Medtronic News

Medtronic Collaboration with Mpirik to Address Disparities in Care Associated with Sudden Cardiac Arrest

Aortic Stenosis Pilot Program with Mpirik Also Underway

DUBLIN, Sept. 13, 2021 /PRNewswire/ -- Medtronic plc (NYSE: MDT), the global leader in medical technology, today announced a pilot program with Mpirik to address disparities in care associated with the prevention of sudden cardiac arrest (SCA), a condition in which the heart suddenly and unexpectedly stops beating. SCA is caused by a disturbance in the heart's electrical system, and can be deadly if not treated by defibrillation within minutes.

Globally, cardiac arrest claims more lives than colorectal cancer, breast cancer, prostate cancer, influenza, pneumonia, auto accidents, HIV, firearms, and house fires combined.[1] Proven treatment options include implantable cardioverter defibrillators (ICDs) or cardiac resynchronization therapy-defibrillators (CRT-Ds), established therapies that have been in use for more than 30 years. However, Medtronic-sponsored research has shown that patients who are medically indicated for these implantable heart devices often do not receive them. Recent studies have shown treatment disparities tied to gender and race: women and men of color, along with white women, receive devices at lower rates than white men.[2]

The Medtronic collaboration with Mpirik also involves Vizient, a health care performance improvement organization that provides data and analytic insights. This pilot program aims to identify patients at higher risk for SCA, and identify them earlier in their care journey. Mpirik's proprietary artificial intelligence platform, Cardiac Intelligence®, will screen electronic health records (EHRs) data at five pilot hospitals, including three Vizient member hospitals, to spot patients, regardless of race or gender, who meet prespecified clinical criteria for being at risk of SCA. Mpirik will provide an automated alert through the EHR system for these patients, enabling clinicians to determine appropriate follow-up care. The identification process will continue to protect patient health information, none of which will be shared with Medtronic or Vizient.

"This pilot program offers an innovative and scalable method to use real-world clinical data – and more sophisticated approaches than traditional manual chart reviews – enabling earlier, appropriate care for at-risk patients, while also improving quality and reducing potential disparities," said Kweli P. Thompson, M.D., MPH, general manager of Defibrillation Solutions within the Cardiac Rhythm Management business, which is part of the Cardiovascular Portfolio at Medtronic. "This exciting technology provides the ability to improve care pathways, digitize population health management and collect a robust set of data to leverage for publications."

"Collaborating with both Medtronic and Vizient in this pilot offers at-risk patients a best-of-breed program for improving outcomes through timely referral," said Logan Brigman, CEO at Mpirik. "Ensuring adherence to a care pathway, assessing personalized disease progression and screening potential cardiac disease, without differentiation for gender or race, are complex issues that our machine learning and natural language processing help to solve."

"Collectively our organizations are aligning around a program using AI to quickly identify at-risk patients based on multiple clinical factors," said Doug Beinborn, associate principal at Vizient. "Our progress will lead to opportunities to enhance patient care in sudden cardiac arrest at these member organizations."

ICDs deliver lifesaving shocks or painless pacing to stop life-threatening fast or irregular heartbeats that can lead to SCA. Cardiac resynchronization therapy is a treatment for heart failure that uses an implantable CRT device to improve the pumping efficiency of the heart; the device can be a CRT-pacemaker (CRT-P) or CRT-defibrillator (CRT-D). Typically, these devices are implanted by electrophysiologists, cardiologists who specialize in identifying and treating heart rhythm disorders, after patients are referred by general practitioners or general cardiologists.

Medtronic Structural Heart and Mpirik Pilot Program

Medtronic also is collaborating with hospitals in four U.S. cities to develop and implement solutions that address racial and ethnic disparities in the treatment of aortic stenosis, a common heart valve disease. The pilot program uses Mpirik Cardiac Intelligence® to identify and manage patients in the hospital system who may need additional follow up. Once complete, the pilot program will quantify the impact with insights and key learnings that can be applied in other markets to address disparities of care.

In collaboration with leading clinicians, researchers and scientists worldwide, Medtronic offers the broadest range of innovative medical technology for the interventional and surgical treatment of cardiovascular disease and cardiac arrhythmias. The company strives to offer products and services of the highest quality that deliver clinical and economic value to healthcare consumers and providers around the world.

About Vizient

Vizient, Inc. provides solutions and services that improve the delivery of high-value care by aligning cost, quality and market performance for more than 50% of the nation's acute care providers, which includes 97% of the nation's academic medical centers, and more than 20% of ambulatory providers. Vizient provides expertise, analytics and advisory services, as well as a contract portfolio that represents more than $110 billion in annual member purchasing volume, to improve patient outcomes and lower costs. In 2021, Vizient acquired Intalere, which expanded its footprint with ambulatory and rural acute care providers. Vizient has earned a World's Most Ethical Company designation from the Ethisphere Institute every year since its inception. Headquartered in Irving, Texas, Vizient has offices throughout the United States. Learn more at www.vizientinc.com.

About Mpirik

Mpirik, headquartered in Milwaukee, Wis., provides a suite of software including cloud-based, automated patient screening and care pathway management for cardiovascular disease, patient communication, and data collection/analysis platform. We enable health care professionals to make informed decisions to give the right care at the right time. Learn more at www.mpirik.com

About Medtronic

Medtronic plc (www.medtronic.com), headquartered in Dublin, Ireland, is among the world's largest medical technology, services, and solutions companies – alleviating pain, restoring health and extending life for millions of people around the world. Medtronic employs more than 90,000 people worldwide, serving physicians, hospitals and patients in more than 150 countries. The company is focused on collaborating with stakeholders around the world to take healthcare Further, Together.

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

[1] Centers for Disease Control and Prevention. National Vital Statistics Reports, December 29, 2011. http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_03.pdf. Accessed October 31, 2012

[2] Curtis AB, et al. Real-world Assessment of Disparities in the Use of Guideline-directed Defibrillator Therapy. Presented at HRS 2019; San Francisco, CA.

Cardiac Intelligence is a registered trademark of Mpirik.

Contacts:

Tracy McNulty Ryan Weispfenning

Public Relations	Investor Relations
+1-763-526-2492	+1-763-505-4626

SOURCE Medtronic plc

---

https://news.medtronic.com/2021-09-13-Medtronic-Collaboration-with-Mpirik-to-Address-Disparities-in-Care-Associated-with-Sudden-Cardiac-Arrest