

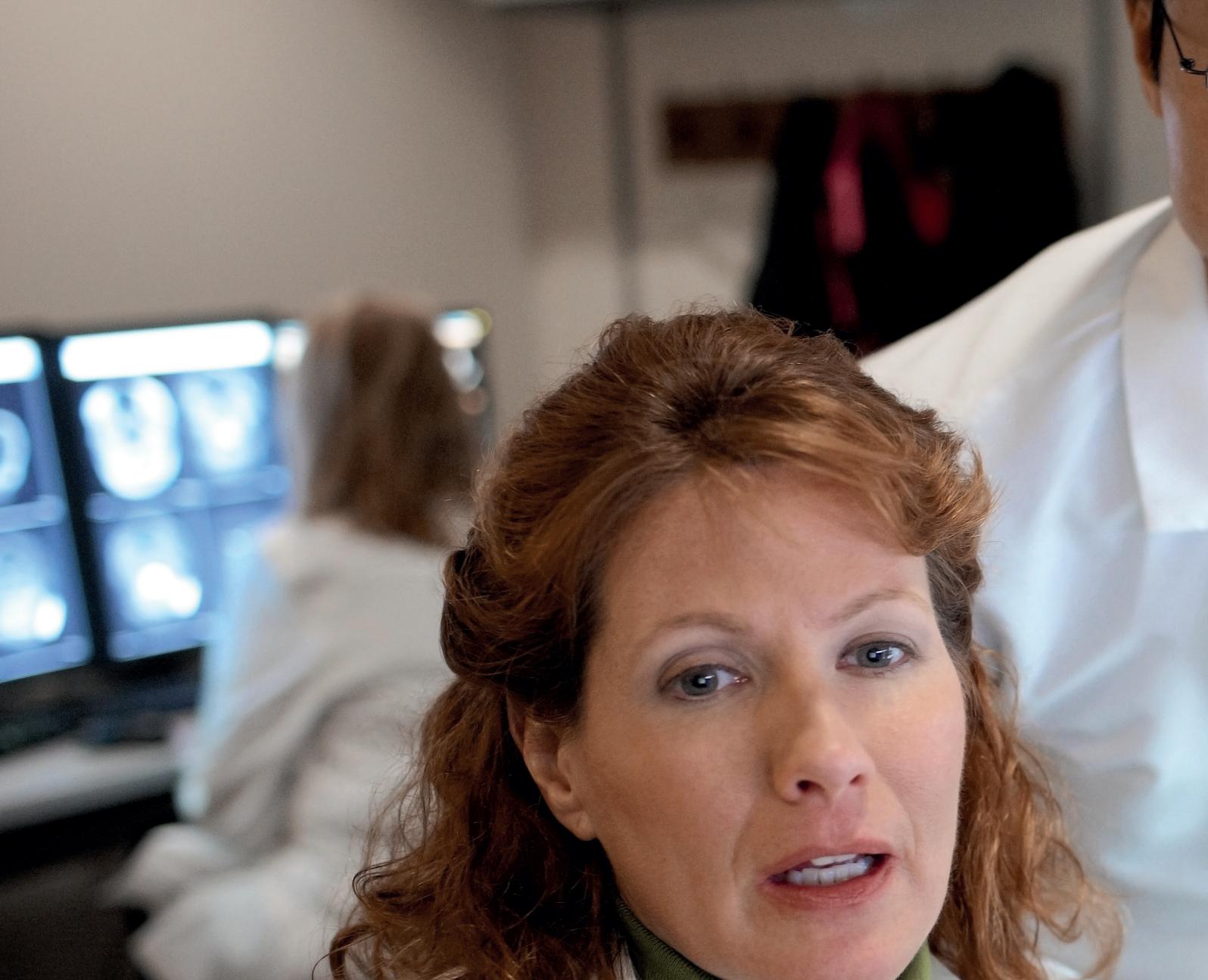


**PHILIPS**

*IntelliSpace Portal*

Advanced Visualization  
as a Service

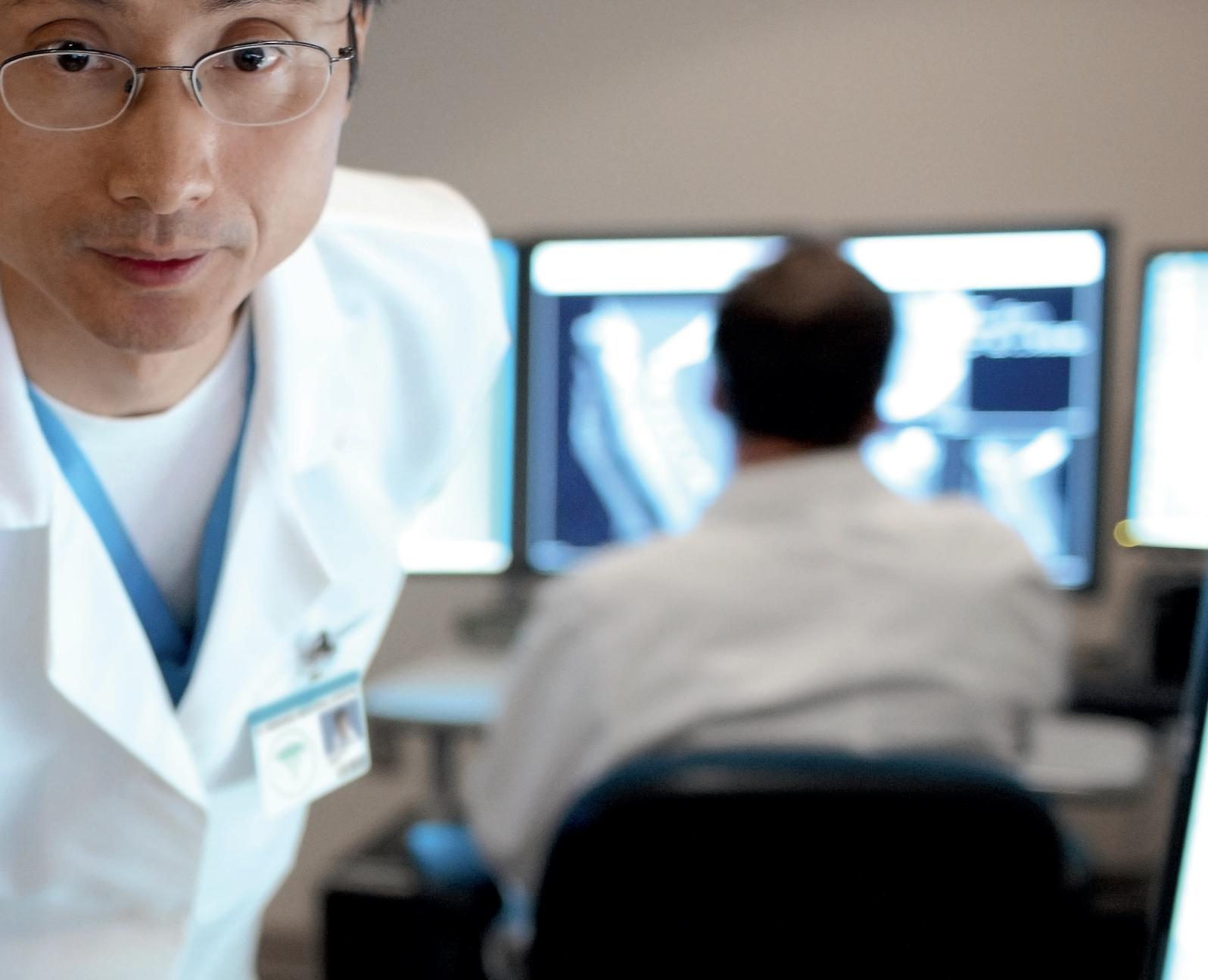
**Raising the bar**  
in patient care



How can large and mid-sized healthcare organizations continue to deliver high-quality care in an era of dynamic technological and organizational change? Investigate the impact an advanced visualization solution can make – and discover how that solution can help redirect healthcare teams to the front lines of care delivery.

Three trends shape advanced visualization's role in the capabilities underpinning consistent and high-quality patient-centric care delivery.

- **First:** With the advent of multi-modality imaging, workstation-based solutions may obstruct comprehensive patient overviews and fast input for treatment planning.
- **Second:** Isolated advanced visualization solutions may restrict the growing – and in many cases, essential – collaboration between specialists, departments, and sites across an enterprise.



- **Third:** As technology continues to develop, clinicians and IT specialists will require ongoing education to be able to apply clinical and technical advances to patient care.

These trends suggest that healthcare organizations run the risk of spending an inordinate amount of resources on catching up with or implementing the latest developments instead of taking full advantage of them right away.

Available as an on-demand service, Advanced Visualization as a Service (AVaaS) supports healthcare organizations over the long term by offering the latest technology, new clinical innovations, IT service, and professional clinical and technical education in a single solution. AVaaS is the service delivery model for the IntelliSpace Portal, our answer to the need for advanced visualization and analysis. Looking for the latest and greatest technologies and clinical collaboration - but lack the resources to maintain complex healthcare IT infrastructures and manage advanced application education internally? Explore how AVaaS can help.

**Large and mid-sized healthcare organizations can:**

- Drive clinical performance through multi-modality and multi-clinical specialty capabilities, collaboration, efficiency gains, and ongoing innovation and education
- Promote operational excellence based on obsolescence protection, standardization, automated processes, and scalability
- Deliver economic value by managing cash flows
- Work with a trustful healthcare partner to foster a relationship founded on common goals of superb healthcare solutions

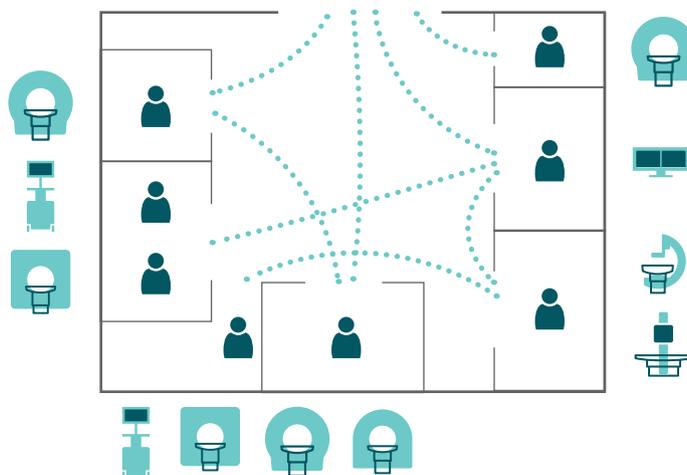


# The healthcare landscape today

## **More challenges ahead**

As life expectancy and chronic diseases increase, individual patients – and society as a whole – are expecting more and more from healthcare providers. One demand remains the same: high-quality, effective, and people-focused care.

	<b>Advances in science and technology driving developments in healthcare</b>	<b>Staff, departments, and hospitals sharing more knowledge, more often</b>	<b>The need for educational programs in training and workflow optimization</b>
<b>What's changing?</b>	<p>As studies expand in size and complexity, imaging in radiology departments is quickly moving from film-based to filmless operation. Workstations replaced light boxes for film. They were developed initially for off-site viewing to ease the burden of night call.<sup>1</sup> This workstation-based advanced visualization solution was satisfactory at a time when radiologists had only a single modality available. As technology for radiology continues to evolve at ever-increasing speeds – both in clinical depth and breadth – the need for additional functionality in advanced visualization has become abundantly clear.</p>	<p>Advanced visualization is used beyond the radiology department. Clinicians and physicians are becoming increasingly active participants in the image-reading phase to provide specialized knowledge in their clinical domain.</p> <p>A structural shift is also underway. Healthcare organizations are transforming from multiple, loosely connected departments toward multi-site enterprise models.</p>	<p>Every day, radiologists, clinicians, technologists, and IT personnel are inundated with new medical imaging and computer applications that surpass their predecessors in speed, complexity, and sophistication.</p> <p>Structural change is also redefining roles and responsibilities within a healthcare organization. Who delivers which information – and when? Where and how is it stored? Who will be able to access and manage it?</p>
<b>What's the challenge?</b>	<p>Separate medical image viewing and processing software across different workstations is no longer suited to a multi-modality, multi-scanner environment. Radiologists are forced to change workstations or reading rooms to obtain a comprehensive patient overview, contributing to an inefficient and time-consuming workflow (Figure 1). With only one radiologist able to access one workstation at a time, collaboration is inconvenient at best.</p> <p>As radiologists continue to add modalities to their repertoire, workflows must be redesigned and streamlined for efficiency. Centralizing the data and software application in the central server(s) for different users to access and share can address this challenge.</p>	<p>Radiology is and will always be at the heart of the health continuum. It is central to diagnosis and facilitating the right treatment at the right time for all patients. In the increasingly connected world of health systems, clinicians must have the tools to engage in clinical consults and provide the information that helps the care team manage disease.</p> <p>Interoperability will play a key role in stronger clinical collaboration. For the right care to be delivered at the right time, clinicians must be able to rely on medical devices which interface with individual IT systems as well as entire IT systems which work smoothly with one another.</p>	<p>New technologies along with organizational evolution present an entirely new set of clinical, educational, and political challenges. The long-term success of clinicians and IT personnel in overcoming these challenges will be tied in large part to their ability to incorporate the changing technologies into their workplace.</p> <p>As evident in many other industries, lifelong learning is indispensable in healthcare. Continuous education does more than increase the competency of healthcare professionals. By extension, it improves patient care – and this can help a vision of patient-centric care come to fruition.<sup>2</sup></p>



**Figure 1: Complexity in radiology reading room due to decentralized imaging data and software.**



# Choices in healthcare IT

Multi-modality imaging, connected care, skills development – these trends impact patient care in both subtle and dramatic ways. Healthcare IT plays a critical role in how you respond. Your organization can achieve expected levels of return when it leverages the latest technology, supports interoperability between systems and devices, and keeps pace with evolving structures. Yet many healthcare IT networks reflect a series of investments over time, often with varying systems or through different providers. A decision for the latest technology may require a major technological (and costly) overhaul to accommodate existing solutions from multiple vendors. Maintaining these complex IT infrastructures and overseeing advanced application education in-house can also prove cost-prohibitive. Your expenses for organizational resources range from budget to time and manpower.

Few healthcare organizations actually possess the required, highly specialized software development skills and advisory experience internally. Given the lack of these capabilities, there is a very real risk you'll spend an inordinate amount of resources on catching up with or implementing the latest developments instead of taking full advantage of them as soon as they come on the market. Without turnkey solutions in which devices and systems from multiple vendors work together, you may also need to devote extra effort to finding suitable alternatives.

# New IT approaches for a new world

Rather than navigate a dynamic IT landscape on their own, successful healthcare organizations may rely heavily on third-party developers' proven methodologies and tools. A business model which shifts the burden of managing and maintaining complex healthcare IT to service providers can redirect the healthcare providers to the front lines of care delivery.

## **A service model for advanced visualization**

One avenue now available to you is Advanced Visualization as a Service (AVaaS). It represents a comprehensive solution developed in response to advances in medical and healthcare IT as well as the growing demand for collaboration. AVaaS should not be seen as simply a different commercial model. It changes the relationship between you and your IT service providers. No longer a single sales interaction established through the exchange of money and product, the relationship is founded on common goals of exceptional healthcare solutions. In an era of fast-paced transformation, healthcare organizations like yours need to remain agile and continue to deliver consistent,

high-quality care by seeking out service providers with similar interests. AVaaS can open the door to long-term, close relationships which support healthcare IT infrastructures in successfully managing change, driving clinical and operational excellence, and managing cash flows.

While bringing you and IT companies closer together, AVaaS creates a unified platform for easier collaboration between different healthcare organizations. Tomorrow's hospitals will be even more closely networked. They will need standardized IT systems that interact with those of their partners.



# AVaaS

## from Philips

AVaaS is the service delivery model for the IntelliSpace Portal, our flagship solution for advanced visualization and analysis. It features centralized, multi-modality capabilities to help standardize exam review, enhance workflow, and promote interoperability across the enterprise. This model supports you over the long term by offering the latest technology, IT service, and professional clinical and technical education in a single, customized solution with controlled, predictable costs.

You can engage Philips and enter into an IntelliSpace Portal service agreement tailored to your needs and situation, such as the modalities in use, clinical specialties of interest, number of concurrent advanced visualization users, number of sites, and length of service period. Based on these factors, you receive the latest advanced visualization functionalities as well as enabling services (including but not limited to maintenance, support, hardware renewal, and clinical and IT training, if desired) by paying a recurring fee throughout the contract period. As a result, these capabilities - along with servers and software - are available as an on-demand service and no longer require an upfront capital investment.

The AVaaS model is also designed to help advanced visualization evolve as your healthcare organization evolves. An integral part of the IntelliSpace Portal, the annual “development heartbeat” provides access to clinical applications and IT features upgrades, such as the addition of a new modality as well as new and enhanced applications in modalities and clinical specialties. Should you need to bring more sites or users online, AVaaS easily scales to meet those requirements and can be extended to multiple locations and hospitals with a shared purpose or business domain.

Designed to simplify the way radiologists and clinicians work, think, and care for patients, AVaaS can assist you in making the most of your medical imaging, particularly in terms of clinical performance, workflows, and budgets.

Clinical		Operational				Financial	
Clinical innovation	Continuing education and collaboration	Obsolescence protection	Standardization	Efficiency	Scalability	Managing cash flow	Return on investment

### Why AvaaS?

- **Access** the latest and great clinical innovations with flexible service packages
- **Preserve** your capital dollars utilizing software as a service
- **Bypass** capital budgeting and purchasing process
- **Utilize** faster ROI
- **Lower** your operating cost with recurring, predictable spend schedule
- **Coordinate** with all-inclusive monthly costs (all your service and support)

### Clinical innovation

Medical imaging technology is changing rapidly, and the division of work is becoming increasingly specialized (Figure 2). Without comprehensive data sets, clinicians may find it difficult to make well-informed decisions and diagnose with confidence. The processes of gathering this information and turning it into rich clinical insight have intensified the need for departments and organizations to work together.

#### Future clinical innovations

Every patient is unique and many are challenging. AVaaS agreement provides you access to recent technologies and future clinical innovations of modality or clinical specialty of choice that IntelliSpace Portal brings as a single integrated solution. Cutting-edge clinical innovations ensure you can always get your diagnostic answer quickly and reliably, from early detection to treatment and follow-up. Innovations will come to you as you prefer, based on the clinical service packages you choose among seven options: CT, MR, AMI, ultrasound, oncology, cardiovascular, or neurology.

#### Robust multi-modality capabilities

Multi-modality visualization with AVaaS entails more than laying one image over another. It brings several modalities together to enrich clinical decision-making, support confident diagnoses, and help deliver superb care. The Multi Modality Tumor Tracking application, for example, combines MR, CT, and MI images to reveal information not visible in single-modality images.

#### A collaboration platform

Using AVaaS, radiologists and specialists share opinions easily and effectively. Unlike a workstation-based system, the platform allows more than one person to access a case from different locations. Users also conduct interactive meetings online. Radiologists and specialists view and access the same image and annotation tools for collaborative consultations.

#### Workflow efficiencies

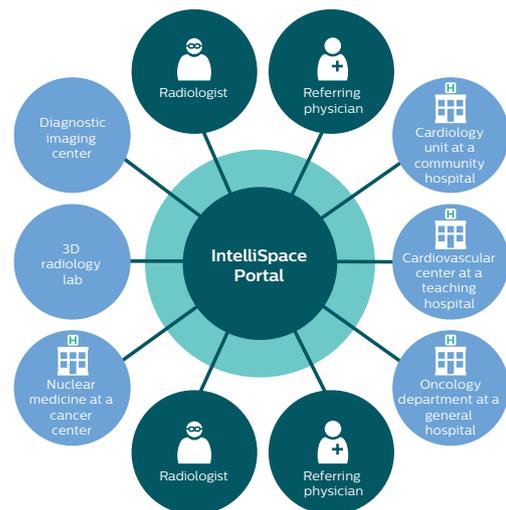
AVaaS connects your imaging system to other systems such as PACS, as well as radiology and hospital information systems. Fast image transfer and enhancements reduce time to results. The results (complete with graphs and tables) can be collated into a single patient-level report and exported directly to patient reporting tools.

### Continuing education

Every year, more advanced visualization applications are brought to market. Healthcare organizations are evolving, too – more clinical procedures, new techniques, larger departments, a larger number of departments, and increased employee turnover. When staff understand how workflows are designed to accommodate these changes over the long term, they are much more likely to adopt new processes and technical solutions. Continuing education supports your staff in overcoming reluctance to change and realizing the underlying value of advanced visualization.

#### Support for advanced visualization

Advanced visualization can empower healthcare personnel to focus on patient care. AVaaS is based on the principle that technology must support care, not hinder it. When users don't see how the technology delivers the results they need – or the results expected of them – they risk devoting more time to problem-solving. AVaaS offers ongoing continual technical and clinical education to help staff make the most of advanced visualization, beginning with installation. Services include workflow optimization consulting, clinical education, a self-learning knowledge base (known as KnowledgeScape), training, and telephone and remote assistance.



**Figure 2: AVaaS enhances clinical collaboration by supporting multi-modality visualization across different specialties, enhancing collaboration between departments and connecting to other hospital systems.**

## Obsolescence protection

Originally formulated from an economics viewpoint, Moore’s law is equally applicable to the pace of change in technology.<sup>3</sup> Every year, you have more advanced clinical imaging options to choose from. New technologies are introduced at an ever-increasing pace. Today’s operating systems, hardware, and software will look very different in two to three years. AVaaS will keep you connected to a stream of innovations, helping expand clinical capabilities year after year.

### Continuous evolution

Change is most often embraced when it is evolutionary, not revolutionary. Underpinned by its “heartbeat” release strategy, AVaaS provides at least one major upgrade every 12-18 months, which includes continuous evolution of clinical depth and application coverage. Workflow performance, both in terms of speed and power, is also addressed. The latest upgrades, updates, and new clinical applications under the chosen service packages are delivered without disrupting current operations. As technology marches on, you’ll have access to the latest technologies with AVaaS without additional investments.<sup>a</sup>

<sup>a</sup> The addition of new modalities, users, and sites will incur additional costs.

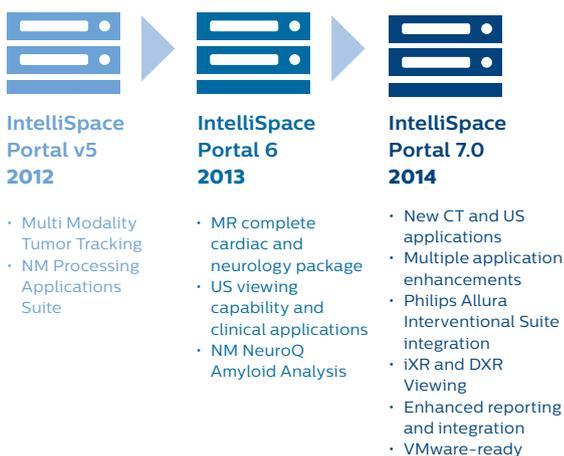


Figure 3: The IntelliSpace Portal has a proven record of year-after-year “heartbeat” software release.

## Standardization

Networks are becoming more intricate, not less. Standardization of interfaces and overall use harnesses this change and redefines it as an approach to support you in realizing advanced visualization’s full potential.

### Centralized management

As a server-based, single license managed solution, AVaaS is easy to use, manage, and upgrade. Analyses can be conducted at a single point with a unified view of patients throughout their journey across the hospital network. IT teams concentrate on maintaining flows of information because users, configurations, and licenses are managed all through one dashboard.

### Connected across the enterprise

Proven technology creates a consistent multi-modality viewing environment while enriching integration. AVaaS leverages open interfaces to manage CT, MR, MI, US, iXR, and DXR data from multiple vendors<sup>b</sup> and connect the system with Philips PACS and PACS systems<sup>c</sup> from other vendors. The system also uses HL7 order information to start pre-fetching priors and to allow clinicians to export patient reports.

<sup>b</sup> Contact your local Philips representative for details on multi-vendor coverage.

<sup>c</sup> Requires integration work with your PACS vendor.

<sup>d</sup> Web Collaboration enables viewing and sharing with tablets and smartphone devices – not intended for diagnosis.

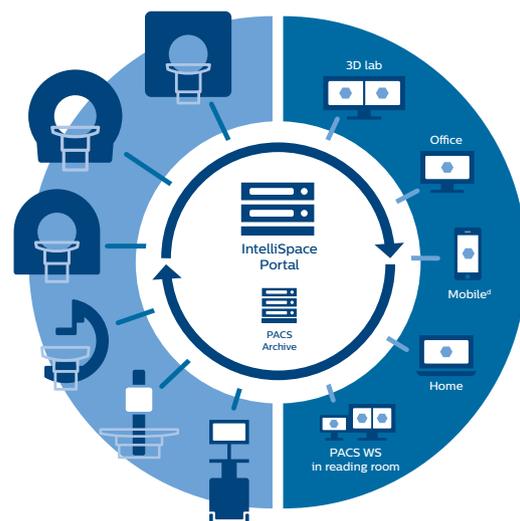


Figure 4: AVaaS standardizes complex healthcare IT networks by providing a centralized system and unified interfaces. Everyone works with the same software version, and all applications and licenses are handled in one solution.

## Efficiency

Today's hospitals require speed and efficiency to adequately manage large patient volume. Advanced visualization functionalities automate image processing as well as many of the manual tasks that may obstruct the delivery of fast, efficient input to patient treatment.

### Automation

Comprehensive tools are included on AVaaS to boost efficiency and throughput. Pre-fetch functions transfer prior studies to a local folder along with new ones for fast comparison. ZeroClick processing uses a variety of automatic tools to begin preparation before cases are opened. Embedded help functions reduce barriers and accelerate the process of diagnosis.

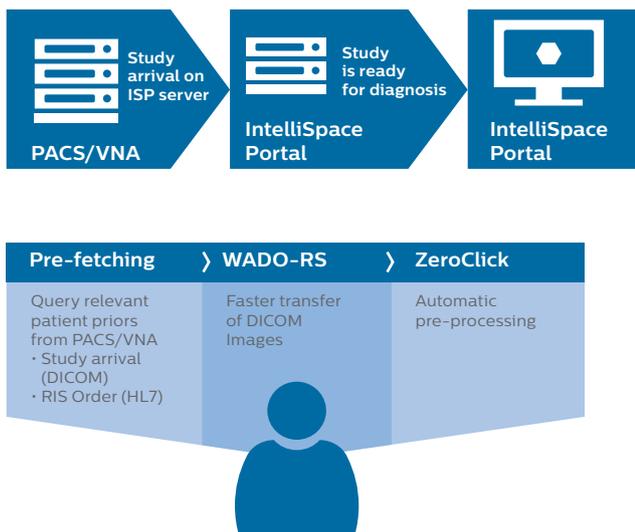


Figure 5: One example of the IntelliSpace Portal saves time and increases efficiency.

## Scalability

While there is a discernible trend toward healthcare alliances and integrated delivery networks, specific planning and staffing needs can remain harder to identify. Yet you must be prepared for future growth. If advanced visualization is to play a meaningful role in that growth, it must be supported by a service provider in touch with your challenges and business priorities.

### The bigger picture of growth

The AVaaS portfolio offers a range of coverage that aligns with your budget and in-house service capabilities. Configurations may include single sites, a single modality, small numbers of users, and multiple modalities, even 100 concurrent users and cross-site enterprise solutions. Solutions can also be easily scaled up or down to meet current needs through adjustable payments.

For the right partner, the product portfolio is just one element of successful growth and change. Our solutions are informed by a strong track record, deep clinical insights, global delivery capabilities, and broad spectrum of services.

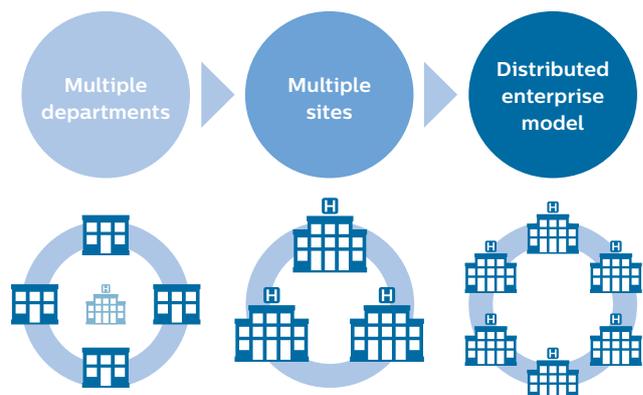


Figure 6: AVaaS supports different hospital scales and the solution can be scaled up or down as the organization evolves.

## Managed cash flow

In contrast to transactional models, the AVaaS pricing model does not require large, one-time, upfront licensing and hardware fees. Instead, you pay smaller, recurring fees over the span of the contract (Figure 7). AVaaS is operationalized through budgets instead of relying on capital investments. A recurring subscription model such as this may be favorable to “bottom line” considerations as it builds a more predictable, deferred cost stream.

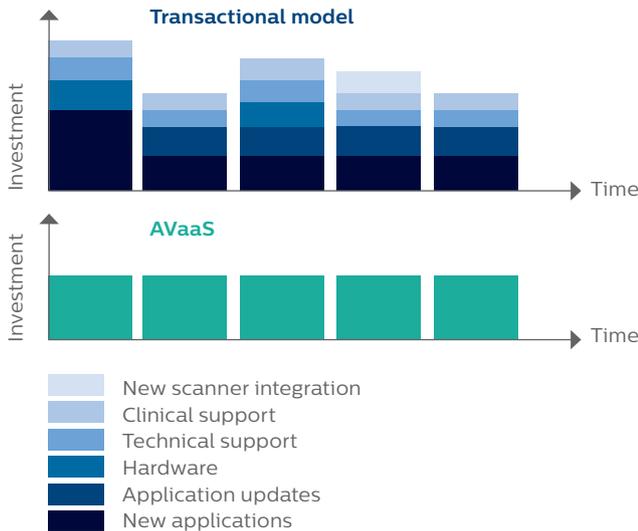


Figure 7: Cash flow comparison of transactional model and AVaaS.

## Return on investment

Companies can spend up to 75 percent of their total IT budget just to maintain and run existing systems and infrastructure.<sup>4</sup> As an end-to-end model for hardware, software, and services provision, AVaaS eliminates the need for you to acquire your own platform (hardware and software) as well as associated testing, maintenance, training, and management. You can maintain high operating standards while keeping the TCO low and transparent. AVaaS secures the investment with locked-in pricing and obsolescence protection. This frees up resources for deployment to other initiatives. You receive a package including applications, support, service, and consulting at an attractive price, with future clinical innovation promise from Philips.

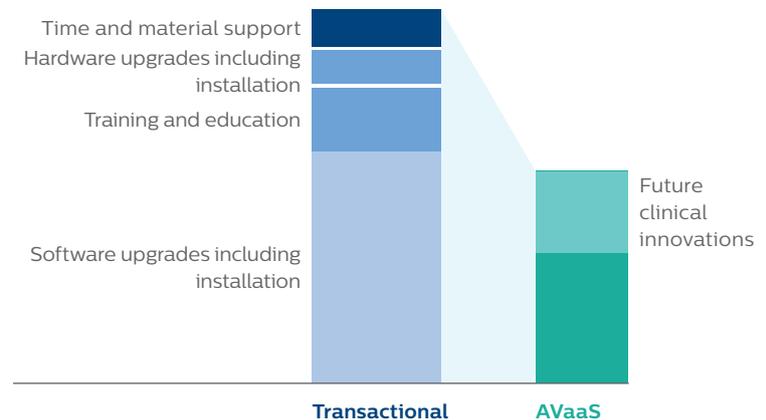


Figure 8: A sample comparison of the difference in cost between AVaaS and a transactional model.

# AVaaS benefits at a glance

AVaaS addresses the needs of different stakeholders in healthcare organizations. The solution's impact can be seen in clinical and operational performance as well as financial management. It can contribute to staff satisfaction. This model offers caregivers a simple yet effective way to deliver consistently high-quality patient care.

Stakeholder	Challenges	Needs	AVaaS solutions	
C-Suite (CFO, CIO, CxO)	<b>Financial challenges</b> Decision-makers are under significant financial pressure.	Clarity on the total cost of ownership during the advanced visualization solution's lifecycle	<ul style="list-style-type: none"> <li>Budgeted spending versus capital purchase</li> <li>Obsolescence protection of investments and very favorable TCO versus transactional purchase</li> <li>No extra costs for support time, education, hardware, etc.</li> </ul>	
		Improved patient care	<ul style="list-style-type: none"> <li>A way to increase the efficiency and productivity of IT and radiology departments</li> </ul>	
Hospital IT	<b>Integration challenges</b> Service lines must be unified.	A system both easy to maintain and service	<ul style="list-style-type: none"> <li>One software version and one software license for all stations</li> <li>A centralized system that's comparably easier to maintain</li> <li>Hardware upgrades that are included (so hardware capabilities always match software needs)</li> </ul>	
End user (clinician, radiologist, technician, physician)	<b>Confident diagnosis</b> Clinical expertise and excellence must be supported to help find answers and arrive at diagnoses.	The latest, most feature-rich, most secure, and fastest software version	<ul style="list-style-type: none"> <li>Enhanced clinical functions of existing applications with every new release</li> <li>Access to the latest applications to support confident diagnoses</li> <li>Increased integration of modalities (CT, MR, MI, and more) and clinical specialties (neurology, oncology, and cardiovascular)</li> </ul>	
		<b>Continuous education</b> Everyone should be able to easily adopt the latest technology and take full advantage of it.	Seamless upgrades and continuing education and support without interruption to daily operations	<ul style="list-style-type: none"> <li>Continuous technical and clinical education</li> </ul>
		<b>Time pressure</b> There is less time to conduct the same activities.	Continuous improvements in applications and workflow performance (speed, power)	<ul style="list-style-type: none"> <li>A way to increase efficiency and productivity</li> <li>Workflow enhancements</li> </ul>
	<b>Integrated workflow</b> Disparate clinical informatics systems gather and store separate kinds of data.	An integrative solution design that accommodates interoperability of different systems, ultimately supporting an integrated workflow	<ul style="list-style-type: none"> <li>Multi-vendor, multi-modality support to help standardize exams across the enterprise</li> <li>A Web-based collaboration tool to allow radiologists and specialists to engage in interactive meetings online</li> <li>Integration with other hospital systems such as the PACS, EMR, RIS, and HIS</li> </ul>	

# AVaaS for large healthcare organizations

## The organization

An industry leader, Hospital A is one of the largest hospitals in North America. Its mission is to develop and provide highly specialized treatment, research, and education international in scope. Hospital A was created by the merger of five hospitals and is in the process of becoming one standardized entity.

## The challenges

- Low efficiency due to different workflows in different sites
- Varying levels of staff resistance to the re-organization
- Complex and extensive IT infrastructure
- Cost control due to large expenditures from the merger and transformation
- Availability of cutting-edge technologies

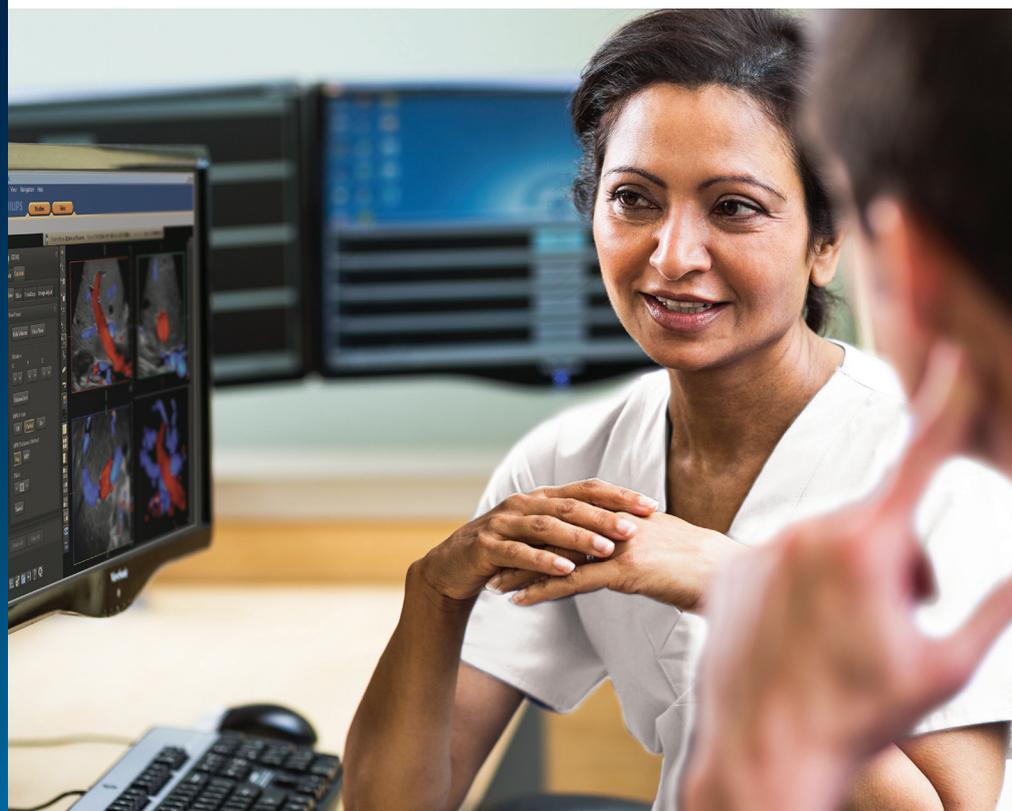
## The solutions

- Standardization across the enterprise and enhanced workflow
- Clinical and technical training and support
- One license and centralized, easy-to-maintain system
- Controlled and predictable fee
- Regular updates of existing features and added new features

Hospital A<sup>e</sup> became one of North America's largest hospitals when five hospitals were merged into one three years ago. Spread across the country, all former hospitals still exist as individual sites. As a merged entity, Hospital A is currently under construction. Its mission is to develop and provide highly specialized treatment, research, and education at an international level. To support this mission, Hospital A needs a high-performance IT infrastructure, the most advanced technology, and a platform for clinical collaboration.

As a result of the multi-site merger, Hospital A's IT landscape is a complex one. Different sites use various modalities, and multiple vendors are in play. Workflows also vary across sites. Scalability emerges as the critical challenge. The solution should be truly scalable to cover the large number of concurrent users and different sites, unifying diverse workflows into one. Another challenge: expenditure. Due to expensive construction, Hospital A requires controlled and predictable costs for its advanced visualization investment.

<sup>e</sup> Data provided for this scenario are not taken from real cases, but they are a typical representation of a large healthcare organization's clinical, workflow, and financial challenges.



### Quantified benefits of AVaaS for Hospital A

Hospital A's scanners are multi-vendor<sup>a</sup> (such as Philips, GE, and Siemens). The topology is represented in Table 1. There are nearly 50 concurrent users across the organization. As an industry leader, Hospital A wants all applications available for CT, MR, and advanced molecule imaging (AMI). To purchase all the required applications, hardware, and service, Hospital A will need to make an initial investment in the first year. From the second year onward, Hospital A will need to pay an additional amount for service, upgrades, and new clinical innovations.

With AVaaS, Hospital A pays one fixed fee for access to all services, upgrades, and new clinical innovations. The cash flow of AVaaS also avoids the huge initial investment and turns a capital expenditure into operational costs (Figure 9).



Table 1: Advanced visualization topology of Hospital A.

	Site 1	Site 2	Site 3	Site 4	Site 5	Total
CT scanner	3	4	2	2	2	13
MR scanner	4	5	1	3	2	15
PET/CT scanner	3	1		1	1	6
Total	10	10	3	6	5	34

<sup>a</sup>Contact your local Philips representative for details on multi-vendor coverage.

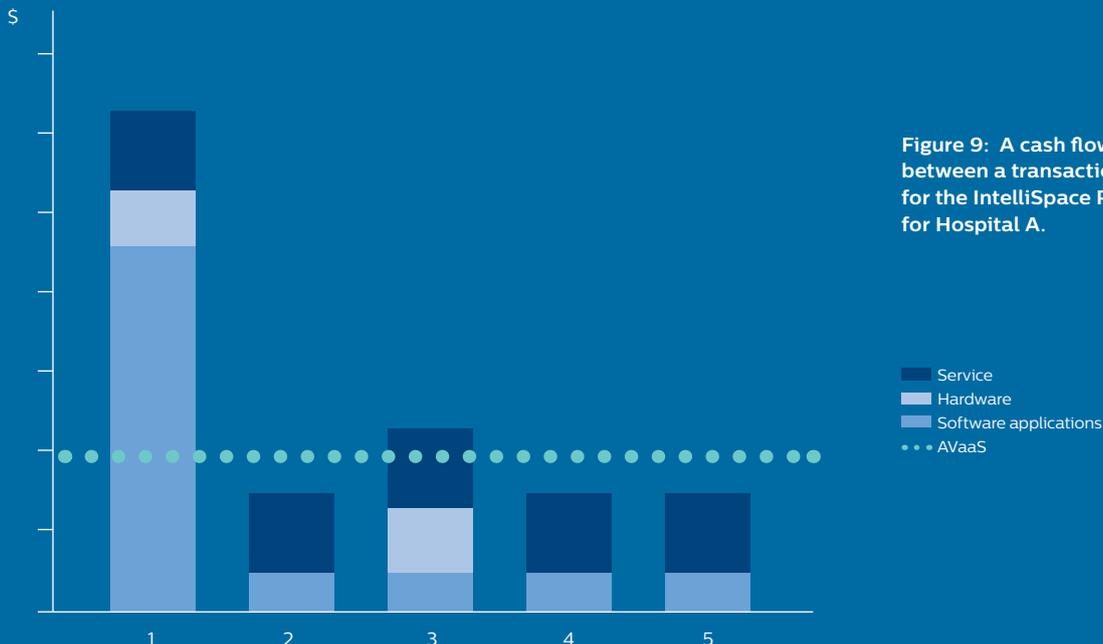


Figure 9: A cash flow comparison between a transactional purchase for the IntelliSpace Portal and AVaaS for Hospital A.

# AVaaS for mid-sized healthcare organizations

## The organization

A non-profit organization, Medical Center B is a mid-sized healthcare organization dedicated to providing affordable yet high-quality healthcare services to the surrounding area.

## The challenges

- Shortfall between revenues and expenses
- Limited IT knowledge in-house
- High patient volume

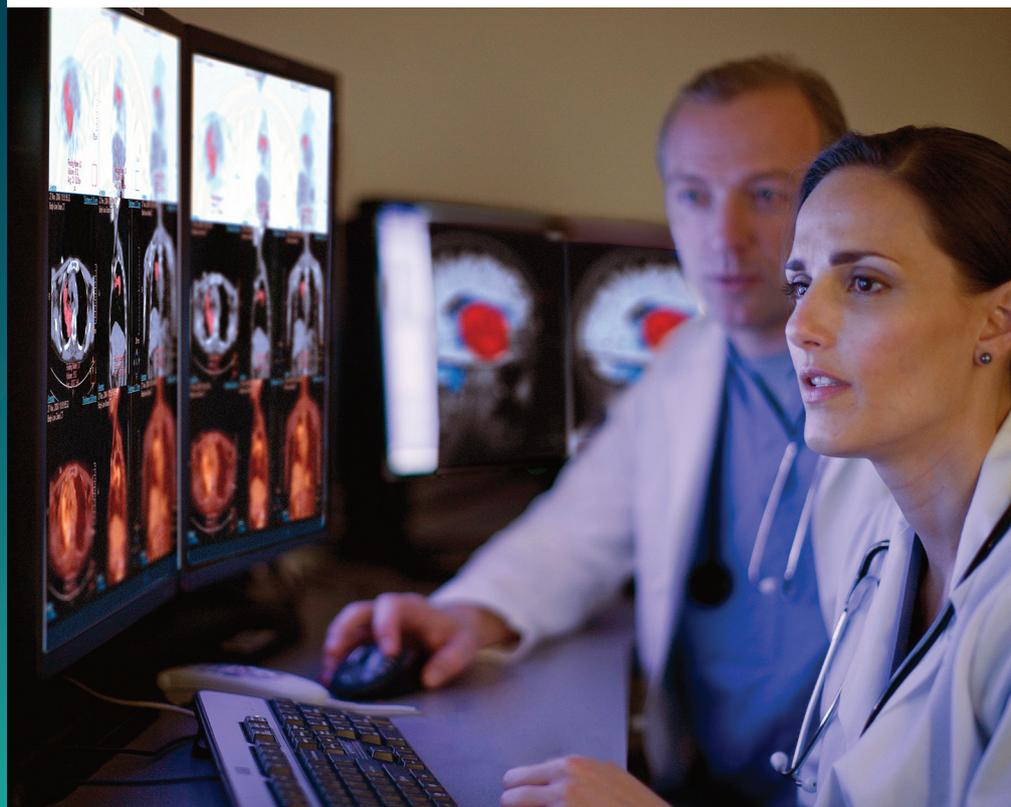
## The solutions

- Operational budget instead of capital investment
- Dense service network of diversely skilled engineers and fast issue resolution
- Improved efficiency gains by continuous applications and workflow enhancements

Located in the UK, Medical Center B<sup>e</sup> is a mid-sized, non-profit facility dedicated to providing healthcare services to surrounding residents, regardless of race, color, sex, age, religion, or ability to pay. It offers a wide variety of services and professional specialties. Much like most non-profit organizations, Medical Center B is facing a shortfall between revenues and expenses.<sup>5</sup> It should not be accumulating large amounts of debt, since the organization is not likely to conduct profit-generating business activities to repay loans. Medical Center B also has limited IT knowledge in-house.

To provide affordable and high-quality care to a large group of patients, Medical Center B decided to replace the current workstation-based imaging solution to server-based advanced visualization and outsource the IT infrastructure maintenance to service providers. By taking this step, Medical Center B increases the patient output through efficient workflows while sidestepping the cost of IT maintenance. Medical Center B must also grapple with the initial investment. Due to the shortfall of revenues and expenses, it cannot afford a large initial capital investment.

<sup>e</sup> Data provided for this scenario are not taken from real cases, but they are a typical representation of a mid-sized healthcare organization's clinical, workflow, and financial challenges.



## AVaaS for Medical Center B

### Benefits of AVaaS for Medical Center B

Medical Center B owns three CT and two MR systems from different vendors. On average, there are ten concurrent users. Medical Center B recently signed a five-year AVaaS contract. Within those five years, the center is entitled to all the advanced visualization applications for CT and MR by paying a fixed fee per year. Technical support is managed by the service provider, so Medical Center B can focus on delivering care.

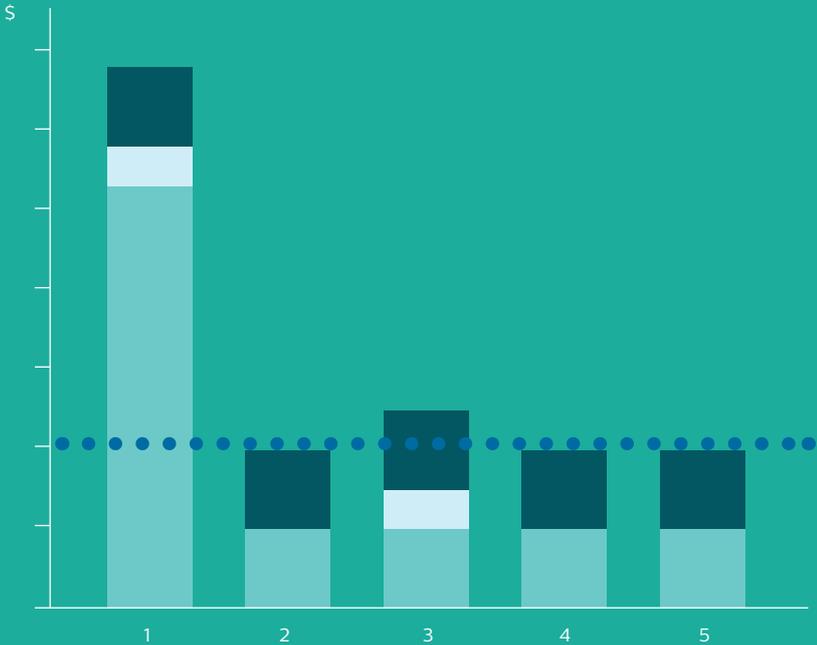
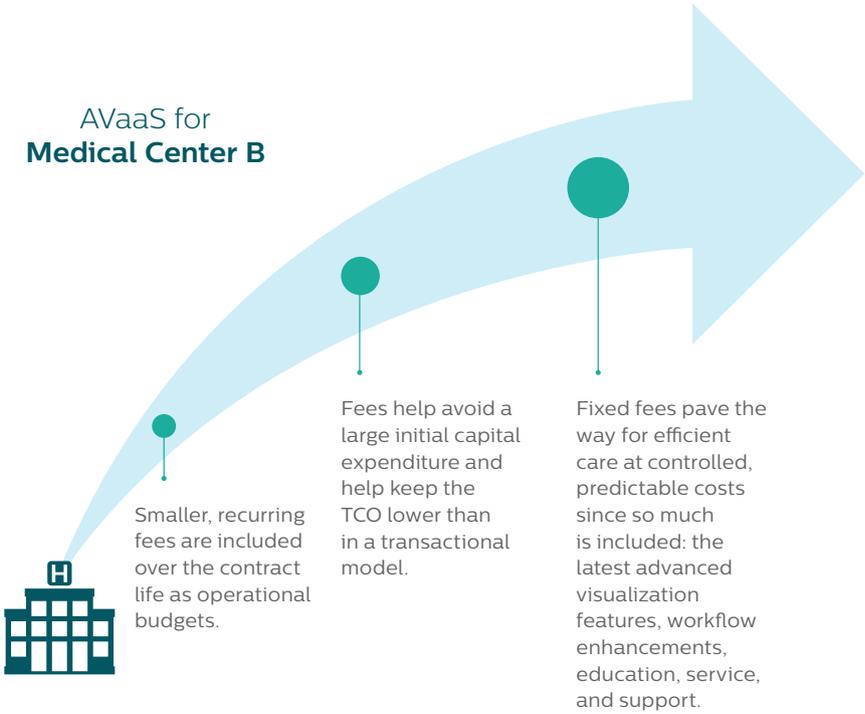


Figure 10: Cash flow comparison between a transactional purchase for the IntelliSpace Portal and AVaaS for Medical Center B.

Service  
Hardware  
Software applications  
AVaaS



# Summary

The healthcare industry has come to expect change. Radiology is no exception. Scientific and technological developments have resulted in multi-modality imaging, opened up new possibilities in specialist collaboration, and encouraged continuous education. Patients have benefited from these developments through comprehensive and fast overviews of their conditions, along with clinicians who are proficient with the latest methods and tools. While change is certain, how to respond to that change is not always so.

Evolutions in healthcare demand increasingly connected care – even in advanced visualization. But what is the right way forward? Large and mid-sized healthcare organizations looking to the future will need to ask themselves many questions, such as:

- Do our advanced visualization capabilities support exceptional care or hinder it?
- Are our clinicians and IT personnel spending time on the right activities?
- How can we empower our clinical staff to excel at what they do?
- How much can we afford to invest, and when?
- Do we have what we need to remain competitive?

The choice is an advanced visualization solution that brings value so you can connect, innovate, and transform. Ideally, this solution will be underpinned by a collaborative healthcare partner with interests aligned to yours. Our AVaaS solution advanced visualization delivery model is designed to drive clinical performance with the latest technology, enhance the patient experience through streamlined workflows and collaboration, and deliver economic value by managing cash flows and generating cost savings. Rather than offering a different commercial model, AVaaS represents an effective way to leverage both your and our specialties to manage evolving challenges and shape high-efficiency and technology-driven healthcare for the years to come.



When it comes to medical imaging, is your advanced visualization solution helping you provide outstanding patient care – or holding you back?

We're helping large and mid-sized healthcare organizations like yours chart a course through a new landscape. The time is now to begin preparing your advanced visualization capabilities for success. With our innovative service delivery model, you can take steps today to maintain tomorrow's clinical and operational excellence and financial competitiveness.

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## References

- <sup>1</sup> Weiss D. The PACS Workstation: A Theory of Evolution. *Medscape MULTISPECIALTY*. 2008;37(8):24-29.
- <sup>2</sup> Fletcher M. Continuing education for healthcare professionals: time to prove its worth. *Primary Care Respiratory Journal*. 2007;16(3):188-190.
- <sup>3</sup> Moore G. Chapter 7: Moore's law at 40. In Brock, D. *Understanding Moore's Law: Four Decades of Innovation*. Chemical Heritage Foundation. 2006:67-84.
- <sup>4</sup> Chou T. *The End of Software*. SAMS Publishing. 2005:6.
- <sup>5</sup> EW H. Nonprofit hospitals face structural as well as financial challenges: lessons from Massachusetts. *Hospital Topics*. 2005;83(3):2-8.

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