pulse rate, oxygenation and photoplethysmography (PPG) signal wave, all easily accessed via an LED screen and mobile app. Biobeat®, which supplied the device, is an Israeli company founded in 2016 with the goal of providing comprehensive AI-powered wearable remote patient monitoring platforms designed to elevate the standard of care for both short and long-term healthcare environments.

With the outbreak of COVID-19 in Israel in March 2020, Sheba Medical Center swiftly converted several departments to fully quarantined units for COVID-19 patients, necessitating rapid adaptation of telehealth technologies including the Biobeat® remote health monitoring system.

In addition to its work in Israel, Sheba Beyond, Sheba’s virtual hospital, provides high-quality remote medical care to patients around the world. It is currently using its platform to treat Ukrainian refugees, connecting them to doctors in Sheba through a variety of femtech and other telehealth technologies.

###

About Sheba Medical Center

The largest and most comprehensive medical center in the Middle East, Sheba Medical Center, Tel Hashomer is generating global impact through its medical care, research and healthcare transformation. Sheba's City of Health boasts an acute-care hospital, rehabilitation hospital, research and innovation hubs, medical simulation center and center for disaster response on one comprehensive campus in the center of Israel. A university teaching hospital affiliated with the Sackler School of Medicine at Tel-Aviv University, Sheba is shaping the future of healthcare, educating the next generation of care providers. Sheba serves as a true hospital without borders, welcoming patients and healthcare professionals from all over the world and consistently providing the highest-level medical care to all in need. Sheba has been ranked a top-ten hospital in the world by Newsweek four years in a row (2019, 2020, 2021, 2022).

For more information, visit: eng.sheba.co.il

Media Contact:

FINN Partners for Sheba Medical Center

Raoul Wootliff

Raoul.wootliff@finnpartners.com

(929) 589-2018