

The Philips logo is displayed in a white rounded rectangle in the top left corner. It consists of the word "PHILIPS" in a bold, blue, sans-serif font.

Partnership

Managed Service



Unlocking value for the University of Vermont Health Network

Exploring the hard and soft value benefits of a long-term strategic partnership with Philips

Unlocking value for the University of Vermont Health Network



Introducing the University of Vermont Health Network

The University of Vermont Health Network is an integrated academic health system, serving a population of more than 1 million people in Vermont and northern New York and approximately 160,000 residents in Chittenden and Grand Isle counties.

The University of Vermont Health Network comprises University of Vermont Medical Center, UVM Health Network – Medical Group, Central Vermont Medical Center, Champlain Valley Physicians Hospital, Elizabethtown Community Hospital, Alice Hyde Medical Center, Porter Medical Center and Home Health & Hospice.

The University of Vermont Medical Center serves all of Vermont and the northern New York region. Located in Burlington, the University of Vermont Medical Center is a regional, academic healthcare center and teaching hospital in alliance with the University of Vermont. The University of Vermont Medical Center provides a full range of tertiary-level inpatient and outpatient services and provides primary care services at 10 Vermont locations.

“This long-term strategic partnership is not just a business transaction. It’s a transaction of trust, transparency and caring.”

Charlie Miceli, Chief Supply Chain Officer and Vice President, University of Vermont Health Network

Executive summary:

The University of Vermont Health Network and Philips Healthcare have partnered to cocreate strategies and initiatives that address some of the complex challenges of healthcare and deliver both hard and soft value benefits to staff, patients and the organization’s bottom line. This case-study explores the ongoing path to value creation, pinpoints the way the teams have learned together and posits opportunities for the future.

Exploring the hard and soft value benefits of a long-term strategic partnership with Philips

“The Philips and the University of Vermont Health Network relationship has evolved into a true partnership with a common mission of improving people’s lives by transforming how care is delivered.”

Vitor Rocha, CEO of Philips North America

What is value-based healthcare?

Michael Porter and Elizabeth Teisberg, from Harvard Business School, were the early-thinkers of the concept of value-based healthcare (VBHC). They introduced a value agenda, suggesting a shift from a supply-driven health care system organized around what physicians do and resources spent, to a patient-centred system organized around what patients need. Porter and Teisberg suggested moving from a focus on activity to focus on outcomes. This model drives for the integration of health and care, in the way that value to the patient should consider outcomes measured by all providers in a full cycle of care.

Value in healthcare is the goal, and yet unlocking real and sustained value represents a significant structural and mindset challenge. It also requires teamwork; aligning on shared values and the smart integration and continuous optimization of people, process and technology. According to value-based principles, a health care system should co-create and measure outcomes that are meaningful for patients with similar needs along the whole care pathway.

Inevitably, these optimal outcomes cannot be achieved in one go – true value creation requires first steps to be made based on the existing situation with each step made contributing to significant change, often over numerous years. It also relies on the purpose and the personalities within the partnership being aligned.

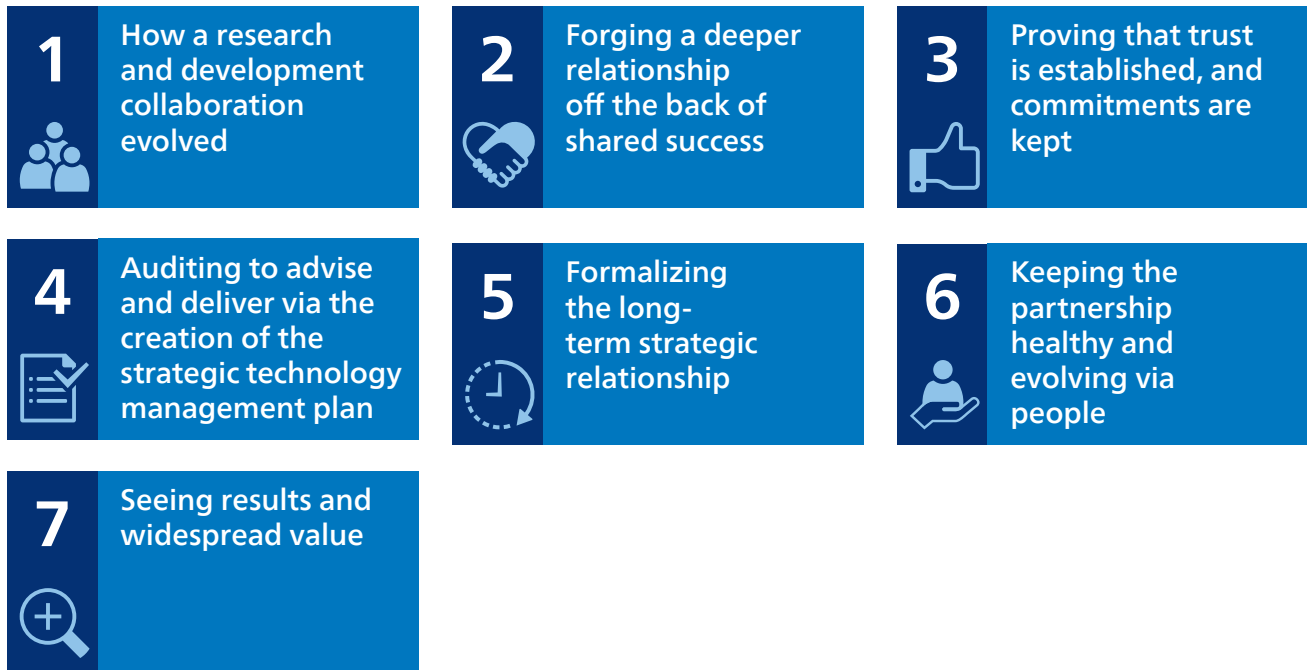
The University of Vermont Medical Center (UVMHC) and Philips Healthcare have been on this type of journey for over 15 years to co-create strategies and initiatives that address some of the complex challenges of healthcare and deliver both hard and soft value benefits to staff, patients and the organization’s bottom line.

As Matt Egan, Customer Delivery Manager for Philips explains: “The University of Vermont Health Network’s transformation to value-based health care is well under way. Over the years, we have undertaken small, medium and large-scale changes together involving multiple components of the value agenda. The result has been striking improvements in outcomes and efficiency, and growth in market share. What started as a research and development collaboration has grown into a 10-year long-term strategic partnership of shared vision, purpose and goals.”

His observations are compounded by Charlie Miceli, Chief Supply Chain Officer and Network Vice President of University of Vermont Health Network: “Our long-term strategic partnership with Philips has helped us assess the life cycle of assets across our entire enterprise and know when it’s time to bring in new technologies, bring in new ways to improve the efficiency of our imaging departments, know how to better streamline workflows and they’ve also brought in operational management experts and engineers.”

In this value-based partnership review, we deconstruct the partnership’s ongoing path to value creation, pinpointing the ways in which the teams on both sides have learned together as well as working to unlock opportunities for the future. In this way, we see both the hard and soft value and effective, trusted and evolving Managed Service partnership can offer and document the path to partnering with purpose.

The path to partnering with purpose towards value creation





Stage 1: How a research and development collaboration evolved to become a long-term strategic partnership, triggered by the need for multi-slice CT scanning.

The University of Vermont Medical Center (UVMCC) is the primary teaching facility for medical students and their respective programs offered at the University of Vermont. Radiology students at the university learn how to read the images obtained from the modality devices such as CT scanning, MRI, Digital X-Ray, Nuclear Medicine, Ultrasound, etc. and are also taught by the Radiologists who are on the staff. With a focus on providing the very best in patient care, UVMCC also needed to create an environment in which radiologists and staff could also access cutting edge technology and stay abreast of the latest breakthroughs in their domain.

This became particularly evident at the start of the CT multi-slice revolution, when the technology was advancing at an alarming rate and the UVMCC Radiology department had to find a way to stay relevant in CT. With this in mind, UVMCC started its Radiology Residency Program with the aim of maintaining leadership in this field, while pioneering new techniques.

A stalwart of the partnership, Matt Egan, Customer Delivery Manager for Philips, explains: "The University of Vermont Medical Center has always been visionary and wanted to secure the CT multi-slice technology and make it available to upper state New York as well. With this in mind, they approached Philips Medical Systems to see if we might participate in a collaborative agreement that would provide UVMCC Radiology with Multi-slice CT scanners and where UVMCC Radiology would work with our Philips software developers on the protocols and scanning techniques for patient imaging. This turned out to be the start of a Research agreement - initially a 5 year agreement based on co-developing 16 slice, 40 slice and 64 slice CT - and subsequently evolved to become a more comprehensive Strategic Business Agreement to include all Imaging modalities and patient monitoring."

Such was the success of the research and development collaboration, that the agreement expanded to include MRI technology and PET/CT and Spect/CT. The UVMCC and Philips teams also worked together on Advanced Visualization techniques such as 3D imaging and Bone subtraction and Image distribution, making it possible for radiologists and clinicians to access images anywhere, anytime.

And, as they say, one thing leads to another once you've demonstrated capability and established trust and so, with one of the affiliate hospitals requiring a major patient monitoring upgrade, replacements and a need to identify exact need and potential cost and funding options, the UVMCC Chief Supply Chain Officer, Charlie Miceli, approached Philips to better understand the company's patient monitoring offerings and to also devise solutions to directly help UVMCC attain operational and patient care initiatives across what is now an Integrated Delivery Network. This evolution to an IDN (i.e. the University of Vermont Health Network) is facilitated by shared collaboration and conversations between the network and Philips healthcare about required Enterprise-wide solutions.



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Matt Egan, Customer Delivery Manager for Philips



Stage 2: How the path to value started by understanding the baseline landscape: value-based governance and the strategic technology management plan.

With positivity and past successes on both sides, the University of Vermont Health Network and Philips Healthcare teams cemented their partnership by starting with value-based governance and a strategic technology management plan. Both processes were approached innovatively in order to unlock value.

Matt Egan explains: "Instead of being a start point for risk, worry and closed thinking, a modern, innovated governance model is central to the formation of any good relationship and is integral to realizing change management. When embarking on the next stage of our relationship, we framed the governance process and adopted an innovative model from the start to prime ourselves for success. We opened conversations within the context of a confidentiality wall, and set provisional guidelines and the like, creating a virtuous circle of continuing learning and optimization. This enabled us to be less transactional and more solutions focused."

To do this, UVMHN and Philips Healthcare began by mutually identifying the organization's pain points and areas where Philips could partner UVMHN to address these. First, was the development of the technology management plan with consolidated heat maps for the Network Chief Financial Officer (CFO) and Network Chief Supply Chain Officer. It was important for the CFO to understand quickly where the focus should be when budgeting for the next fiscal year. These were done for both Imaging and Patient Monitoring with an additional focus on patient safety.

Next, the governance team outlined the current Strategic Initiatives and built a Client Results / Value Analysis program to include Charters, Governance, KPI's, tracking, etc.

"Our governance model was cocreated with the Chief Supply Chain Officer and Network VP. We even wrote some of the terms together establishing a trusted, mutually-positive partnership from the start. What was initially a transactional relationship has given way to true value with even greater involvement, including network radiology, cardiology and patient monitoring."

Rick Penny, Solutions Leader for Long-term Strategic Partnerships at Philips Healthcare

Instead of setting procedures in stone, a progressive governance structure can lock in trust, flexibility and collaboration by embedding the principles of shared risk and reward. It becomes a win-win from the start. The UVMHN and Philips Healthcare teams found that embedding an innovative governance structure had multiple benefits that spanned far beyond the initial contract and paved the way for effective change management.





Stage 3: Proving that trust is established, and commitments are kept, time and time again

A formalized and structured governance process was important but so too was consistency of service and proof of commitment.

As Matt Egan explains, the consistent ownership of the Philips service organization proved instrumental: *“When operating in a R&D environment, there are always challenging situations that require everyone to go above and beyond their normal work obligations. For example, on the rare occasion that a CT system went down due to a power outage and impacted the protocols, our Philips service team worked day and night to get the scanner back up again for patient scanning as soon as possible. Each time a challenge was met with **unrelenting** commitment to support and solve, we built more trust and deepened our relationship.”*

As the relationship continued to progress, an opportunity presented itself for Philips to take inventory of the complete **UVMMC** Radiology Digital X-ray systems. In doing so, the team developed a Technology Digital X-ray fleet program that outlined the equipment to identify; End of Life cycles, current software version and OS, potential replacement and/or upgrade schedule and patient safety issues. This was presented to the Radiology Department Director and managers - and followed up with a presentation to the Network VP's of Clinical Services and Supply Chain and was so well received – that the program was accepted and became the roadmap for the department budgeting.



“We had a lot of confidence in the Philips team and knew that they were good listeners. The DXR technology innovation program helped us identify all the pieces of equipment in our hospital and throughout our network, from the age of the equipment to the software version. The benefits of this standardization included the creation of exam cards that can be shared across different pieces of equipment and quicker technologist training across a common user interface. We now have smaller clinics and the bigger department at the hospital and Philips helped us right size each solution but also plan strategically, looking at the next 10-15 years. From our sales to our services, it’s about what we need. That’s what makes this partnership and lets me know that I’m a partner and not just a customer.”

Paula Gonyea, Network Vice-President, Radiology



Stage 4: Auditing to advise and deliver via the creation of the strategic technology management plan

Fail to plan, plan to fail.

The value of the strategic technology management plan:

With a wealth of complexity and fragmentation, hospitals can struggle to have a comprehensive overview of their complete technology enterprise, why they have it and how it fits into their long term plan and goals. A key part of the relationship was the Philips ability to help UVHN 'take stock' by creating a complete technology asset inventory.

With the Digital X-ray Technology fleet program so well accepted, the Philips team was asked undertake an audit and inventory the entire network.

Matt Egan explains: "Our Managed Technology Services team spent 3-4 months visiting every Vermont and New York location to create an inventory of every piece of imaging and patient monitoring equipment and plan with predictability for what, how, where, and when to replace, optimize and manage and get the full picture of the end of life and service needs. This meant that we could identify and develop a high-level view for the Network CFO clarity regarding potential patient safety issues."

By close, the team had audited and inventoried over 200 diagnostic imaging devices, 150 ultrasound devices and 1,000 patient monitoring devices.



Charlie Miceli,
Network Vice-President,
Chief Supply Chain Officer

"At University of Vermont Health Network, we understood the value-shift from buying the 'Rolls Royce' to putting the right technology investments in the right areas at the right time for the right reasons. Technology as a service (TaaS) not as a product – but strategic technology management as a vendor neutral solution, delivered by Philips as part of a long-term strategic partnership. The Philips teams go over and beyond. For example, they've helped us through supply chain issues and when we were first pioneering nuclear medicine, they helped us bring in a GE Spect CT."

Just as the team had cocreated the governance structure that would work for the partnership, they also cocreated the strategic technology management plan that would best fit their collaboration. They found it depended on a full audit that ensured the removal of assumptions, an assessment of the existing landscape and situation as well as the ability to align on what the objective is. Together they developed the following approach:



Start broad to build a holistic overview.

First, the team needed to gain a holistic perspective of the technology (and services) necessary to support positive clinical outcomes and identify equipment performance needs and existing issues. All aspects have to be considered – patient volume, staff/clinical requirements, facility layout, equipment age, lifecycle progression, funding, etc. With clinical input and financial considerations, a multi-year plan for technology operations was developed.



Build patience into the planning.

The journey to an actionable plan may take a significant period of time. It is imperative for the internal and external partner team to sit down with hospital stakeholders in 'CoCreate sessions' and work as a single cross-department/cross-functional multidisciplinary team.



Adopt a multidisciplinary team approach to construct a comprehensive plan.

Multidisciplinary teams removed the likelihood of blind spots by viewing the world – and the project – from a 360 degree perspective. In fact, the Centre for Workforce Intelligence¹ has cited the value of teams 'working across a range of different professional groups, delivering higher quality patient care and implementing more innovations in patient care².



Build tangible value into the plan.

Predictability, from a financial perspective, was central to a strong technology plan. Unexpected costs could be removed using the managed technology services business model as it was shaped exactly and solely to fit the hospital's particular needs.



Build in scope for the plan to encompass an opportunity for change management.

When good planning leads to technology management stability, it opens up the possibility to add other transformational services. The teams included education around Lean methodologies and service improvement science into their organization.



Ensure that integrated information management is central.

One of the great ironies of healthcare technology management is that despite being data rich in quantity, many hospitals are data quality poor. Vermont Health Network didn't trust its data. As part of its strategic approach to technology management, Philips provided real-time metrics through its integrated information management system.

While this inventory work was going on, the University of Vermont Health Network grew from 3 hospitals to 6 hospitals and a problem arose with asset knowledge and especially allocation. As the Philips team was already engaged in obtaining substantial asset information, the team was informed that a Radiation Oncology CT (an old beyond end-of-life system) at the new affiliate hospital was broken beyond repair. At the same time, the Philips CT sales specialist – being hyper networked within the teams – became aware that the main UVMHC Medical Center Radiation department was about to replace their RT CT scanner with a newer model.

As the existing scanner still had a few years before it would be End of Life, the Philips team proposed to move that scanner over to the other facility and replace the broken one. This pragmatic solution was very well received throughout the organization and was a further example of how Philips Healthcare could be trusted in support of UVMHCN's asset management needs. The resulting Technology Management Plan (TMP) for the entire network included imaging modalities and patient monitoring and framed discussions regarding the next steps to a more comprehensive relationship and a long-term strategic partnership to include all important service to manage equipment from multiple vendors.

¹ Future skills and competencies of the health workforce in Europe, WP6, Centre for Workforce Intelligence UK, 2016. Funded by the EU.
² Team and working effectiveness in healthcare: Findings from the healthcare team effectiveness project, Borrill et al, 2013



Stage 5: Formalizing the long-term strategic relationship through a 10-year partnership with Philips Healthcare

To celebrate the growth of the relationship and the formalization of the collaboration into a 10-year long-term strategic partnership, the then-CEO of Philips, Frans van Houten and Dr. Kristen DeStigter, Network Chair of Radiology for University of Vermont publicly shook hands at RSNA in 2017.

"Vermont is moving quickly into population health. We're able to offer the latest and the greatest; the best, most sophisticated equipment in the world and yet our Philips relationship is not just about the technology. Like us, they know there's a patient on the other side of that machine. It's pretty rare to find that customer-centric focus in an industry partner and it's a real breath of fresh air."

Dr. Kristen DeStigter, Network Chair of Radiology for University of Vermont





Stage 6: The key relationships on both side that unlocked greater value

While the technology expertise of Philips was inevitably a key part, successful outcomes are ultimately dependent on the ability to embed change. The dedicated Philips team on site regularly met all staff in person and to build close rapport, recognizing that change means a significant adjustment for many, new processes are delivered in small, relevant chunks – one at a time. Both teams also invested heavily in their relationship, appreciating throughout that people make the difference.

Matt Egan explains: “Our relationship started with Dr. Kristen DeStigter, the Chair of the University of Vermont Health Network Radiology committee. She’s very progressive, in-tune with the healthcare market and very well thought of throughout the industry. Dr. DeStigter and our then CEO of Philips, Frans van Houten, forged a very close relationship speaking regularly about the ways in which the partnership could support the radiology vision.”

Such was the strength of the interpersonal relationships that the two teams essentially became one team.

Matt Egan continues: “We have to be disciplined at Philips to continually consider UVMHN’s business challenges as the starting point for the way we tailor solutions. It’s not about

selling something from our Philips catalogue. Our goal is to continually tailor solutions to arm UVMHN with what they need to manage their business and, ultimately, provide world class care for the patients they serve in Vermont and New York. We’ve learned that the key to our mutual success is collaboration and creativity. For example, there was a recent Contrast Media shortage used in CT scanning – Philips doesn’t manufacture or sell Contrast Media, but we found people who can help and also suggested some CT scan protocol changes with the help of our Clinical Education experts. It’s how and when you show up to get them through the crisis at hand, but also on a daily basis to collectively solve the day-to-day challenges. The Philips-UVMHN relationship is built on open communication, shared initiatives and ultimately shared success.”

The evolving and deepening partnership has also enabled the teams to unlock increased value from their technology by understanding the synchronization of people and processes. This approach is also being taken to help the network properly embed PerformanceBridge, this Philips, real-time data platform that aggregates data from multiple sources like RIS, PACS, and financial systems to provide the actionable insights that help drive continuous improvement in areas such as asset optimization, workflow and planning.

“We all agreed that the Technology Management Plan (TMP) will be a dynamic plan that will need to adjust to meet UVHS’s needs. Accordingly, the TMP governance process should be designed to optimize the alignment of the TMP with UVHS’s dynamic needs. With a good governance program and the actions above, I think the TMP is ready for action”.

Thomas E. Skorup, Vice President ECRI Applied Solutions





Stage 7: Seeing results and identifying the value of a long-term strategic partnership

Long-term strategic partnerships represent a new business model to help health care leaders better manage the cost and complexity of their technology investments while expanding access to advanced medical care to improve patient outcomes. Through partnerships just like UVMHN, healthcare leaders gain access to strategic guidance and a collaborative approach to new challenges with opportunities to co-innovate and co-create solutions. They gain a partner who commits to continuous performance improvement as well as sharing risk and accountability for outcomes.

Charlie Miceli explains: “With service folks on the ground in product development and research, Philips has shown our clinicians and staff how to make MRIs less daunting for patients with ways to speed up imaging and then turn around results and get them to their doctor quickly. They’ve even taken care of other vendors’ machines or devices.”

Vitor Rocha, CEO of Philips North America continues:

“The Philips and the UVMHN relationship has evolved into a true partnership with a common mission of improving people’s lives by transforming how care is delivered. Over the years we have built a level of trust that will allow us to work more collaboratively and understand how we can help the network break down data silos, giving staff access to information that can help them improve their already impressive level of patient care. Ultimately, we want to redefine the patient and staff experience, helping them to deliver the quality, cost-effective care their communities deserve.”



Vitor Rocha,
CEO of Philips
North America



“This long-term strategic partnership is not just a business transaction. It’s a transaction of trust, transparency and caring. The root of this success has been purpose over project. From the start, we found a partner whose vision, values and operational strategy aligned with ours. I really advocate that when looking to partner with a health technology supplier to create a strategic technology management plan, ensure that your values and vision align above and beyond the project objectives. Partners with a shared bigger purpose and aligned ways of working will pull together to deliver more effectively.”

Charlie Miceli,
Network Vice-President, Chief Supply Chain Officer

Positive results

The long-term strategic partnership between University of Vermont Health Network and Philips Healthcare has unlocked hard and soft value.

Improved Patient Experience

Overall Equipment Uptime 99.62%

- Ontime patient scheduling with reduced modality backlog

Better Health Outcomes

Technology Asset Planning

- Resistance to obsolescence, equipment End of Life
- Maintain cutting edge Imaging technology

Improved Staff Experience

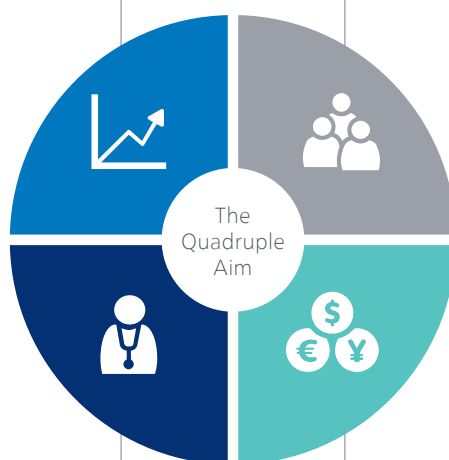
UVMHN overall net promoter score 93.8

- Service quality score 96
- Clinical education score 99.9

Lower Cost of Care

Partnership savings

- Savings total over **\$5 million** since 2017 for the University of Vermont Medical Center
- Lowered overall service cost by **\$500K** annually with the UVM Health Network-wide MultiVendor Service Agreement



Shared Values

- Shared clinical workflow and industry best practices regarding patient safety and quality
- Equipment Planning/Management Assistance
- Unique Equipment Financing Options
- Availability of latest Hardware and Software



Network Portfolio Asset

Management; Radiology/Cardiology Diagnostic Imaging, Patient Monitoring and Ultrasound

- Mitigate vulnerability of legacy systems
- Maximize Equipment life with upgrades
- Remove outdated pieces of equipment - Heat Map
- Holistic Approach to equipment - Right Piece for Right Situation



To find out more about Managed Service and Strategic Partnerships:
<https://www.usa.philips.com/healthcare/about/enterprise-partnerships/managed-services>

