

Sleep Number Unveils New Research Linking Sleep Abnormalities with Risk of Heart Failure

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The study, which used data from Sleep Number® smart beds, was presented at the Heart Failure Society of America Annual Scientific Meeting

MINNEAPOLIS--(BUSINESS WIRE)-- Today, **Sleep Number Corporation** (Nasdaq: SNBR), a wellness technology leader, announced new research presented at the **Heart Failure Society of America (HFSA) Annual Scientific Meeting** in Cleveland. Data presented show results of a study in collaboration with investigators at Mayo Clinic analyzing the connection between sleep abnormalities and heart failure with preserved ejection fraction (HFpEF), the most common cause of heart failure. The study, titled "Sleep Abnormalities Among Community Participants at Risk for Heart Failure," leveraged longitudinal sleep data from Sleep Number smart beds with Mayo Clinic's AI capabilities and clinical expertise.

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In recent years, the prevalence of heart failure has increased, which is linked to a rise in HFpEF. This is a common but life-threatening syndrome in which the heart does not adequately relax between each heartbeat, so the pressure inside the heart rises. Diagnosing HFpEF can be challenging, since a physician can't detect it based on symptoms alone. Existing diagnostic criteria are obtrusive, requiring the use of tests such as cardiac catheterization or an echocardiogram, often during exercise. As a result, the prevalence of HFpEF is severely underreported.

It is also true that sleep disorders such as insomnia and sleep apnea are associated with metabolic health and heart

failure. To estimate the probability of HFpEF and understand the link between HFpEF and sleep quality, Mayo Clinic researchers developed an HFpEF probability model based on age and BMI. They then validated this model using exercise right heart catheterization, which helps physicians understand how well the heart is working when one is active or exercising. Researchers then collaborated with Sleep Number Corporation to analyze a month's worth of de-identified sleep data from 91,954 Sleep Number® smart bed sleepers and self-reported sleep survey data submitted by 5,861 of those smart bed sleepers. Results will show the relation between HFpEF and sleep in a real-world, home environment.

The study was led by Dr. Yogesh N.V. Reddy, a board-certified invasive cardiologist and heart failure specialist, and Consultant in the Circulatory Failure Division and Cardiac Catheterization laboratory at Mayo Clinic. Dr. Reddy is a preeminent researcher focused on diagnosis and treatment of HFpEF, pulmonary hypertension and exercise physiology.

“By connecting sleep disturbances and HFpEF risk, this study could suggest that addressing sleep issues may potentially play a role in preventing or managing heart failure,” said Raj Mills, Vice President, SleepIQ Health and Research, Sleep Number. “Our joint research introduces a new, potentially valuable tool for early detection of HFpEF, allowing for timely monitoring, lifestyle adjustments and medical intervention. This could improve health care quality and outcomes. The broader public health implications of this research are vast, as they could lead to better-targeted preventive measures, more accurate diagnoses and improved management strategies for those at risk of HFpEF.”

Sleep Number has over 22 billion hours' worth of highly accurate sleep and biosignal data from its millions of Smart Sleepers. Today, the data are used by global research institutions to understand the impact of sleep on health, and advance sleep science with individualized, actionable insights not previously available without an in-lab sleep study.

In the future, these proprietary data can potentially be instrumental in securing funded studies enabling research on a global scale, in partnership with physicians, health systems and research institutions. The data will also be used to bring new health and wellness solutions to our smart sleeper community.

“This novel study highlights not only the important relationship between sleep and cardiovascular health, but also the ways in which wellness technology companies can meaningfully connect real-world, longitudinal data with research to advance understanding of health outcomes,” said Annie Bloomquist, Executive Vice President and Chief Innovation Officer, Sleep Number. “Sleep Number was integral to the success of this study; our data and smart sleepers enabled Mayo Clinic researchers to validate their AI model and findings. In the future, we intend to deliver connected sleep health and wellness solutions, and our collaboration with Mayo Clinic on this important study is validation that we are one step closer to delivering on that goal.”

To learn more, visit sleepnumber.com/science or our [newsroom](#).

About Sleep Number Corporation

Sleep Number is a wellness technology company. We are guided by our purpose to improve the health and wellbeing of society through higher quality sleep; to date, our innovations have improved over 14.5 million lives. Our wellness technology platform helps solve sleep problems, whether it's providing individualized temperature control for each sleeper through our Climate360® smart bed or applying our 22 billion hours of longitudinal sleep data and expertise to research with global institutions.

Our smart bed ecosystem drives best-in-class engagement through dynamic, adjustable, and effortless sleep with personalized digital sleep and health insights; our millions of smart sleepers are loyal brand advocates. And our nearly 5,000 mission-driven team members passionately innovate to drive value creation through our vertically integrated business model, including our exclusive direct-to-consumer selling in 675 stores and online.

To learn more about life-changing, individualized sleep, visit a Sleep Number store near you, our [newsroom](#) and [investor relations sites](#), or SleepNumber.com.

Forward-looking Statements

Statements used in this news release relating to future plans, such as statements about our joint research to advance sleep science, intention to deliver connected sleep health and wellness solutions, and our continued research collaboration with global institutions, are forward-looking statements subject to certain risks and uncertainties. Additional information concerning these, and other risks and uncertainties, is contained in the company's filings with the Securities and Exchange Commission (SEC), including the Annual Report on Form 10-K, and other periodic reports filed with the SEC. The company has no obligation to publicly update or revise any of the forward-looking statements in this news release.

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