

A woman with grey hair, wearing a white scarf and a light purple top, is smiling and looking towards a doctor in a blue coat. They are in a hospital setting with blurred background lights and other people.

PHILIPS

Healthcare

Cardiovascular Health

Philips at the **heart**
of **healthcare**



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At the heart of healthcare



At Philips, we are dedicated to creating the future of healthcare and saving lives. Our vision is improving people's lives through meaningful innovation. A significant part of this vision includes our approach to cardiovascular health and delivering a better patient pathway and experience.

Cardiovascular health is a vital part of the healthcare landscape. Currently Cardiovascular diseases cause more than a quarter of all deaths in the UK, or around 160,000 deaths each year*. At Philips we understand that truly holistic cardiovascular care begins with the heart but looks beyond the disease to understand what really matters for all people at the centre of the patient care journey.

Philips strives to deliver innovative solutions to help improve care and pathways and enhance outcomes – improving both patient and care team satisfaction.

Philips has over 100 years of experience at the forefront of medical care. Innovations include the first X-ray tubes made for the professional market in 1918, followed by the introduction of the first digital radiography system in the early 1990s and other innovations such as the first live 3D transoesophageal echocardiography.

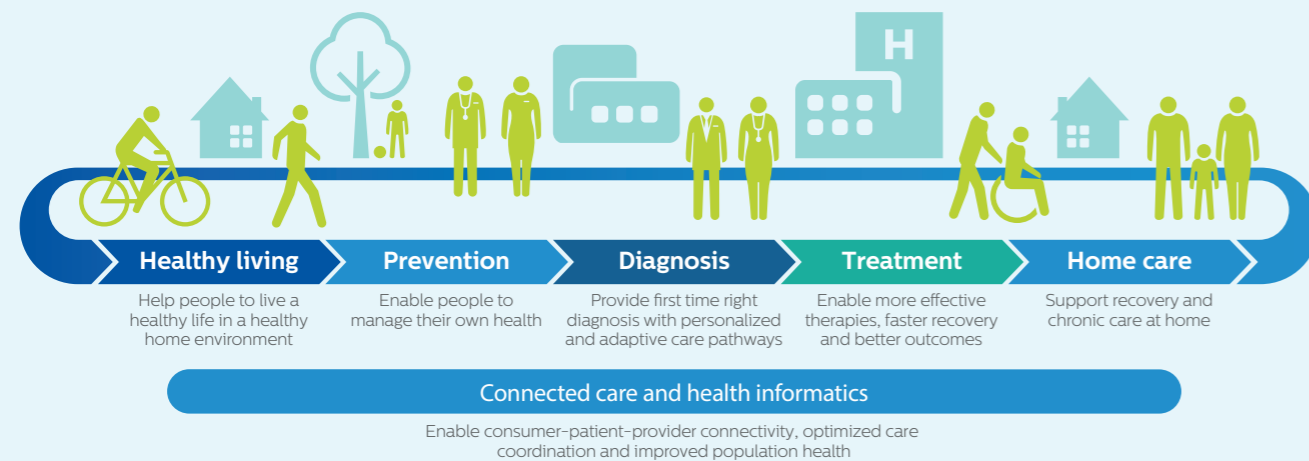
The most valuable assets within our organisations are the individuals who work in them. It is our hope that these talented teams can come together to create a healthier future for all. We would love to work with you to help drive excellence in care improving patient outcomes and experiences through personalised treatment.

Neil Mesher
CEO
Philips UK&Ireland

An **integrated** healthcare approach

We have a growing and aging world population and are experiencing a dramatic rise of chronic and lifestyle-related diseases, global resource constraints, and a digital revolution. These trends are driving demand and creating opportunities for a new approach to healthcare. We see an opportunity to leverage advanced technology and deep clinical and consumer insights, to deliver integrated solutions that improve people's health and enable better outcomes across the health continuum.

Philips believes the industry has to make a shift from merely developing individual healthcare products to developing integrated solutions, together with customers and partners. Consumer and healthcare worlds are coming ever closer together, and our solutions span across both. We aim to create solutions that make a difference from home to hospital... and back home



We want to **partner with you**

To understand your challenges and create meaningful innovation

Truly holistic cardiovascular care begins with the heart but looks beyond the disease to understand what really matters for everyone connected to the patient care journey. We know you face challenges – a growing multi-morbid patient population, pressured reimbursement and limited resources. But, the opportunities for cost-effective, people-focused cardiovascular care have never been greater.



We understand that your needs are focused around:

- **Coordinated care delivery**
- **Dealing with financial and quality objectives**
- **Building patient and care team satisfaction**
- **Easing the adoption of new techniques and processes**

Our wide range of capabilities across the continuum of care and our rich history of innovation enable us to build flexible, scalable and adaptable integrated care solutions around your needs.

At Philips, we partner with you to create innovative solutions that help you deliver continuous, collaborative cardiovascular care for every patient – from prevention to diagnosis and treatment, to recovery and home care.

Healthcare Transformation Services

How we support our customers' healthcare transformation

<p>Clinical and Business Performance Improvement</p> <p>Improves clinical and operational process performance while reducing costs</p>	<p>Information Integration</p> <p>Enables quality-driven connected care delivering seamless information exchange</p>	<p>Healthcare Experience Solutions</p> <p>Provides a superior care delivery environment while improving patient and staff experience</p>	<p>Managed Services</p> <p>Delivers sustainable and affordable access to healthcare technologies and support services via innovative business collaborations</p>
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Hospital/System Redesign and Delivery

Better manage specific populations through the redesign of services, information and performance management, technology and workforce to optimise health outcomes and value.

Supported by advanced data analytics

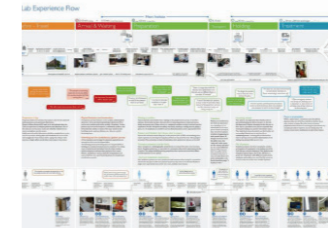
An **Experience Flow** is a visualised overview of the functional and emotional experiences of people across places and time.

Why our approach is unique

Collaborating with our clients to enable clinical and business transformation

Understand the context

Experience Flow lays out clinical and business processes



We use experience flow methods to display and document opportunities for improvement

Give stakeholders a voice

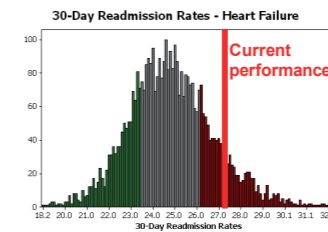
Clinicians, managers, and patients contribute input and insights



Soliciting broad stakeholder input captures the insights needed to effect deep, meaningful change

Leverage the power of data

Dedicated tools assess performance across the continuum of care



Analysis of multiple data sources offers fact-based underpinning for recommendations and tracking

Co-create the Solutions

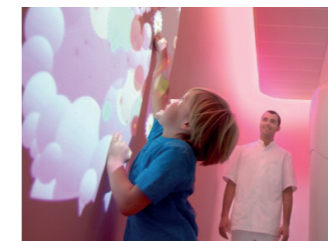
Clinicians and managers work to co-define solutions



Mutual "ownership of the recommendation" improves the implementation of improved processes

Implement and Transform

Outcomes-driven implementation models



Expert program and change management resources oversee thorough and effective deployment

The **best** in **Image Guided Therapy**



Dose Aware family:

DoseAware is a system that gives real-time feedback of X-ray dose reception and instant access to dose history

Suite of advanced visualisation and quantification tools:

Including HeartNavigator for simplified planning and automatic measurements; EPNavigator for intuitive 3D catheter image guidance and Dynamic Coronary Roadmap. This tool helps guide your wires and devices towards the lesion with confidence, and without the need for additional contrast injections (Dynamic Coronary Roadmap is work in progress and CE mark pending).

FlexMove Hybrid OR:

Key features of the system include special ceiling rails that enable FlexMove to be parked in a lateral stand-by position and move quickly in place during hybrid surgery and endovascular procedures when needed. The system is ceiling mounted so it frees up floor space for cleaning and accommodates laminar air flows. FlexMove works around you. It provides full body coverage on both sides of the table to support open surgical and minimally invasive procedures.

Interventional **Xray**

Philips AlluraClarity family with ClarityIQ technology, introduces a comprehensive set of system-wide improvements that virtually ends the trade-up between X-ray dose and image quality. The result is high quality imaging for a comprehensive range of clinical procedures, achieving excellent visibility at ultra low X-ray dose levels for patients of all sizes.

ClarityIQ

Dramatically reduces X-ray dose (typically by 73 percent in neuro, 50 percent in cardiac and 83 percent in vascular interventional procedures), while delivering equivalent image quality. The new technology pushes the boundaries of the ALARA (As Low As Reasonable Achievable) principle, so that patient and staff risks from radiation exposure are radically reduced, and longer, more complex procedures can be performed more safely. It incorporates powerful state-of-the-art image processing technology, developed by Philips Research, all working in realtime, enabled by the latest computing

technology to assure optimum image quality with noise and artefact reduction (also on moving structures and objects); image enhancement and edge sharpening, and automatic real-time patient and accidental table motion correction on live images.

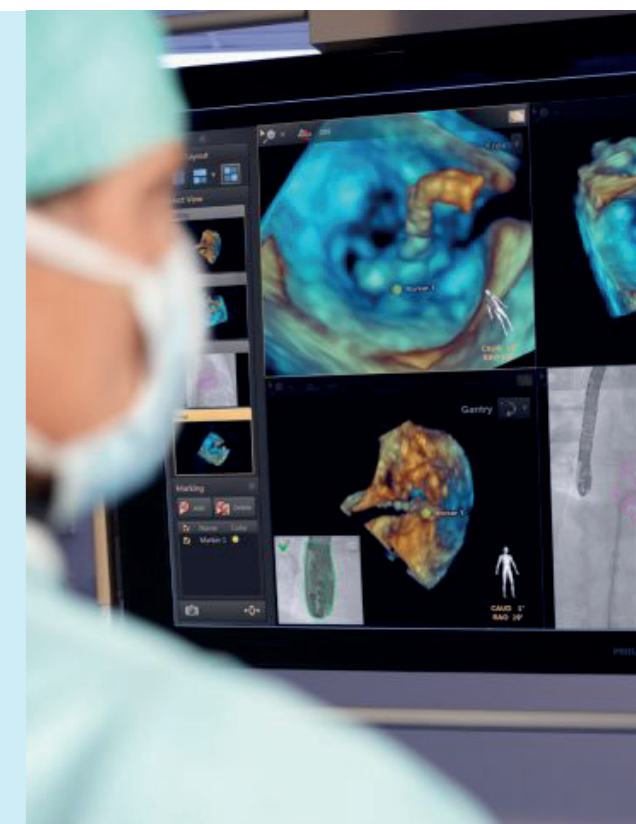
FlexVision XL:

Provides outstanding viewing flexibility, using a large, high definition LCD screen, allowing for the display of multiple images in a variety of layouts tailored for your specific procedure to give you full control over your viewing environment from table side.

EchoNavigator **intuitively fuses images**

SmartFusion provides greater insight and confidence in finding and treating the problem during minimally invasive procedures in the cardiac catheter laboratory. EchoNavigator automatically fuses live 3D TOE and live X-ray in real time so you can intuitively guide your device in the 3D space more quickly.

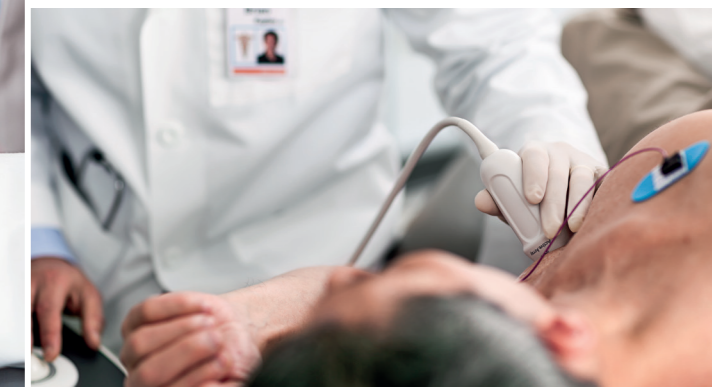
EchoNavigator provides enhanced guidance and communication during minimally invasive structural heart intervention.



Philips Volcano

Volcano is a global leader in both FFR (fractional flow reserve) and IVUS (intravascular ultrasound) and part of Philips' industry leading solutions to decide, guide and confirm the right therapy for each patient in real-time during image-guided therapies.

iFR is a solution unique to Volcano, it has the ability to synchronize pressure measurements to a 'wave-free' period in the patient's heartbeat which means that no hyperemic agent is needed. By eliminating the need for hyperemic agents, iFR offers the benefits of reduced procedure time, cost and complexity.



In image-guided treatments of the heart and blood vessels, there is increased clinical evidence which demonstrates that the use of imaging and measurement catheters in conjunction with interventional X-ray imaging helps improve procedural outcomes.

“The completion of the Volcano acquisition is an important milestone in our strategy to become the leading systems integrator in the fast growing

image-guided minimally invasive surgery market and accelerate our growth in that market,” said Frans van Houten, Chief Executive Officer of Royal Philips. “The combination of Volcano’s broad portfolio of imaging and measurement catheters and Philips leading interventional imaging solutions allow us to provide our customers with an integrated solution to improve procedural outcomes at a decisive stage in the health continuum”.

Echocardiography

Philips' family approach to Echocardiography systems adds value by enabling you to build your portfolio optimized to your situation or needs with common user interface and shared transducers.

The EPIQ platform offers our highest level of premium performance with exceptional image resolution and detail along with extraordinary levels of information. It brings high-quality ultrasound imaging to every echocardiography setting.

nSIGHT Imaging, PureWave technology and xMATRIX technology combine to provide outstanding image quality on every patient.

CX50 xMatrix is the only premium compact ultrasound system featuring live 3D TOE and supporting the integration of 3D TOE with fluoroscopy.

Unique Anatomical Intelligence tools turn images into answers: with advanced organ modelling and proven quantification, exams are easy to perform, more reproducible and deliver new levels of clinical information.

HeartModel brings automated 3D views, robust reproducibility and advanced quantification to cardiac ultrasound imaging.

Only truly single transducer solution capable of all imaging modes at the touch of a button including 3D imaging and iRotate all housed in an ergonomic transducer.

Clinicians have trusted Philips Live 3D TOE for millions of exams since 2007. We have changed lives together.



Computed Tomography

iCT Increases dose efficiency and optimises image quality



The iCT family, Philips flagship scanner family, utilizes a unique combination of industry-leading hardware innovations that enable state-of-the-art acquisitions – that open pathways for advanced cardiovascular capabilities.



- **Gating compatible knowledge-based iterative reconstruction (iMR)** leads to virtually noise-free images with increased spatial and low-contrast resolution at low doses.
- **Future-proof platform** – upgrade to Philips Spectral CT with the unique dual-layer detector.
- **Rate responsive toolkit** allows you to enter the CVCT world, providing you with market-leading acquisition and analysis tools specifically designed for cardiac imaging
- **AirGlide Gantry** with 0.27 second rotation speed – fastest temporal resolution @ 34 ms
- **Powered by iPatient** – the world's first truly patient-centric CT imaging desktop environment. Be assured of the best image quality irrespective of the patient condition or procedure complexity.
- **8cm detector array** for fast scan coverage – image the entire heart in two beats.



Magnetic Resonance

Ingenia provides digital clarity and speed.

Unique digital architecture – dStream, first ever digital broadband delivers premium image quality with digital clarity and speed. iPatient patient-centric imaging with calming In bore patient experience

An imaging platform for today and tomorrow:

- More accessible**
Fast & robust
Patient centric
- More definitive**
Quantitative
and Advanced
visualisation
- More precise**
MR guidance

We have specific cardio tools for you available on our Ingenia platform:

ScanTools CardioVascular: Designed for high-quality vascular imaging, and supports assessment of cardiac morphology and functional studies of the heart and surrounding vessels.

MR Software CardiacQuant: Get access to exciting new applications for cardiology, which can help in the assessment of myocardial tissue characteristics and guide early decisions for therapy.

MR Software StarQuant: With a fast, single breathhold scan, StarQuant gathers information to provide you with comprehensive graphs and quantitative maps.

Patient Care and Monitoring Solutions

Philips AED solutions with Life Guidance act as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process. Adaptive instructions and intelligent sensors keep you on track to automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

The Philips OnSite/HS1 is the first and only defibrillator available without a prescription

With QuickShock, the HS1 and FRX are among fastest in class delivering shock treatment after CPR in typically 8 seconds



PageWriter TC70 cardiograph

- **The Philips PageWriter TC70 cardiograph** is designed to meet high-volume ECG demands
- **Integrated interpretation** on up to 16 leads
- **Advanced STEMI** clinical decision support tools
- **Previous ECGs** at the bedside for immediate comparison

HeartStart MRx

As the first advanced networked monitor/defibrillator, HeartStart MRx incorporates many of the same algorithms, patient connections, and configuration choices as Philips premier bedside monitors

Built to be rugged, reliable, and easy-to-use, the Philips HeartStart MRx Monitor/Defibrillator with our advanced DXL 12-Lead ECG algorithm seamlessly provides:

- **Industry-leading** patient monitoring capabilities
- **Superb diagnostic** measurements
- **Robust and reliable** STEMI clinical decision support tools
- **Evidence-based**, proven resuscitation therapies
- **CPR guidance** with the Q-CPR™ measurement and feedback tool.



IntelliVue

Enabling rapid clinical decision making

Providing a clear view of patient information, IntelliVue's highly configurable screens and clinical decision support tools clearly reflect clinical thought processes. IntelliVue monitors collect, combine, and cross-reference physiologic data to provide a coherent picture of patient status.

MX800 is the first patient care solution to incorporate patient monitoring and clinical informatics. Designed to simplify access to the patient information you need to enhance diagnostic confidence throughout the hospital. The MX800 is changing outlooks in the ICU, CCU, NICU, ED, OR, and PACU.

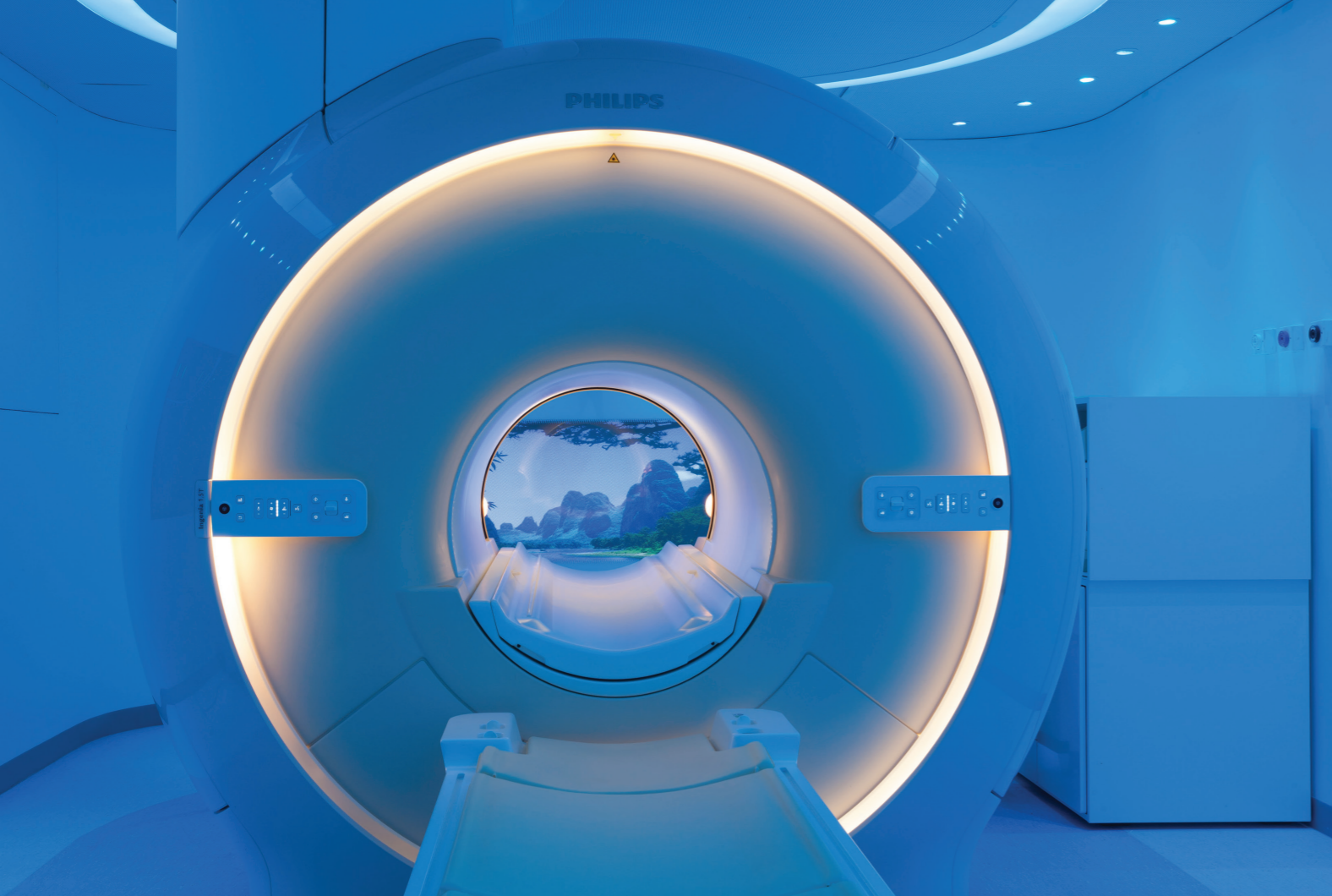
ST Map – clinical solution support tool with unique sophisticated analytical methods which visualise deviations.

Minicare I-20

Ready where you are

When time is critical you need decisions to be made rapidly on the spot. For high-risk cardiac patients, fast triage and rapid initiation of treatment are vital in order to improve patient outcomes and to save lives. You need accurate blood test results as fast as possible so you can decide what intervention is best. If a test has to be made in the laboratory you will have to wait before deciding, and when every second counts this is time a patient just doesn't have.

Minicare I-20 allows you to rapidly rule in or rule out NSTEMI (myocardial infarction) patients from a single droplet of blood at the patient's bedside. Having lab comparable cardiac troponin results available at the point of care in less than 10 minutes means potentially life-saving treatment can be started more quickly for some patients, while others can be safely discharged.



Clinical Informatics

Data should help you do your job, not slow you down. Our cardiovascular informatics solutions streamline workflow and optimize processes, giving you a single access point into advanced clinical applications, analytics, multi-modality images, and reports.

Armed with the right information, you can provide coordinated, continuous, and collaborative care - personalized for every patient.



Innovation that matters

Philips Ambient Experience Transforming healthcare into human care

We believe good healthcare is people-centric and there is value beyond medical and technical expertise. A professional environment must also be psychologically supportive, instilling a sense of well-being.

Ambient Experience integrates technology (dynamic lighting, projection and sound), spatial design, and workflow improvements. By adding Ambient Experience, we help hospitals create an engaging, and multi-sensorial environment. It brings comfort to an otherwise stressful time and seeks to alleviate patient anxiety, as well as creating an efficient, clutter-free workspace for your staff. Philips Ambient Experience is based on years of clinical design research. It focuses on the values and needs of patients and medical staff by addressing the total experience flow. It integrates architecture and technology innovations to create healthcare spaces that are unique and inviting.



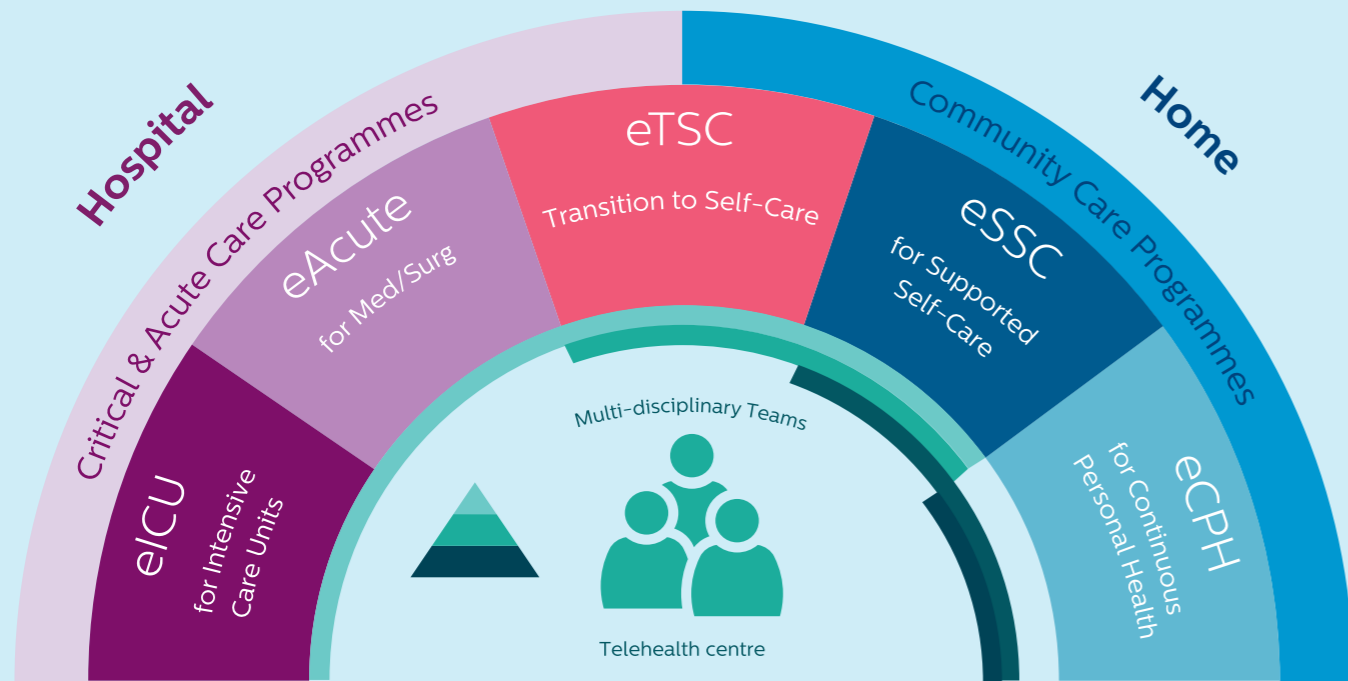
IntelliSpace Portal

Expanding your view of the heart and blood vessels
IntelliSpace 8.0 Cardiovascular with access to advanced clinical applications, brings multi-modality images and clinical tools together in a single workspace. Rely on a comprehensive set of multimodality applications to examine and quantify vascular lesions as well as quantitative techniques to help you characterize cardiac related pathologies in friendly and non-invasive diagnostic methods. From your customized workspace, you can seamlessly move to advanced clinical applications within the same patient or study context without having to log in, helping to save time and improve workflow.

IntelliSpace Cardiovascular

Connected Cardiology begins here
IntelliSpace Cardiovascular is our next-generation cardiovascular image and information management solution. It provides a single point of access anytime, virtually anywhere to a patient-centric repository of comprehensive cardiovascular information that helps to support clinical decision-making, streamline workflow, and reduce costs.

One step closer to treatment
Bring advanced diagnostic imaging closer to the interventional suite by integrating your Philips Allura Interventional Suite with IntelliSpace Portal 8.0. This unique interventional X-ray integration puts an end to multiple patient searches by automatically retrieving patient data on IntelliSpace Portal 8.0.



Personal Health Programs

People are more engaged with their health, taking more ownership than ever before. Innovations are needed to help motivate people, prevent disease, and provide support as they navigate their health journey.

Philips personal health programs represent a new era in connected care for consumers, patients and health providers, as healthcare continues to move outside the hospital, and into our homes and daily lives. Personal health programs empower individuals to take greater control of their health, with each health program comprising connected health measurement devices, an

app-based personalized program combined with secure, cloudbased data analysis. The programs are built on the Philips HealthSuite digital platform, an open and secure, cloud-based platform that collects and analyzes health and other data from multiple devices and sources, such as a health watch, blood pressure monitor, an ear thermometer, and body analysis scale.

Hospital to Home

Transforming care delivery

eICU

Remote, yet hand-in-hand

It combines:

- **Population management** for critical care
- **Collaborative** clinical models
- **Clinical decision** support
- **Reporting designed** to improve clinical and financial outcomes

Patients who receive their ICU care from a hospital with an eICU program were:

- **26% more likely** to survive the ICU
- **Discharged** from the ICU 20% faster
- **16% more likely** to survive hospitalisation and be discharged
- **Discharged** from the hospital 15% faster

eSSC

Real-time insights for both providers and patients

- A range of programmes that help improve the patient experience, workforce efficiency and clinical outcomes through connected solutions across the care continuum that focus on patient education, motivation and self-care
- From organisational structure through definition of clinical workflows and on to performance reporting, Philips helps your team transform for sustaining success and maximum return on investment.

Population Health

Philips Population Health Monitoring Service is engaged in innovation that deepens its value proposition for the HCP ecosystem and the patients they serve. Ultimately Philips will provide the HCP access to an end-to-end population management transformational program that connects the patient, family caregiver, and HCP clinical team. Providing population health solutions with actionable information is at the core of Philips Service research and development initiatives; allowing organisations to monitor many patients over a long period of time with sensor accepted wearable technology. As financial risk is passed down from government agencies to healthcare providers and ultimately the patient (consumer), we will provide cost effective solutions enabling them to age in the place they call home.



We are committed to using an approach to enable HCPs to partner at whatever stage of readiness for systems integration and technological innovation. Innovative HCPs are invited to join us on the journey to support the preference of seniors to age in the comfort of their own home. We aim to meet the goals of the HCP to serve more patients, more efficiently, and more effectively.

World leading technology



Philips believes in developing innovative solutions that address clinical challenges and deliver improved care to patients. Philips approach to innovation always puts your needs first. The combination of our own original thinking, with critical input from patients and providers, serves as the foundation to create innovations that really matter. We are delighted to say that our investment in delivering new solutions is recognised by our customers and industry assessors.

'Best in Klas' awards are presented by Klas, an independent research firm, which

honours the best-performing equipment providers in the world, based on evaluations from healthcare providers.

Philips is awarded "Overall performance leader in Imaging" 2 years in a row - further evidence that Philips achieves meaningful innovations that address clinical challenges and deliver improved care to patients.

Added to this, Philips has also received 'Best in Klas' awards for our Ingenia MR systems, our Philips Ingenuity CT systems, our Philips iE33 ultrasound system and our IntelliSpace portal.

Customer Service



Count on us as your patients count on you

Customer service

We have listened to our customers and extended our service provision to align with the way you work. Count on fast answers with service from 8am to 8pm, 7 days a week.

We work as one with your teams to keep your systems running smoothly. Our flexible services and education offerings can be adapted to your needs in order to support your internal teams. Partner with us to maximize utilization and uptime of your systems and ongoing investments.

Extended Support

When an issue occurs, we know you need fast answers to your questions. At Philips we are changing the way service is delivered to you with our new seven-day Customer Service Solution.

Global Infrastructure & Expertise, locally delivered

Benefit from our expertise and in-depth knowledge across the healthcare spectrum.

Increase uptime through proactive remote support

Receive proactive monitoring so that many system issues can be identified, diagnosed, and fixed without interrupting your busy schedule

Parts Delivery

Be ensured of round-the-clock technical parts expertise and next-day delivery.



Cardiology Portfolio

Philips' Cardiovascular Health: a wealth of innovation and a breadth of capabilities



IGT:
Imaging guided therapy



AlluraClarity



AlluraXper / clarity families



Allura Xper / Clarity in Cardiology



Allura Xper / clarity in electrophysiology



Allura Xper / clarity in hybrid surgery



Volcano



EchoNavigator

Ultrasound



EPIQ



CX50 XMATRIX



CX50 Purewave



Affinity



Sparq



ClearVue 350, 550 & 650



ClearVue 850

PCMS:
Patient care and monitoring solutions



HeartStart MRx



IntelliVue Patient Monitors



Xper PCC & Central Station



Pagewriter Cardiographs



Holter monitoring



Stress testing

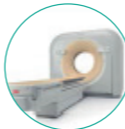


IntelliSpace ECG



DXL 16-Lead ECG Algorithm

CT:
Computed Tomography



Ingenuity family



IQon Spectral CT



ICT family

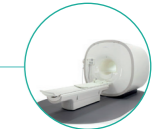
MR:
Magnetic resonance



Ingenia 1.5T & 3.0T



Ingenia CX 1.5T & 3.0T



Multiva 1.5T

EICI:
Enterprise Imaging and cardiology informatics



Intellispace portal 8.0



Intellispace workstation IX



Intellispace cardiovascular



Xcelera



QStation



QLAB quantification software



CVIS



Hemo

