

Medtronic and Lehigh Valley Health Network Sign Strategic Partnership Agreement Focused on Delivering Value-Based Healthcare Programs

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The Programs Are Expected to Benefit up to 500,000 Patients in Northeast Pennsylvania and Reduce Cost of Care by \$100 Million

LEHIGH VALLEY, Pa. and DUBLIN - February 28, 2018 - Today, Medtronic plc (NYSE: MDT), the global leader in medical technology, and Lehigh Valley Health Network (LVHN), an eight-hospital network serving seven counties in Northeastern Pennsylvania, have announced a five-year strategic partnership aimed at developing innovative, sustainable, and integrated value-based solutions to improve healthcare outcomes for the patients served by LVHN. The strategic partnership will create programs that span more than 70 major medical conditions, with the goal of positively impacting as many as 500,000 patients in Northeast Pennsylvania and reducing their cost of care by \$100 million.

The strategic partnership brings together the technological insights and operational efficiency expertise of Medtronic with the clinical expertise of LVHN. It also creates the opportunity for piloting and beta-testing programs, processes and technology at Lehigh Valley Health Network across multiple disease states with a goal of creating new technologies and services that will drive better outcomes for patients at a reduced cost.

"This agreement is exciting not only for Medtronic and LVHN, but also for the healthcare industry, by serving as a template for how we can work together to achieve our mutual goals of better clinical and economic outcomes," said Omar Ishrak, Medtronic chairman and CEO. "By working in partnership, trusting each other, and combining our expertise, we will create new models of care that are more connected and coordinated. Ultimately, these value-based programs will contribute to a more sustainable health system and a healthier community."

"As LVHN continues navigating the daunting challenges in today's healthcare environment, we are actively searching for new approaches and partners for providing better care and better health at better cost to our community," says Brian Nester, DO, MBA, FACOEP, LVHN's president and CEO. "The opportunity to create innovative programs through this first-of-its-kind partnership with Medtronic will enable both organizations to improve patient experiences and outcomes at a reduced cost."

Initial programs will address conditions such as cardiovascular disease, stroke, and lung cancer, with additional areas to be identified as the partnership progresses. These are key priorities for the community, due to rising numbers of LVHN patients impacted by and costs associated with these conditions.

Medtronic and LVHN will initially develop programs across 10 to 15 conditions and value-capture initiatives in three main areas: therapy optimization, episodic care bundles, and chronic care management. The programs are designed to deliver improved efficiency, outcomes and patient experience.

A few examples of these programs include:

- **Bariatric Surgery:** In general, bariatric programs have a long and complex vetting process. The average length of time from an initial information session to surgery is several months, resulting in an average attrition rate of 70 percent. Medtronic is working with LVHN to create a clear process for patients to learn about bariatric surgery, align staff resources to meet the needs of this growing area, improve provider and patient awareness of the clinical and economic benefits of bariatric surgery, and increase access for patients by making more bariatric surgeries available to surgical candidates within LVHN through improving clinical efficiency.
- **Respiratory Compromise:** Patients with hospital-acquired respiratory compromise, often caused by pulmonary

edema or pneumonia, on average cost U.S. hospitals approximately \$18,000. Through a clinical protocol, education, and training with Microstream(TM) capnography technology, which is a noninvasive, continuous measurement of CO2 concentration over time, Medtronic is helping LVHN detect signs of respiratory compromise earlier, so they can intervene sooner. The goal of the program is to reduce respiratory compromise-related adverse events by at least 20 percent.

- **Thoracic Oncology:** In its early stages, lung cancer presents few, if any, symptoms. Occasionally, lung nodules are identified as a secondary finding while the patient is being treated or tested for other conditions. Even when lung nodules are identified early, a lack of infrastructure, coordination and capacity to manage identified patients in a timely manner can lead to delays in diagnosis and treatment. Medtronic and LVHN are analyzing data on patients that pass through the health network to build a best-in-class model for the diagnosis and treatment of patients with lung disease. Medtronic's capabilities in imaging, data informatics and image-guided intervention will help LVHN to reduce complications, control costs, and maximize optimal treatment in the most efficient and effective manner possible, making a meaningful, positive impact on patient care.

Measuring Value

A key element enabling the success of the strategic partnership between Medtronic and LVHN will be the development of an innovative data collection and analysis initiative that will allow the two companies to demonstrate improved outcomes and economic value.

The collaboration will aim to develop, test, and validate their data science capabilities in creating the total product life cycle (TPLC) for a given patient population. This will require the utilization and application of data science techniques that will reliably extract real-world data from multiple data sources, including LVHN's Electronic Healthcare Records (EHR), for high-quality evidence generation. This data will be used to measure current outcome variance and drive implementation and measurability of new solutions aimed at improving healthcare value.

About Lehigh Valley Health Network

Lehigh Valley Health Network includes eight hospital campuses - three in Allentown including the region's only facility dedicated to orthopedic surgery, one in Bethlehem, one in East Stroudsburg, one in Hazleton and two in Pottsville, Pa.; 22 health centers caring for communities in seven counties; numerous primary and specialty care physician practices and 19 ExpressCARE locations throughout the region including the area's only Children's ExpressCARE at the Health Center at Palmer Township; pharmacy, imaging, home health services and lab services; extensive inpatient and outpatient rehabilitation services; and preferred provider services through Valley Preferred. Specialty care includes: trauma care at the region's busiest, most-experienced trauma center treating adults and children; burn care at the regional Burn Center; kidney and pancreas transplants; perinatal/neonatal, cardiac, cancer care, orthopedics, and neurology and complex neurosurgery capabilities, including national certification as a Comprehensive Stroke Center. LVHN's Cancer Institute is a formal member of the Memorial Sloan Kettering (MSK) Cancer Alliance, a transformative initiative to improve the quality of care and outcomes for people with cancer in community health care settings, including access to key MSK clinical trials. Lehigh Valley Hospital-Cedar Crest has been recognized by U.S. News & World Report for 22 consecutive years as one of America's Best Hospitals. Lehigh Valley Hospital-Cedar Crest, Lehigh Valley Hospital-17th Street and Lehigh Valley Hospital-Muhlenberg are national Magnet hospitals for excellence in nursing. Additional information is available at lvhn.org and by following us on facebook.com/LVHealthNetwork and twitter.com/LVHN.

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 84,000 people worldwide, serving physicians, hospitals and patients in approximately 160 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.

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