CHANGING WHAT’S POSSIBLE AT MUSC

South Carolina’s most nationally recognized health system partners with Medtronic to make value-based healthcare a reality
As the world of healthcare evolves from fee-for-service to connected and coordinated value-based models, it’s going to take teamwork to succeed.

“Knowing where we need to go is not our struggle,” said Patrick Cawley, M.D., CEO of MUSC Health and Vice President for Health Affairs, University. "It’s the how. How do we transform care delivery, because we can’t do this ourselves. The answer is through healthcare collaborations, like this one with Medtronic."

Studies have shown that patients do better when their care is coordinated, and that quality care reduces wasteful healthcare spending. But redesigning delivery models and shifting healthcare payment systems to favor quality over volume can be intimidating, complicated, and expensive.

Medtronic and the Medical University of South Carolina (MUSC) — South Carolina’s only comprehensive academic medical center — recently announced a five-year healthcare partnership agreement aimed at addressing those challenges, by improving outcomes for patients while reducing costs. The goals of the partnership are to redesign the healthcare model to:

- Identify at-risk patients sooner and with better accuracy.
- Get treatment to the right patients, at the right time.
- Optimize patient care pathways inside and outside the hospital.
- Use data analytics to determine whether the new processes have improved patient outcomes, reduced the cost of patient care, or both.

Choosing Healthcare Partners
Their individual pursuits of value-based healthcare led MUSC and Medtronic to each other.

“We can’t change the way healthcare is delivered without partners, without people who share the same vision,” said Omar Ishrak, chairman and CEO of Medtronic. “We have that alignment with MUSC, on our views of healthcare, on reward mechanisms, and on having the patient at the center of our activities.”

MUSC and Medtronic take similarly deliberate approaches in picking value-based healthcare partners. They look at potential collaborations through four specific lenses:

**Ideological alignment**
Organization and leadership alignment on a patient-centered mission and a vision for the future where care is delivered through value-based care models

**Partnership readiness**
An ability to think differently, make changes to the status quo, communicate openly, and trust each other in the process

**Data capabilities**
Demonstrated ability to share data and make information actionable for data-driven, evidence-based decisions

**Clinical alignment**
Engaged clinicians who are willing to improve processes in ways that can benefit their patients
“The two sides must be a match in terms of vision, mission, and values. If you don’t have that, you can’t really move forward,” said Cawley. “With Medtronic, we found early on that we’re fully aligned on where healthcare needs to go, and that is value-based healthcare.”

“We found tremendous strategic alignment with Medtronic,” added Caroline Brown, director of external affairs and special assistant to the president at MUSC. “Not only that, but Medtronic is partner-ready. They’ve invested time and resources in a value-based healthcare team to make sure we can put theory into practice.”

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Transitioning to Value-Based Healthcare

Initially, the strategic partnership will focus on three value-based care programs to:

1. Address vascular disease treatment
2. Identify and monitor patients who are at high risk for post-surgical breathing problems (respiratory compromise)
3. Reduce adverse events for tracheostomy patients and deliver the best quality of care
The unique structure of the partnership works despite the different financial models for each program because each program is tied to improving patient outcomes while reducing costs of care. For Medtronic, it is about evolving from the traditional model of selling technologies based largely on the promise they will deliver positive outcomes that were shown in clinical trials. A value-based model makes the financial commitment that the technologies will actually deliver positive patient outcomes when used in the right way, on the right patients, at the right time in the care pathway.

“This is the trend, toward the idea that some portion of payment is tied to the clinical outcome for the patient,” said Mike Coyle, executive vice president of the Cardiac and Vascular Group at Medtronic. “These are complicated partnerships, where it’s not just about our technology. It’s about how that technology is applied in the care pathway, to which patient, and to the outcome for that patient. Where we see leaders in that thought process, we want to be pioneers with them in making that transition,” he said.

The partnership is the second major value-based healthcare partnership for both Medtronic and MUSC in the past year. Medtronic teamed up with Pennsylvania’s Lehigh Valley Health Network (LVHN) in February 2018, and MUSC signed an agreement with Siemens Healthineers in August.

“This work is transformational, where a health system and a technology and services leader are aligned on their strategic imperatives,” said Christian Howell, vice president of value-based care programs at Medtronic. “We are both focused on the health of the community, patient care, the cost of that care, and the satisfaction of the clinician,” he said.

Medtronic leaders believe learnings from the initial agreement with LVHN put the MUSC healthcare partnership months ahead of where it would have been otherwise. “We know the basic requirements on both sides, which value-based care programs we’re going to work on, and what the resource requirements will be,” Ishrak said. “We believe we’ll see results faster, and I’m really looking forward to seeing how even more of the things we’ve seen with Lehigh Valley will get incorporated, perhaps in a different way, at MUSC.”
Physician Alignment on Value-Based Care Programs

More than three million South Carolinians are affected by at least one chronic disease, and it’s estimated that 21,000 lives could be saved every year in South Carolina through better chronic disease treatment and prevention. That makes the initial focus on vascular health particularly gratifying to Ravikumar Veeraswamy, M.D., division chief of vascular surgery at MUSC.

“South Carolina has one of America’s highest rates of limb amputation related to vascular disease,” he said. “If we can design a screening system that identifies people at higher risk of vascular disease sooner, we can then treat them sooner and spare more people the trauma of losing a limb to this disease. Prevention costs less than treatment, so it can also take cost out of the healthcare system. We believe this partnership can help us do that on a larger scale and impact more patients.”

Both MUSC and Medtronic consider physician support for implementing value-based healthcare programs critical to success. “Their knowledge and training in stratifying risk, selecting cohorts, and removing variation in treatment, among other things, are needed to help us create new care pathways,” Ishrak said. “Their input and expertise will be very important.”

MUSC physicians like Dr. Veeraswamy and other care teams are eager to help the partnership move forward, Cawley said. “They want to change healthcare. They want to do something different, to find higher value in helping patients. I’m confident this project will do well because of that [physician engagement].”

Healthcare Collaboration Powered by Data

Data analytics will play a key role in tracking and measuring the impact of the partnership on programs.

“You need data to build new systems,” said Lisa Saladin, Ph.D., executive vice president for academic affairs and provost at MUSC. “Then you need data to prove whether those new systems are working. Data is one of the most
critical elements to the success of this partnership. We couldn’t move ahead without it,” she said. “MUSC has a very sophisticated data structure, with access to information that makes them unique compared with other health systems,” said Howell. “Medtronic brings excellent clinical evidence and data from medical devices. Together we have the opportunity to create a really interesting health information exchange that can make a real difference to patients.”

Medtronic and MUSC intend to gather, analyze, and organize data into detailed dashboards to determine whether the new programs increase efficiencies for MUSC and achieve better patient outcomes at a lower cost of care. The data will also be integrated into the care delivery process, enabling physicians and care teams to make more informed decisions.

“We’re not going to pick projects we can’t measure,” said Cawley. “Each has hard outcomes attached to them. That’s another great alignment with Medtronic. They think the same way,” he said.

“Value is creating an improved outcome for the patient at a lower cost,” said Ishrak. “Data will tell us whether we’re successful, and if we’re not, it can tell us how to make adjustments so that we can be [successful].”

But analyzing data won’t be just crunching numbers. Subjective opinions will matter too. Medtronic and MUSC intend to measure the satisfaction of clinicians and patients, to help define what truly impacts patient outcomes. “We talk a lot in value-based healthcare about how it puts patients in the middle,” said Howell. “It’s really important to measure that impact and ask them directly if the outcomes we’re generating are meaningful to them.”

A Better Future with Value-Based Care
The impact of the work could be far-reaching, and MUSC and Medtronic intend to share both their successes and failures. Value-based care programs or technologies developed through the partnership may even be made available to the broader marketplace.

“Using data to help create care pathways or identify patient

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Researchers working on the programs will be encouraged to publish their findings. An academic institution, MUSC educates and trains nearly 3,000 healthcare professionals every year. MUSC intends to use the data and the case studies generated by the partnership to augment existing curriculum on value-based healthcare.

“Our mission is to educate the healthcare leaders of the future,” said Saladin. “And the future is value-based care. The data will help us figure out how to really deliver better outcomes at lower cost. We want to share that with our students, so they can actually lead changes in the places they’re going to work.”

“As an academic health system, we’re supposed to be the innovators. We’re supposed to move first,” added Dr. Cawley. “This can be transformational, and we’re going to share what we learn. We’re going to try to convince others to come along with us.”

Leaders at Medtronic and MUSC know the road toward value-based healthcare is long. “You can’t underestimate the difficulty here,” Cawley said. “Some people have described it as navigating down a river with a foot in two canoes, one in the value-based world and one in the volume-based world. But we firmly believe this is our role. And we appreciate having a partner like Medtronic to help us.”

“The inertia of a fee-for-service system needs to be broken,” Ishrak said. “We can do that through bold leadership and by building trust with each other. We envision a day when, by working together, we can create a healthcare system where everyone is paid for the true value that is created. That’s where we’d like to go.”

Learn more about our commitment to transforming healthcare.

References
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