

# Duration of External ECG Monitoring is Critical to Detecting Atrial Fibrillation

2019-05-09

## Duration of External ECG Monitoring is Critical to Detecting Atrial Fibrillation

*Data show greater than 10 percent of patients with atrial fibrillation are missed if monitoring is stopped at 14 days versus monitoring for at least 28 days*

**Minneapolis - May 9, 2019** - Preventice Solutions announced today the presentation of data showing the critical impact the length of the monitoring period has when using ambulatory remote ECG monitoring to detect atrial fibrillation (AF). While the Preventice BodyGuardian® Remote Monitoring System has the capability and reimbursement to support patient monitoring for up to one month, it is common practice with many currently available monitoring technologies to limit the monitoring period to one to two weeks. This truncated duration of monitoring is associated with “missed” AF in more than 10 percent of patients, many of whom have greater than one hour of AF. The data was presented Heart Rhythm 2019, the Heart Rhythm Society's 40th Annual Scientific Sessions by Suneet Mittal, MD, FHRS from The Valley Hospital and Pooja Mehta and Michael McRoberts from the Preventice data science team.

“In the case of AF, data on the appropriate use of monitoring technologies, including the prescription of a sufficient monitoring period out to a full 28-days, is an important consideration,” said Dr. Suneet Mittal, MD, Associate Chair of Cardiovascular Services for Valley Medical Group, Medical Director of The Valley Hospital’s Snyder Center for Comprehensive Atrial Fibrillation, and Director of Cardiac Research for Valley Health System. “Medicine is moving away from the transactional approach, which involves the doctor only thinking about the patient when the patient is in the clinic. Remote monitoring is changing that paradigm because there is physiologic data that can be captured between visits and used to inform clinical decisions that will optimize care. With AF, there are different patient

populations. It is critical to ensure the monitoring technology is fully leveraged to make an appropriate diagnosis and gauge the burden on the patient, which informs our treatment approach.”

The study was a retrospective analysis designed to compare the incremental yield of AF detection when ambulatory remote ECG monitoring is extended from 14 to 28 days. In the study, data was evaluated from 25,457 randomly selected patients who had undergone monitoring with the BodyGuardian® Remote Monitoring System. The results show at least one AF episode was present for 4,033 patients (15.8 percent) during the 28-day monitoring period. Of those who had AF, 424 patients (10.5 percent) would have been missed if the monitoring period had been truncated at 14 days. From those 424 patients, 352 (or 8.7 percent of the 4,033 patients with AF) had AF for greater than 1 hour, and 181 (or 4.5 percent of the 4,033 patients with AF) had AF for greater than 6 hours.

“We have developed the BodyGuardian® Remote Monitoring System to address the critical needs of patients and physicians. We continue to understand, advance and validate the system based on clinical data,” said Jon Otterstatter, Chief Executive Officer, Preventice Solutions. “Influencing a positive effect on outcomes requires that our technology is proven by clinical evaluation and common practice. Our technology was created with the full capability to monitor accurately and effectively for up to one month of data capture. This study shows the importance of leveraging full capabilities of the technology that can lead to complete actionable data and achieve the best outcomes for patients.”

Dr. Mittal has received no compensation from Preventice for his involvement in this project.

## **About the BodyGuardian® Remote Monitoring System**

BodyGuardian Heart is a small, lightweight, wireless monitor in the BodyGuardian family of monitors. It records important physiological data such as heart rate, ECG, respiratory rate and related activity. Through Bluetooth®, the smartphone can also capture additional physiological measurements such as blood-oxygen, glucose levels, blood pressure and weight, anytime, anywhere. The system creates a virtual connection between patients and their care teams, allowing physicians to monitor vital signs outside the clinical setting.

The BodyGuardian® Remote Monitoring System includes integration of the BodyGuardian family of monitors and additional third-party

sensors, the BodyGuardian Connect smartphone patient application and the PatientCare Platform. The system utilizes machine learning to remotely recognize AF and integrate data into the electronic health record. Patients wear cardiac monitors, which feed real-time data into the cloud-based health platform that physicians can access. Growing clinical use resulting from increased incidence of cardiac disease and a rising aging population forces a greater reliance on algorithms in order to provide high-quality reporting in a timely manner. These factors are amplified in the case of mobile cardiac telemetry (MCT), where ECG is streamed directly to data processing centers, annotated, and may be used to quickly alert clinicians of potentially critical cardiac events.

## **About Preventice Solutions**

Preventice Solutions is a leading developer of mobile health solutions and remote monitoring services that connect patients threatened by cardiac arrhythmias with their care team. Using insights to create revolutionary monitoring technologies, this tech-enabled, service-based approach can ultimately reduce the cost of care and improve health outcomes. The Preventice wearable portfolio includes the PatientCare Platform and BodyGuardian family of monitors. For more information please visit [www.preventicesolutions.com](http://www.preventicesolutions.com).