

A stronger healthcare system requires **bold new** ways of working together



Introduction

These are turbulent and trying times for health systems striving to deliver quality care at a sustainable cost. Their resolve to do so – despite the challenges they face – is on remarkable display every day in care settings of every variety. As health systems are called upon to perform like never before, we must also seek new ways to help them transform to meet the evolving needs of our 'new normal.' As we seek ways to help, we also must seek ways to earn the trust that is tantamount to productive partnerships.

In this guide, we explore ways long-term strategic partnerships can help healthcare systems provide practical considerations to facilitate the selection and management of these relationships and include case studies to illustrate approaches and outcomes in a range of organizations.

Health systems have demonstrated remarkable tenacity against great odds



Adapting to unpredictable patient volumes and the resulting impact on healthcare workers

- Healthcare providers used their skill sets in different roles to provide expertise and extra hands.¹
- In 2020, there were large fluctuations in ICU bed-use, with an average of 950 COVID-19 patients in ICU in April vs more than 2,300 in April 2021²
- Overall, 20% of COVID-19 cases are People Working in Healthcare Settings (PWHS), this proportion has been declining since a peak in May, 2020.³
- In addition to exposure to COVID-19, healthcare workers faced stressful work environments, long hours and fatigue, burnout, and in some instances, stigma and discrimintation.⁴



Courage and commitment amidst the uncertainty of a continuing pandemic

- Due to global shortages in personal protective equipment (PPE), healthcare workers have had to come up with ways to reuse face masks and other equipment or go without proper PPE altogether.⁵
- Healthcare workers have been working for more than 200 days in what may seem like an uphill battle to support colleagues and meet patient care needs.
- Thousands of healthcare workers worldwide have died due to COVID-19.6



Openness to and rapid scaling of new technology, namely telehealth

- Telehealth services are growing exponentially. Pre-COVID-19, more than 80% of care was being delivered in-person. In April 2020 that number drastically reduced to about 40% according to Canada Health Infoway. This resulted in 60% of visits being conducted virtually in Canada.⁷
- Meanwhile, providers and staff have had to adjust to a different type of care delivery as they take on increased volumes of telehealth visits, seeing 50 to 175 times the number of patients via telehealth solutions than they saw before the COVID-19 pandemic.8

#futuretogether 2

Health systems continue to face considerable challenges

Clinical teams are weary



55%

of physicians in one survey reported that COVID-19 had increased their feelings of burnout.⁹

Across healthcare systems, clinicians are feeling the strain of these times. In nearly 9,500 critical care providers surveyed, self-reported stress has escalated from a median score of 3 to an 8 during the pandemic.¹⁰ Additionally, up to 55% of physicians in another survey reported that COVID-19 has increased their feelings of burnout.⁹ During the pandemic and beyond, solutions will be needed to meet this ongoing challenge of stress and burnout.

Cybersecurity and interoperability challenges persist



196%

increase in cybersecurity data breaches occurred from 2018 to 2019 11

When it comes to cybersecurity, the data is concerning. From 2018 to 2019, a 196% increase in cybersecurity data breaches occurred, exposing 41.3 million patient records¹¹ for an average cost of \$3.86 million per breach in 2018.¹² In the face of mounting cybersecurity threats and vulnerabilities, health systems will need to take a proactive approach to security, harnessing innovative ways to protect their health technology and patient privacy.

In a world where sharing data across settings is imperative, security is not the only challenge. The challenges of interoperability are also complex, as healthcare systems must share accurate and timely information with patients and healthcare providers across a variety of settings.

Increasing Wait Times



22.6 weeks

is median waiting time for Canadians between referral from a general practitioner and receipt of treatment for specialists, diagnostic and surgical procedures.

With the COVID-19 pandemic, provincial health ministers prioritized hospital space for COVID-19 patients and canceled thousands of elective surgeries. These cancellations will result in an increase to already lengthy wait times for Canadians looking to see specialists.

The Fraser Institute released a report: Waiting Your Turn: Wait Times for Health Care in Canada, 2020 Report. In this report, specialist physicians were surveyed and reported that wait times for medically necessary treatments have increased since 2019, when the wait time reported was 20.9 weeks. This is the longest wait time recorded in the surveys history and is 143% longer than in 1993, when it was just 9.3 weeks.

Wait times vary across provinces and specialties / procedures. Ontario reports the shortest total wait -17.4 weeks- while Prince Edward Island reports the longest- 46.5 weeks. There are variations in wait times, depending on the procedures. Patients wait longest between a GP referral and ophthalmic procedures (34.1 weeks), while those waiting for medical oncology begin treatment in 4.2 weeks.

Patients in Canada also experience significant wait times for several diagnostic procedures. This year, Canadians could expect to wait 5.4 weeks for a computer tomography (CT) scan, 11.1 weeks for a magnetic resonance imaging (MRI) scan, and 3.5 weeks for an ultrasound¹³

The increasing waiting times across the country can result in serious consequences such as increased pain, suffering, and mental anguish. In certain instances, they can also result in poorer medical outcomes.

Positioning health systems for a better future

Leaders from a wide range of public and private health organizations – from independent community hospitals to regional integrated health networks to large, multistate health systems – are seeking decidedly new ways to enable them not only to weather this turbulent time but to be better positioned to proactively manage their future. Stronger healthcare systems serve us all, bridging the gaps, addressing the disparities and meeting the needs – so we are all stronger, together.

This is not easy to achieve – and harder still as a result of the pandemic. While point-by-point adjustments – a new scanner here, an adjusted imaging workflow there – can provide momentary relief for an overburdened unit, health systems also are looking at the bigger picture – scaling their operations, extending their care delivery and planning for long-term growth.

Lasting improvements are the goal and may be more likely when organizations can harness the strength of partnerships to both evolve with agility and grow strategically. As is true of many partnerships, partners serving health systems must earn the trust of the teams they serve.

Evolving with agility to deliver value-based care

Partnering with experts in the broader healthcare ecosystem allows health systems to meet current challenges by first standardizing and modernizing technology so teams are well supported in their efforts. It also means helping organizations be even more proactive so they can deliver upon their objectives with fewer constraints and greater speed. This is also important so they can respond well to unprecedented events and market shifts that invariably occur on the path to providing patient-centered, value-based care.

Forming long-term business relationships to grow strategically

It is valuable to build lasting and trusting engagements with technology partners and others based on deep expertise, close collaboration and a shared commitment to healthcare innovation, as well as on shared accountability for managing costs, complexity and risk.



Health systems are evolving rapidly

Many health systems were already evolving rapidly even before the pandemic and may continue being incentivized to transform their care delivery models. Now, in addition to mounting a massive response to a once-in-a-century public health crisis, they may also be accelerating cost-containment efforts through:



Continued emphasis on enabling virtual care and care at home



Ongoing hospital and health system mergers and partnerships facilitate greater efficiency and scale

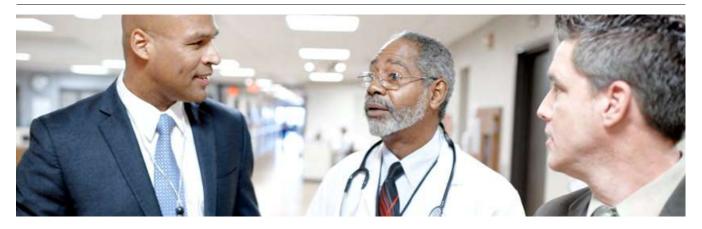


The formation of broad alliances with the aim of shifting certain care out of the hospital to lower-cost settings



Striving to standardize while avoiding vendor lock-in and disparate systems

These efforts are more necessary than ever but may not be enough to meet the chasm of needs facing health systems today and tomorrow.



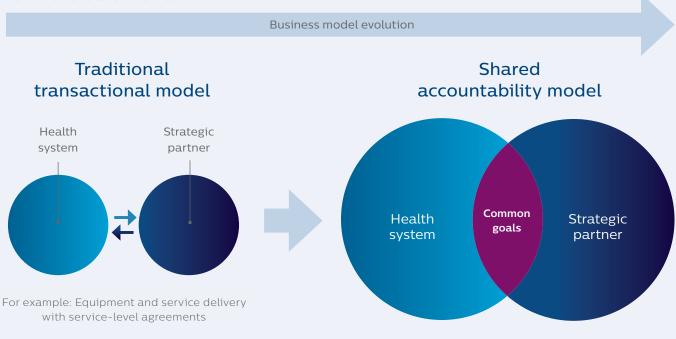
Why build strategic long-term relationships?

Strategic collaborations can begin from a variety of starting points – from goal alignment within a department or among executives from different organizations who have a mutual affinity for innovative business models. Regardless, long-term relationships can address operational, technical and clinical needs and drive efficiencies. They are fundamentally different from traditional

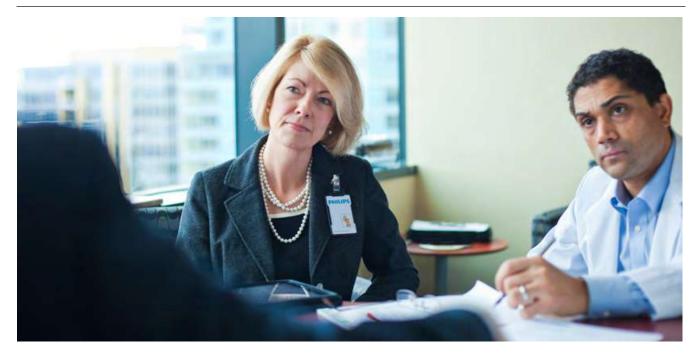
transactional models and are based on shared accountability, risk and reward. A shared accountability model involves choosing a partner that is invested in putting the organization on a pathway to confident growth. A health system's partners can come from the surrounding ecosystem and should include entities that are well positioned to help. See criteria for consideration on page 7.

New challenges require new ways of working

From a transactional to a shared accountability model that fosters continuous engagement and commitment to outcomes



Joint commitment to quality, efficiency and cost metrics = value for patients



How do long-term partnerships yield benefits beyond needed technology?

Long-term strategic partnerships are the kind of hand-in-medical-glove collaboration that many health systems are seeking today. These mutually beneficial relationships not only provide the reliable technology health systems need but also relieve stress on day-to-day operations, which in turn drives positive experiences for

clinicians and users so health systems can reach their goals of improving patient care. To serve as such a partner, organizations need to bring expertise gleaned from a history of collaborating with health systems around the world and in driving technology and industry standards.

Long-term partnerships are proactive in nature and provide a variety of benefits that may include:



Technology management plans to anticipate and meet the organization's evolving technology needs and to accelerate adoption



Planning and governance for clinical and workflow training programs to ensure a coordinated approach to both identifying the need for and implementing training across the enterprise



Dedicated customer delivery management to prioritize integration and adoption to
ensure alignment with the overall program
delivery and defined objectives



Coordinated approach to service to plan for service communications and escalations



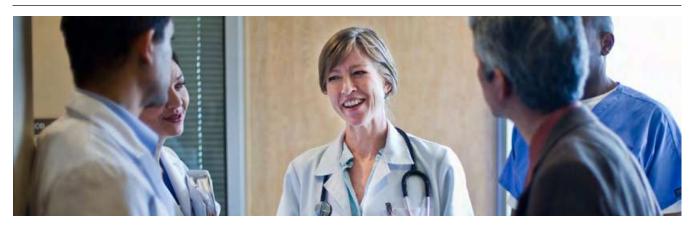
Innovative financial models, such as unitary payment models, service models, and consulting and clinical services funding pools that are not tied to a single business or solution. In some instances, risk sharing is included



Long-term planning for data analytics to guide decision-making and report overall results of the partnership to the health system



Clinical and innovation working groups to identify and prioritize opportunities for innovation across the enterprise, driving a shift away from 'business as usual' activities toward innovation to solve novel problems with new solutions

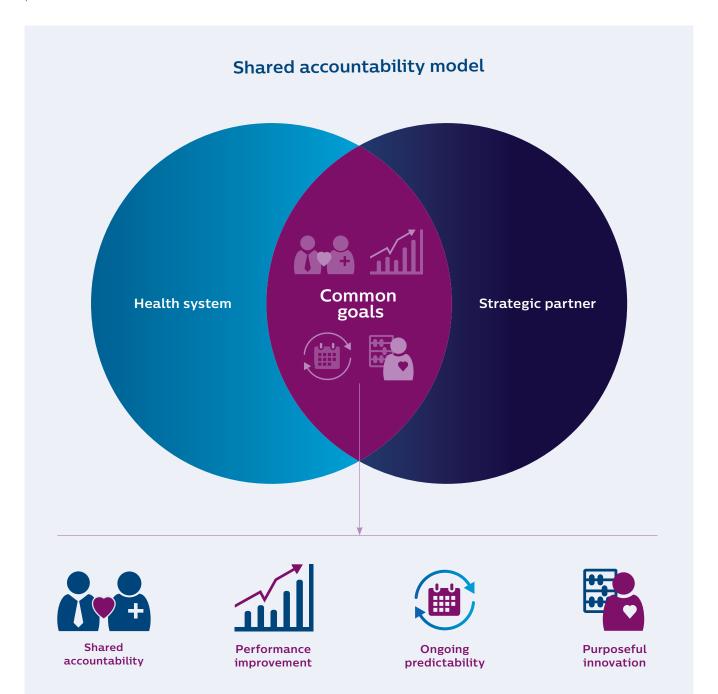


What criteria should be considered when selecting a long-term strategic partner?

Considerations Does the organization have or provide? ☐ Openness to exploring multiple ways of working and varying payment models, including value-based risk sharing Business model ☐ Alignment to measurable, mutually agreed-upon key considerations performance indicators A commitment to ROI Clinically tenured personnel Clinical A broad range of clinical verticals considerations Proven near- and longer-term strategies to improve workflow efficiency $oxedsymbol{oxed}$ Secure technology that enables seamless data transfer across clinical settings open standards Robust, reliable and proactive services and support Solutions that capture, digitize, analyze, and share data to support collaboration and create actionable insights Long heritage of healthcare innovation Global network and reach Long-standing collaborative partnerships with a wide range considerations of health systems Demonstrated ability to anticipate, plan, pivot (as needed) and deliver on shared commitments

Philips long-term strategic partnerships are built on a solid foundation

When faced with large, systemic challenges, health systems can choose to leverage long-term partnerships to help them achieve their short- and longer-range technical, clinical and business goals. At Philips, we believe that effective partnerships can build pathways for organizations to improve and grow confidently and create innovative solutions that make a meaningful impact on patient care.



Essential to these partnerships are having common goals



Shared accountability

Partners create a trusting relationship based on shared accountability, shared reward and, often, shared risk, as well as on transparency. Where possible, the relationship is also enhanced by embedded Philips experts who work alongside teams within the healthcare organization.

For example, when MarinHealth in California was seeking significant expansion, a partnership with Philips went beyond basic service-level contracts, enabling successful growth and evolution through a model of shared risk and shared responsibility.

See Spotlight on page 12.



Ongoing predictability

Partners enter into agreements and working relationships with clearly defined strategic goals, key performance indicators, ongoing assessment and predictable spend, providing clarity from the start and throughout the engagement. This kind of predictability is especially important in cardiac care.

At Miami Cardiac & Vascular Institute, a strategic partnership with Philips has established common goals to reduce variation and improve consistency in performance and outcomes.

See Spotlight on page 14.



Performance improvement

Partners collaborate by taking a stepwise approach to modernizing and standardizing technology to address current challenges and then optimizing and enhancing to continue improving clinical, operational and financial performance.

We can see this goal in action via a Philips partnership with Phoenix Children's Hospital, which helped serve children and their care teams by expanding access to advanced technology, products and consulting services.

See Spotlight on page 13.



Purposeful innovation

Partners discover and co-create tailored and innovative solutions to help the organization solve complex challenges and be well positioned to deliver on the quadruple aim of healthcare, creating sustainable value for multiple stakeholders.

Increasing care access for US veterans presented this kind of complex challenge, inspiring an innovation partnership among Philips and key veterans groups and the subsequent launch of a unique, highly successful access program.

See Spotlight on page 15.

Sometimes embedding within an organization, we form close working relationships with teams to understand our partner's challenges, identify opportunities and jointly build strategies and plans for mutual benefit. Philips understands how decisions are made within

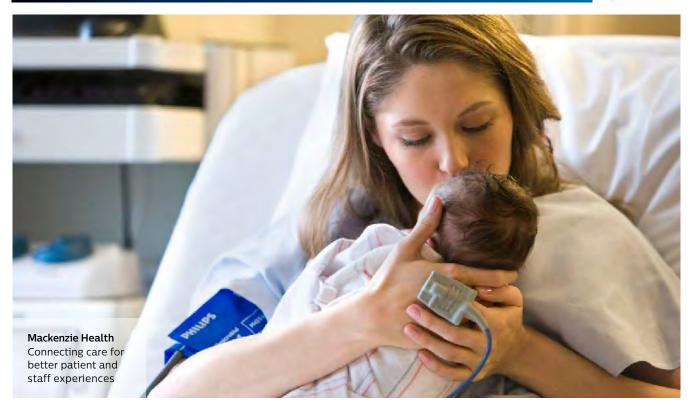
health systems and the executives' need to build consensus among decision makers in multiple departments. Together with our health system partners, we share a commitment to quality, efficiency and cost metrics that create value for patients.

Next, we take an in-depth look at a Philips partnership in action with Mackenzie Health and cast a spotlight on some of our health system partners.

Case study:

The Philips-Mackenzie Health partnership model for transforming care delivery





Creating integrated solutions for today's healthcare challenges

History and change. You can't have one without the other. More than 80 years ago, Philips opened its first office in Canada to sell the new technology of the day - the X-ray - which gave doctors the ability to see patients in a totally different way, literally. Philips has helped to make healthcare history again and again by developing and offering innovative solutions in medical imaging, clinical informatics and patient monitoring. Healthcare has never been the same.

But history has a way of never stopping, and neither does



the need for change. Canada is seeing a dramatic rise in chronic and lifestyle diseases as competition for limited healthcare resources intensifies and a digital revolution transforms how we deliver care. Canadians are becoming more involved in their healthcare, and the focus for healthcare in general is shifting to lower-cost alternatives and the ability to provide citizens with healthcare at home, where possible.

So it's not surprising that hospitals want industry partners with strong consumer and clinical insights who can do more than deliver solutions to business challenges or introduce the latest technologies and gadgets. They want partners who can help them transform how they deliver care.

That was certainty our vision when Philips joined forces in a historic CAD 300 million, 18-year strategic partnership with Mackenzie Health, a dynamic healthcare leader serving more than half a million people in the southwest York Region of Ontario, Canada. Our mission: to redefine how quality healthcare is delivered using state-of-the-art technology and solutions

Spotlight: Mackenzie Health





"The new Mackenzie Vaughan Hospital has the potential to transform the lives of residents in need of quality care. We choose Philips not only for their products, but for their expertise and solutions."



Altaf Stationwala President and CEO Mackenzie Health

The Philips-Mackenzie Health deal is the largest of its kind in the country's history and expands Philips' and Mackenzie Health's role in the innovative healthcare field. It also demonstrates Mackenzie Health's commitment to expanding access to quality care across the southwest York Region of Ontario, as well as Philips' leadership as a partner in the creation of new integrated solutions for today's healthcare challenges.

Mackenzie Health has been a healthcare trailblazer since 1963, when it opened its flagship hospital, Richmond Hill Hospital, which serves one of the fastest-growing and most diverse communities in Canada. Mackenzie Health is now embarking on an exciting new venture and building a second hospital in Vaughn, Ontario. Mackenzie Health's "Smart Hospital" vision led them to embrace new technologies and recognize the value of continuous connectivity in a changing healthcare environment. The Mackenzie Innovation Institute, MI², continues to collaborate with healthcare, academia and industry to push the kind of positive disruption that changes the world.

Philips century-old leadership in meaningful innovation, our current focus on health technology and our unique Managed Equipment Services model means that there's a perfect fit between Philips and Mackenzie Health: both of us are on a mission to change the future of patient care. The partnership meets Mackenzie Health's Smart Hospital vision by providing a range of cutting-edge health technology, IT and operational management support for its Richmond Hill Hospital. And in 2019, the Philips-Mackenzie Health partnership will produce the "Smart" hospital of the future for Canada with the completion of a new approximately 360 bed facility in Vaughan. This will be the first hospital built in this region in over 50 years. Mackenzie Health Vaughan Hospital patients will have access to everything from advanced medical imaging to modern surgical services and state-of-the-art emergency department.

With early and ongoing access to the latest Philips healthcare innovations and expertise, Mackenzie Health will have the ability to offer best-in-class care. Integrating data analytics and innovative operational and clinical redesign processes will enable Mackenzie Health to continue to evolve while putting a concerted focus where it needs to be - squarely on patient experience and outcomes.

In the ever-changing healthcare world, with the complex array of challenges and opportunities, simply attempting to optimize existing care delivery models is not enough.

To truly meet the needs and challenges of our new era, healthcare solution providers must take a holistic approach that covers the range of consumer needs across the health continuum, from healthy living, to diagnosis and treatment, to recovery. Innovative managed service business models, like the one provided for Mackenzie Health, can help hospitals stabilize, innovative and transform while managing costs, complexity and financial risk.

Healthcare institutions like Mackenzie Health are rethinking the way care is delivered, how data is used and how people collaborate and communicate in more preventive, proactive ways.

Delivering this kind of "all of the above, and more" healthcare is best achieved through long-term partnerships, like that of the Philips-Mackenzie Health agreement. Together, we can accelerate the healthcare revolution, turn obstacles upsidedown and transform them into historic opportunities.

For more details, please see our customer story.

Spotlight: MarinHealth





Transforming a community hospital into a vital hub of connected care

As an independent hospital in Marin County situated between bustling population centers - San Francisco to the south, Oakland to the east, Napa and Sonoma to the north - MarinHealth is ranked as one of the top hospitals in the country for clinical excellence in cardiac and pulmonary care and was recently named one of America's 100 best for cardiac care by Healthgrades. 15 It is a 'small but mighty' hospital that is fully committed to community health. But as MarinHealth began to pursue an ambitious growth plan for their facility, expanding from 240 to 320 beds, executives knew they'd need to overcome not only healthcare industry challenges but also local competition with larger health systems. Without large health system resources, MarinHealth couldn't spend their way to success. Instead, they needed to be smart about how they grew, developed new business lines and implemented advanced clinical technology.

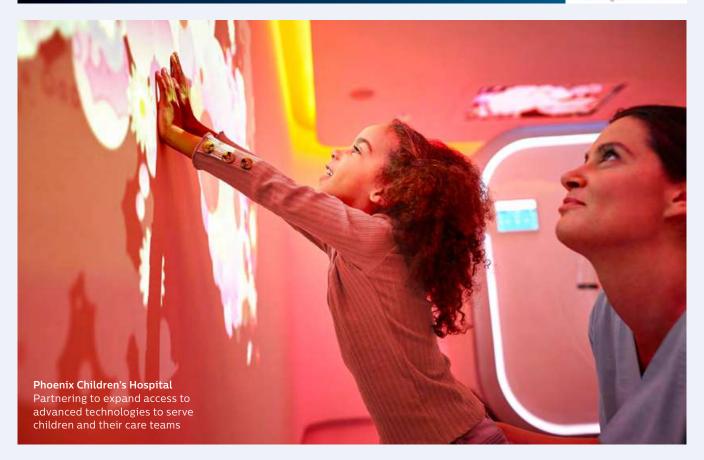
To achieve these goals, MarinHealth and Philips embarked on a 15-year, \$90 million enterprise partnership aimed at transforming care while also constructing a new facility that would bring cutting-edge services and clinical workflows to the hospital. Going far beyond service-level contracts, the enterprise partnership provides MarinHealth with a strong governance structure focused on delivery of equipment, services and business consulting, all through a model of shared risk and shared responsibility. When MarinHealth needed a large capital expenditure investment, Philips helped by supplying a range of connected health technologies and services, including imaging systems, patient monitoring, and telehealth and clinical informatics solutions, as well as clinical education and consulting. Nearly 40 transformational projects were implemented, from enhancing cath lab performance to the launch of a new Breast Health Center in June 2017.

By leveraging all the services and knowledge that an independent hospital would not otherwise have access to, MarinHealth can focus on providing high-quality care for their community, making strides at reducing costs and increasing satisfaction, and keeping patients conveniently within their home county while still having access to the latest technology.

For more details, please see our customer story.

Spotlight: Phoenix Children's Hospital





Serving the unique needs of children's hospitals

Among specialty medical centers across the US, children's hospitals face unique growth as well as clinical and technological challenges. They tend to specialize by focusing on genetic conditions and psychosocial support instead of chronic illness, which means they're highly invested in patient monitoring technologies, which Philips has been committed to for nearly two decades.

Building on its established clinical excellence, Philips entered a first-of-its-kind partnership to develop products, technology and services with Phoenix Children's Hospital to address the needs of children who come to the hospital from around the world. The 15-year partnership gives Phoenix Children's Hospital strategic foresight and access to Philips advanced medical technologies like imaging systems in CT, MRI and angiography as well as patient monitoring, clinical

informatics solutions and a comprehensive range of clinical and business consulting services.

This long-term investment also allows for greater asset planning and management while providing data-driven clinical decision support that enables strategic cost reductions, enhanced staff experience and better patient outcomes. Results thus far include new dosing protocols in its imaging equipment that are child sized and appropriate for particular age groups or a particular organ. These protocols were codesigned and tested by Phoenix Children's Hospital and Philips. And the research and technologies on dose management using iterative CT reconstruction and spectral multi-energy CT combined with specific pediatric CT and MRI protocols are now standards in Philips equipment offered worldwide. Also, through the strength of the partnership, MRI exams have been shortened without impeding image quality, diagnostic confidence in pediatric brain tumor imagery has increased and the time to repair ultrasound systems has been reduced.

For more details, please see our customer story.

Spotlight: Miami Cardiac & Vascular Institute





Partnering to foster clinical, operational and business innovation at Miami Cardiac

& Vascular Institute

The value of strategic partnership is keenly felt in cardiovascular (CV) care, which is a long-term, high-cost effort that calls not only for ongoing clinical innovation to optimize outcomes but also for workflow and business innovation to optimize operational efficiency. Increasingly, strategic partnerships with companies that provide innovative technology and services, among others, are important as health systems seek to reduce CV care variation, to address concerns about technology obsolescence and cybersecurity and to navigate the shift to population-based reimbursement models and outpatient care where appropriate.

For the team at Miami Cardiac & Vascular Institute (MCVI), part of Baptist Health South Florida, a long-term, productive relationship with Philips has been in place with the two organizations working together as innovation partners for 30 years. A tenured Philips team is continuing to collaborate with MCVI to identify their strategic CV care vision and uncover the root causes of the issues they are facing. This leads to recommendations for how to optimize resources to address, for example, IT management, facility design, clinical optimization and workflow efficiency, as well as capital cost reduction and variable inventory management – all so MCVI customers may realize greater performance, cost savings and improved outcomes.

Philips is aligned to data metrics, which will guide efforts and measure the success of the partnership

with MCVI. These metrics include operational KPIs like reduced room turnaround time, intraprocedure time, variable supply costs and patient wait times. They also include clinical operation KPIs such as reduced procedural complication rate (CIN), CABG graft failure rates at 30 days and unscheduled PCI readmissions. Teams collaborate to optimize interventional lab utilization, streamline operations and address changing reimbursement and cost structures, among other goals.

For more details, please see our customer story.

"We need to have a vendor relationship that's two-way, allowing us to participate in the development of that change and also allowing us to be the beneficiaries of technology that's going to help us in taking care of our patients."

 Barry T. Katzen, MD, FACR, FACC, FSIR Founder and Chief Medical Executive, Miami Cardiac & Vascular Institute Chief Medical Innovation Officer, Baptist Health South Florida

Spotlight: Leeds





Partnering to deliver excellence in cardiac care

Leeds Teaching Hospitals Trust

With goals to deliver on the Trust's vision to set new standards of excellence for cardiac care in the UK and globally. Philips and Leeds Teaching Hospitals Trust have agreed a long-term Managed Services strategic partnership

Leeds Cardiac Clinical Services Unit sees over 25,000 patients a year and offerings specialist cardiology services to a regional UK population of over 5.4 million across West Yorkshire. As both a local care provider and international specialism centre, the Trust operates as aspirational international innovation program that not only benefits the local population but also the global cardiology community by developing cutting-edge techniques to meet challenging patient presentations. With both local and international objectives, Leeds has decided to work in partnership with Philips on a long-term basis to ensure these aspirations are

A long-term strategic partnership to deliver excellence in cardiac care

The strategic partnership combines the latest innovations in technology for integrated cardiovascular solutions to deliver on the quadruple aim: better outcomes, increased efficiency, and improved patient and staff experience. Service improvement programs will support the co-design of new patient pathways and workflows, all with the aim of delivering the best care experience for patients

The partnership agreement includes six fully interventional cardiac suites based on the Philips Azurion platform, including two specialized electro-physiology suites and a structural heart suite, as well as advanced patient monitoring and ultrasound systems. The Azurion platform provides an intuitive, seamless approach to minimally invasive procedures that will support Leeds' clinicians to focus on treating the patient, and its administrators as they strive to improve productivity and efficiency through intelligent resource management.

Delivering an interim solution to a non-functoining cath lab

Following the commencement of the partnership, one of the cath labs was not functioning due to aging, unreliable equipment and superseded replacement parts. Philips proposed and installed an interim solution to enable the Trust to use the lab whilst a full replacement program was being undertaken, incorporating a Philips Zenition C Arm system.

In addition, the solution provided a storage area to help facilitate building works required for the new department layout.

For more details, please see our customer story.



Leeds Cardiac Clinical Services Unit sees over **25,000** patients a year and offers specialist cardiology services to a regional UK population of over **5.4** million across West Yorkshire

Summary

Now more than ever – as a pandemic pushes the boundaries of our health systems' capacity to a near-breaking point – we must simultaneously meet the magnitude of this moment and look beyond it to build the more resilient healthcare system we all need going forward.

This is no easy task. And it is a task made more challenging by the fact that we started with an already complex, fragmented and expensive system – a system that is now stretched and strained all the more.

Now is the time for ingenuity and tenacity. It is a time for trying new approaches and new ways of working. And it is a time for forming strategic and lasting relationships with partners who earn each other's trust and support and share the goals of ultimately building a more scalable, agile health system.

These goals may initially be shorter range and involve modernizing and standardizing technology before turning to the next priority of optimizing and enhancing clinical, operational and financial performance. Other partnership goals may be longer range and involve researching and innovating to deliver on an organization's strategic priorities.

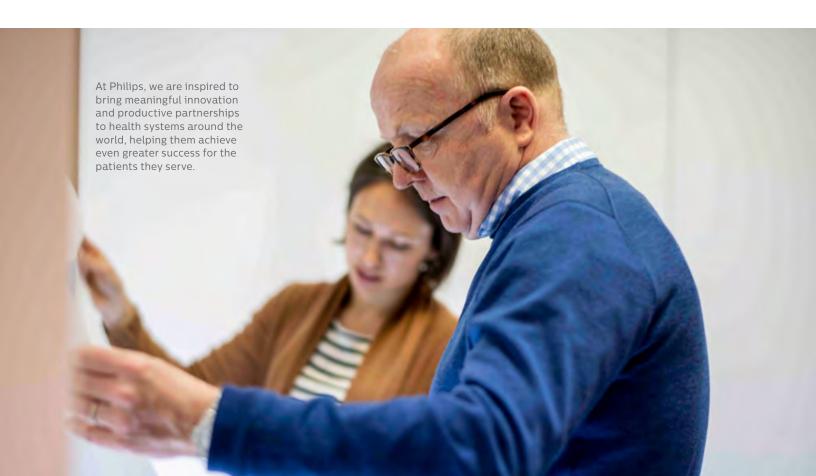
The most effective of these partnerships are built on a foundation of deep expertise, close collaboration, trust and transparency, along with a shared responsibility for improving the organization's ability to serve its patients and communities well while providing a positive experience for its staff.

Philips brings deep knowledge of the complex healthcare environment based on a long history of collaborating with health systems around the world and the sheer depth and breadth of its connected solutions. With its partners, Philips is heavily invested in co-creating solutions – a collaborative process that requires transparency, empathy and an understanding of what the customer wants to do and where they want to go, building stronger and more resilient organizations now and going forward.

This guide showcases how Philips works closely with customers to transform patient care with meaningful and lasting improvements.

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Results from case studies mentioned in this paper are not predictive of results in other cases. Results in other cases may vary.



References

- 1. Burnett GW, Katz D, Park CH, et al. Managing COVID-19 from the epicenter: adaptations and suggestions based on experience. *J Anesth.* 2018;32(2);151-152.
- 2. Government of Ontario. Hospitalizations | COVID-19 (coronavirus) in Ontario. Accessed May 31, 2021. https://covid-19.ontario.ca/data/hospitalizations
- 3. Government of Canada. COVID-19 infections among healthcare workers and other people working in healthcare settings. Accessed May 31, 2021. https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/epidemiological-economic-research-data/infections-healthcare-workers-other-people-working-healthcare-settings.html
- 4. Kisely S, Warren N, McMahon L, Dalais C, Henry I, Siskind D. Occurrence, prevention, and management of the psychological effects of emerging virus outbreaks on healthcare workers: rapid review and meta-analysis. BMJ. 2020 May 5;369:m1642. doi: 10.1136/bmj.m1642. PMID: 32371466; PMCID: PMC7199468.
- 5. Fischer RJ, Morris DH, van Doremalen N, et al. Assessment of N95 respirator decontamination and re-use for SARS-CoV-2. *medRxiv.* April 24, 2020. Accessed November 30, 2020. https://www.medrxiv.org/content/10.1101/2020.04.11.20062018v2.full.pdf
- 6. World Health Organization. Keep health workers safe to keep patients safe: WHO. Accessed November 27, 2020. https://www.who.int/news/item/17-09-2020-keep-health-workers-safe-to-keep-patients-safe-who
- 7. Green M. Is Virtual Care the New Norm?. Accessed June 2, 2021. https://www.longwoods.com/content/26231/insights/is-virtual-care-the-new-norm-
- 8. McKinsey & Company. Telehealth: A quarter-trillion-dollar post-COVID-19 reality? Accessed November 27, 2020. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality
- 9. McKinsey & Company. Physicians examine options in a post-COVID-19 era. Accessed November 27, 2020. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/physicians-examine-options-in-a-post-covid-19-era

- 10. Society of Critical Care Medicine. SCCM COVID-19 rapid-cycle survey 2 report. Accessed November 27, 2020. https://sccm.org/getattachment/Blog/May-2020/SCCM-COVID-19-Rapid-Cycle-Survey-2-Report/COVID19-Clinicians-Are-Stressed-Rapid-Assessment.pdf?lang=en-US
- 11. HIPAA Journal. 2019 healthcare data breach report. Accessed November 27, 2020. https://www.hipaajournal.com/2019-healthcare-data-breach-report/
- 12. https://www.usa.philips.com/healthcare/articles/cybersecurity
- 13. Barua B, Moir M. Waiting Your Turn: Wait Times for Health Care in Canada, 2021 Report. Accessed May 31, 2021. https://www.fraserinstitute.org/studies/waiting-your-turn-wait-times-for-health-care-in-canada-2020
- 14. Cox C, Kamal R, McDermott. How have healthcare utilization and spending changed so far during the coronavirus pandemic? Peterson-KFF Health System Tracker. Accessed November 27, 2020. https://www.healthsystemtracker.org/chart-collection/how-have-healthcare-utilization-and-spending-changed-so-farduring-the-coronavirus-pandemic/#item-start
- 15. MarinHealth. Healthgrades awards. Accessed November 27, 2020. https://www.mymarinhealth.org/about-us/awards-accreditations/healthgrades-awards/

