



Value
Partnerships

Edition #09

White paper

Operational Excellence in Healthcare

How comprehensive engagement management
can identify challenges and opportunities to
streamline operational complexity

siemens-healthineers.com/value-partnerships

Executive Summary

Healthcare operations management takes place in the context of a rapidly evolving regulatory and economic environment. Healthcare leaders must stay current with new technology, scientific advances, privacy issues, and data protection concerns to ensure the health and safety of patients. Strong partnerships for shared responsibilities and benefits, planning, implementation, and ongoing operations have helped many healthcare providers retain their focus on clinical excellence by shifting key operational management duties to specialists.

This kind of comprehensive, end-to-end solution management is essential to executing large or complex projects in healthcare. Everything from the layout of patient rooms to the procurement of medical technology to staff training and workflows must be carefully planned and expertly executed to maximize the potential of projects like hospital expansions. Healthcare provider organizations benefit from partnerships that help them understand the current environment, and plan for the opportunities that will arise tomorrow, while preserving the flexibility to react to unforeseeable events. In addition, wide-ranging operational management enables sustained excellence by continually streamlining operational complexity and optimizing processes.

The acquisition of Varian Health Systems in 2021 enables Siemens Healthineers to build tailored Value Partnerships for oncology care providers. These partnerships can support cancer centers throughout their lifecycles, with operational and clinical services, process optimization, technology provision and commissioning and more available to this important and growing market.

Siemens Healthineers a uniquely qualified, trusted partner for healthcare providers with comprehensive operational excellence. A combination of clinical insight, medical technology innovation, strategic vision, implementation expertise, and process optimization capability helps healthcare providers develop and realize their key strategic goals and avoid unnecessary risks. Value Partnerships ensure that Siemens Healthineers is there for the “long haul” to ensure a successful engagement from planning through implementation to ongoing operation.

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An increasingly complex healthcare landscape calls for best in class qualified partners

As healthcare grows ever more complex, procurement, maintenance, medical technology management and other non-clinical tasks place increasing demands on the time of healthcare organizations' leaders. Many administrators of hospitals and other healthcare enterprises are turning to partners to help their organizations keep pace with and integrate new developments in technology, policy, reimbursement, and patient demographics.

At the same time, healthcare leaders are seeking to preserve financial flexibility by optimizing cash flow and linking it to earnings, and are eager to develop partnerships that enable them to make this shift while maintaining the quality of care delivered.

Similarly, today's healthcare leaders seek flexibility through "future-proof" solutions that leave them room to maneuver in the face of unanticipated changes in the healthcare landscape in years to come. Identifying, prioritizing, and proactively managing risks and opportunities contributes substantially to that desired flexibility. Healthcare administrators benefit from partnerships that help them manage risks and opportunities throughout a project's lifecycle, meaning, in the case of large complex healthcare projects, several years of guidance after implementation.

Against this background, healthcare leaders are seeking partners that will help them realize operational excellence throughout their organizations. Ideal partners can add value at every step of the project lifecycle, from initial feasibility studies through design planning to implementation and ongoing process optimization.



Comprehensive project management in healthcare

Large, capital-intensive healthcare projects cannot be undertaken without an earnest assessment of challenges that may arise throughout the project lifecycle. In addition, healthcare providers benefit from quantifying opportunities that range from completing implementation ahead of schedule to addressing a greater demand for services than initially planned.

Identifying, prioritizing, and proactively managing challenges and opportunities has become, like everything in healthcare, increasingly complex. The expertise to effectively characterize and quantify these factors across the project lifecycle, from right-sizing solutions to meet future patient demand to permitting and licensure, to legal compliance, to ensuring medical technology performance, may not reside within the healthcare organization. Leadership of such institutions often find it to be advantageous to form partnerships that give them access to that expertise on an as-needed basis throughout the project lifecycle.

Building upon the careful strategic planning done in the early phases of the project, careful and methodical strategic implementation planning ensure that everything goes right, and that contingencies are anticipated and planned for. This kind of implementation expertise is extremely valuable, especially in the context of comprehensive, end-to-end operational excellence. Companies that excel in both the planning and implementation phases of healthcare projects give their healthcare provider partners a significant advantage in terms of meeting their goals on time, on budget, and at the desired quality level.

Transition management

Medical technology partners like Siemens Healthineers offer experience and expertise to aid health systems in adopting new technologies and anticipating potential needs. Using feedback from providers to develop customer-focused strategies and bring projects to life, we provide a safety net tailored to support organizations throughout the implementation process. These project management solutions include optimizing and designing layout, training and educating staff, and performing stress tests and validation to establish reliable processes, as well as guiding long-term financial and logistical considerations.

Operational excellence spotlight

Customer: Healius Pathology

- Approximately 100 medical laboratories and 2,000 patient collection centers across metropolitan, regional and remote Australia
- Provides 1/3 of all pathology services in Australia

Contract length: multi-year

Services provided:

- FlexLab installation – first in Australia (Laverty Pathology, Sydney)
- Inpeco HVS (high volume storage) installation (Laverty)
- Atellica solution installation (Laverty)
- Connectivity with third-party IT infrastructure
- Simultaneous installation of Atellica Solution systems and decommissioning of older systems (QML Pathology, Queensland)
- Transition management (QML Pathology)
- Inpeco Flexlab installation (QML Pathology; pending completion)

“The knowledge of the Siemens Healthineers team, that background of knowing pathology in addition to knowing their equipment really helped with the transition. And their customer focus is unmatched in my experience.”

Paul Sorial,
Program Manager, Healius Pathology Ltd.

Streamlining complexity in operations

Operational excellence spotlight

Customer: Royal Victoria Hospital (RVH) –
Barrie, Ontario, Canada

- Advanced Level II facility with stroke designation
- Serves the population of the City of Barrie and the surrounding area
- Founded in 1897, RVH currently has 388 beds
- Cancer center opened in 2005

Contract length: 2 years

Services provided:

- **Remote Applications Coach**
 - Bilingual support from Application Specialist
 - Support for protocol development
- Optimization of DOT programs and engines
- Standardization of workflows, processes, and reporting across all facilities and shifts

“Working in a very busy MRI department leaves very little opportunity for protocol optimization. Remote Coach has been a game changer for our department as it has allowed us to have Siemens Healthineers experts work in the background to create optimized imaging protocols that we could implement with minimal scanner downtime.”

Kristyn Cole, MRI Charge Technologist,
Royal Victoria Hospital – Barrie, Ontario, Canada

Artificial intelligence, novel therapies, new imaging technologies, big data... the rapid evolution of healthcare and its technologies and processes has generated an enormous amount of complexity that administrators may struggle to keep up with. Creeping demands on healthcare leaders' time from non-clinical tasks like procurement, training and education, and assessing new technologies give them less time to focus on clinical excellence. This is another key aspect of comprehensive engagement management, one that may continue for several years following implementation.

Operations and technology management throughout project lifecycle

In the past, projects that involved expanding clinical services, adding facilities, or procuring medical technology could be adequately addressed through vendor relationships. As the healthcare industry has grown more complex, many healthcare leaders have moved away from traditional vendor relationships in favor of benefit- and value-oriented partnerships. For example, instead of looking for a new imaging fleet that meets certain performance measures, administrators now look for partners that can help them dig deeper: How can I best meet the needs of my current patients? How will those needs differ in 5 years? How can I integrate imaging with other enterprise-wide concerns like EMR systems? And how can I ensure that this fleet stays up and running with minimal workflow interruptions over its lifetime? The right partner can help healthcare leaders focus on the desired outcomes and benefits, and less on detailed equipment or facility specifications and requirements.

The need for ongoing training and education

Training and education is another critical need. Hospital staff need to understand how to operate technology in order to optimize both clinical and financial outcomes. The task of training and retraining staff can be overwhelming, time-consuming, and, once again, may take administrators' focus away from key strategic concerns and the improvement of clinical outcomes.

Siemens Healthineers: A trusted partner for end-to-end operational excellence

Siemens Healthineers builds Value Partnerships with healthcare providers in order to address pressing needs or challenges, and unveil high-care value. Value Partnerships are enduring, performance-oriented relationships that help providers optimize processes, expand capabilities, and advance the level of innovation within their organizations.

Value Partnerships reduce operational complexity and enhance capabilities

In terms of operations management, Value Partnerships operate in two complementary ways: they can supplement what the customer is currently doing, and they can expand and enhance the range of activities within that customer's capabilities. Many Value Partnerships deliver both of these benefits simultaneously.

"The supplemental activities are often the foundations of a Value Partnership. We ensure uptime on technology, we simplify maintenance with a single point of contact. We can manage and maintain third-party equipment. We streamline complexity and enable our customers to focus on their core responsibilities of providing quality care," explained Nicola O'Keefe, Global Head of Delivery Support, ES Operations at Siemens Healthineers.

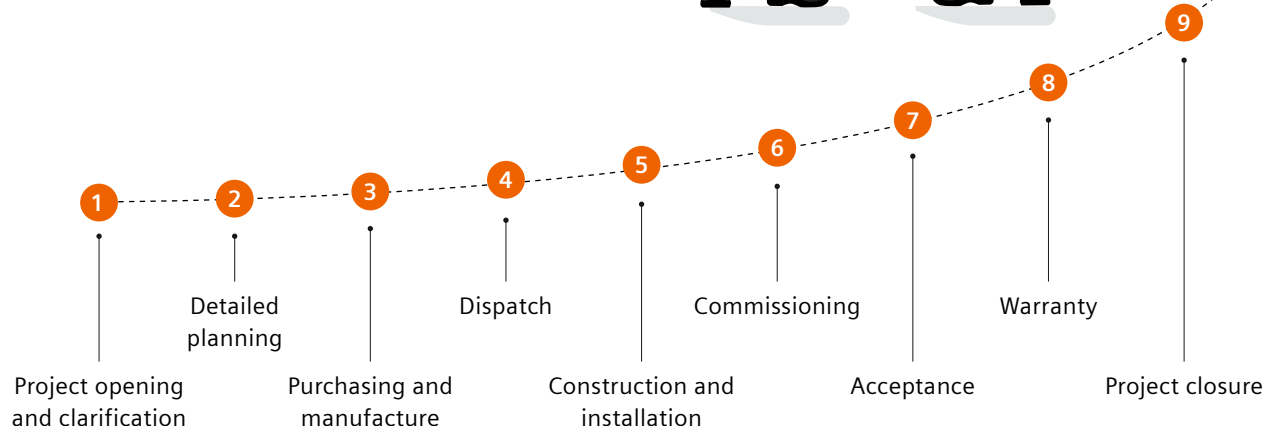
Frequently, Value Partnerships begin with Siemens Healthineers fulfilling important "supplemental" roles, like medical technology management. "Maintaining the customer's technology fleet might be the initial ask, the start of the partnership," said Franca Piepenbrock, SVP,

ES Operations at Siemens Healthineers. "Then there is a natural extension. The customer realizes there is a need, and looks to us for technology life cycle planning, for purchasing, and for optimizing the performance of the fleet and training the staff on how to use it, not just maintenance any more," she continued.



Siemens Healthineers Operations Management key competencies

- Tailored education programs
- Clinical operations management
- Integrated staffing solutions
- Smooth project delivery while staying flexible
- Proactive risk management



Key strategic roles for Value Partnerships

Over the years, Siemens Healthineers has built robust strategic consulting and project management capabilities to help its customers realize their strategic objectives.

“We’re heavily involved in imaging, of course, and we’ve been doing room design and planning for imaging for quite some time. We grew from there to where we now offer extensive facility design and planning capabilities,” Ms. O’Keefe said. “And we can manage these projects from the earliest stages, feasibility studies and so on, through construction and installation,” she added.

As mentioned earlier, Siemens Healthineers can continue to add value once a new facility is up and running through ongoing process optimization, staff training, and proactive maintenance. “We have this holistic view and the capabilities to match throughout the project lifecycle. That’s a major benefit to our customers,” Ms. Piepenbrock said.

That end-to-end capability has been highlighted recently during the COVID-19 pandemic. Siemens Healthineers has helped several customers swiftly create new facilities and procedures – including ICUs and negative flow rooms – to deal with the operational demands of the pandemic.

Partnerships built around the customer’s goals

The idea of co-creation is central to the Siemens Healthineers operations management approach. Value Partnerships are built around a customer’s unique context and goals, and are benefit-oriented. “We realize that it’s less important to a customer to know all the ins and outs of how we plan to do something than it is to know that it’s going to move them toward their goals. They don’t want to know how to build the car, so to speak; they want to know that it’s going to get them to their destination. So together we create solutions around that customer’s goals and their needs,” said Ms. Piepenbrock.



Operational excellence evolved: new directions for Siemens Healthineers

Siemens Healthineers continues to develop its operations management capabilities. The company is in the process of leveraging data from its enterprise application management platform to enable more robust competitive benchmarking and to identify and mitigate risks by detecting patterns or indicators of risks identified in other projects.

In addition, the company is working to broaden its partnerships with providers. For example, research and development partnerships can help drive efficiency by co-creating novel clinical operational delivery models. This type of partnership represents a deep commitment to long-term goals that benefit all partners, and Siemens Healthineers has been gaining insights into new developments from many of such a partnership.

Value Partnerships in Oncology

The acquisition of Varian Medical Systems has opened new opportunities to build Value Partnerships with cancer care providers. Siemens Healthineers offers expertise that spans the entire lifecycle of an oncology department, from feasibility and planning through partnerships and innovation programs to elevate the value and quality of care delivered.

Operational excellence spotlight

Customer: CHRISTUS Health

- 600 US locations across Texas, Louisiana, New Mexico, and Arkansas
- 7 oncology centers serving 5000+ patients with cancer

Contract length: multi-year

Services provided:

- Oncology as a service (OaaS)
 - Dosimetry (remote/on-site)
 - Treatment planning
 - QA
 - Radiation safety
- Installation of 6 linear accelerators
- Enterprise software installation
 - LION (Large Integrated Oncology Network) for secure collaboration between personnel at each site and Siemens Healthineers consultants
 - Cloud-based centralized Eclipse™ treatment planning software

*"This partnership offers our patients access to more advanced technology and the clinical benefits from centralized management of our oncology network. This improves quality and enhances operational efficiencies by leveraging the Oncology as a Service approach to providing comprehensive solutions."*¹

Dr. David Benner,

Vice President of Clinical Ancillary Services, CHRISTUS Health

¹ Source: <https://www.prnewswire.com/news-releases/ctsi-oncology-solutions-a-varian-company-to-provide-technology-enabled-services-for-radiation-oncology-at-christus-health-301231659.html>


A leap in impact – Siemens Healthineers and Varian

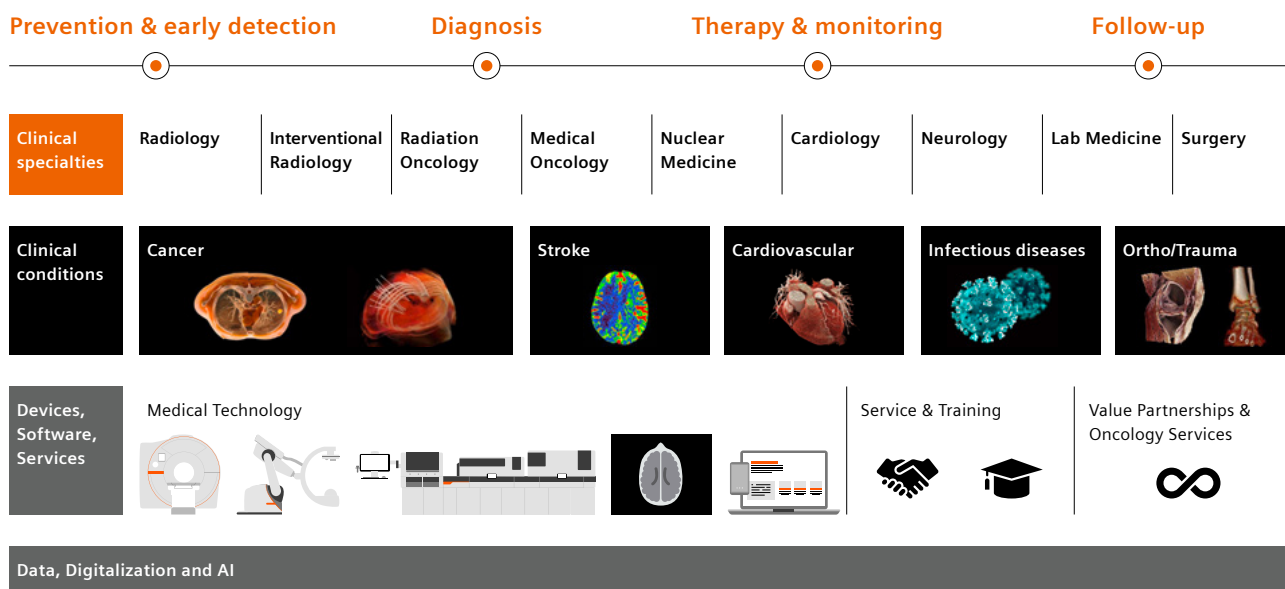
Siemens Healthineers provides operations management services and support tailored to the needs of the institution throughout its lifecycle. Key capabilities include:

- Equipment provision and commissioning
- Training and accreditation
- Process and workflow optimization
- Remote and on-site medical physics services
- Radiation planning and safety
- Patient engagement services

As with every Value Partnership, oncology Value Partnerships are long-term, performance-oriented relationships that help oncology care providers increase the value of the care they provide.

Learn more about Value Partnerships in Oncology

 [siemens-healthineers.com/perspectives/together-a-step-ahead](https://www.siemens-healthineers.com/perspectives/together-a-step-ahead)




Conclusion


The modern healthcare industry presents unprecedented opportunities to improve the lives of the patients it serves. At the same time, healthcare has grown incredibly complex. Healthcare providers can benefit from partnerships that help them deliver higher quality care by easing the burdens of technology, facility, and training management that can overwhelm administrators. Providers also seek partners who will help them realize their longer-term strategic goals, through a combination of strategic vision, proactive risk and opportunity management, and end-to-end operational excellence.

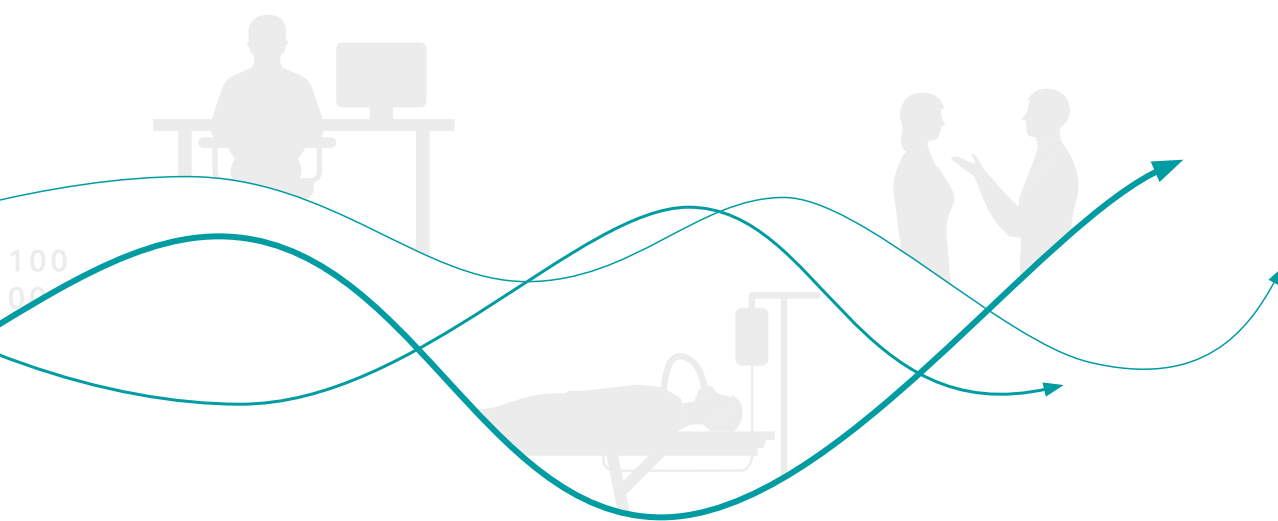
Siemens Healthineers builds customer-centric, benefit-oriented Value Partnerships to help healthcare providers optimize their current processes and activities while expanding their range of clinical capabilities and advancing the pace of innovation within their organizations.

Do you want to learn more about how Value Partnerships can help you achieve operational excellence now, and in the years to come?

Contact Siemens Healthineers Enterprise Services to see how we can help you streamline complexity in operations:


 siemens-healthineers.com/value-partnerships

 eshq.team@siemens-healthineers.com




Read more from our series on Value Partnerships and how to create more value for healthcare providers:

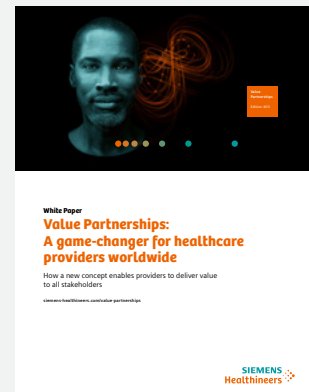
Technology management – Healthcare enterprises continually strive to simultaneously optimize their operations, expand their capabilities, and advance innovation. Therefore, one of the most critical focus areas is the holistic management of their medical technology.

 siemens-healthineers.com/whitepaper-technology-management




Value Partnerships – These game-changers help healthcare providers meet their challenges by digitalizing and transforming care delivery while expanding precision medicine and improving patient experience.

 siemens-healthineers.com/whitepaper-value-partnerships




Digital twin technology – Virtualized presentations of facilities and processes – have emerged as powerful tools for healthcare providers. They can reduce the time and expense of piloting different solutions and approaches in the physical world.

 siemens-healthineers.com/whitepaper-digital-twin




Financing models – Innovative financing models become a vital part to meet unique challenges for healthcare providers. The combination of expertise, financial solidity, and passion for creating value in healthcare separates Siemens Healthineers from other potential financial partners.

 siemens-healthineers.com/whitepaper-financing-models




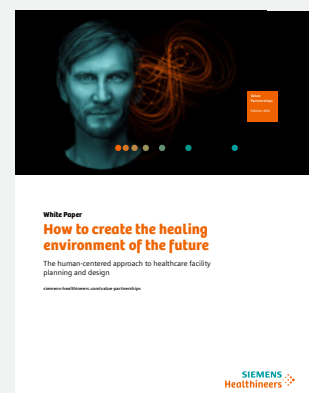
Consulting services and digital transformation – How choosing the right consulting partner can help healthcare providers thrive in challenging times, unlock value and drive future-proof transformation.

 siemens-healthineers.com/whitepaper-consulting-digital-transformation



How to create the healing environment of the future – Thoughtful, human-centric facility design can make a positive impact on patient and staff experience. Interdisciplinary team work, biophilic design, and new technologies are shaping the healing environment of the future.

 siemens-healthineers.com/whitepaper-healing-environment

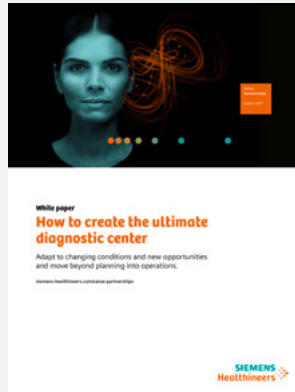


How to create the ultimate diagnostic center

Medical technology partners offer expert operational and strategic consulting to help laboratories optimize their current operations, expand their capabilities, and advance the pace of innovation in their institutions. A range of operations solutions, from managed equipment services through full operational and staffing responsibility, are now available.



siemens-healthineers.com/whitepaper-the-ultimate-diagnostic-center

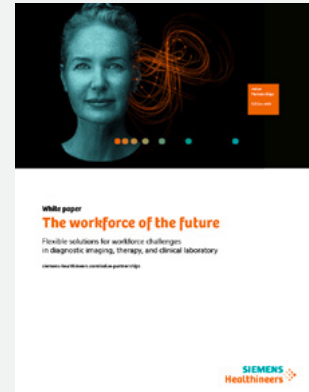


The workforce of the future

Many factors are responsible for today's personnel shortages in healthcare. The magnitude of these issues is increasing and may require even more flexible staffing solutions in the future.



siemens-healthineers.com/whitepaper-workforce-of-the-future



The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities. If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens Healthineers organization for more details. The results described herein by customers of Siemens Healthineers were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results.

The scientific overlay on the title is not that of the individual pictured and is not from a device of Siemens Healthineers. It is modified for better visualization.

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com