



**PHILIPS**

Consulting services

# Making healthcare transformation real

Collaborating to solve multi-dimensional challenges across the care continuum

# Optimize for today and innovate for the future

## Moving forward with confidence

Healthcare organizations face a rapidly evolving world. The ongoing realities of resource constraints, aging populations, and increased consumer engagement have been complicated by the extraordinary demands of a global pandemic. Carefully planned improvement strategies now strain to compete with the immediacies of a healthcare crisis.

The importance of flexibility and resilience was understood prior to the pandemic, but is now reaffirmed. As an example, hospitals find they must handle inpatient volumes that shift dramatically from COVID-19 care to traditional care and back again. The pandemic has also fast-tracked the adoption of virtual care and the need for rapid acceleration of digital transformation.

Throughout, healthcare organizations must continue to strive toward achieving better health outcomes against lower costs of care while enhancing patient and staff experience – the Quadruple Aim. Whatever your challenge, Philips collaborates with you as you undergo this significant transformation – addressing today's concerns, while innovating for the future.

It is apparent the healthcare industry is transitioning from the hospital being a destination for care, to an ecosystem where the hospital is a hub for proactive personal health, population health, and highly intensive care delivery – virtual, in-person, and distributed.

### Managing the now

Balancing quality, costs, access and delivery

### Improve

Performance, productivity, quality, reliability, costs

### Optimize

Patient flow, capacity, utilization, workflow, resources, schedules, care co-ordination

### Enhance

Patient and staff experience, care environments, physical space, technology and information

### Innovate

Future care models; new care paradigms; advanced technology, informatics, analytics, solutions and innovation

Continuous improvement, sustainable transformation, cocreated innovation

# Defining solutions to complex issues

Our consulting services focus on several areas within the healthcare ecosystem. We leverage our knowledge and skills to address areas of improvement that are important for you. We tailor our offerings to suit your specific needs and situation, applying our expertise where it's needed.



We take a collaborative approach to enable meaningful transformation. Our consultants work closely with you to streamline workflows, improve utilization of resources, advise on technology strategy and integration, and create an exceptional experience for patients and staff.

## Benefits of collaboration

- Enhance the quality of care delivery focused on improving value and experience
- Streamline clinical and operational processes to increase efficiency and reduce costs
- Enable fact-based recommendations for change with data analytics and modeling tools
- Identify insights and improvement opportunities across the patient journey
- Garner strong support of change initiatives for sustainable results

# Achieving operational and clinical transformation



Our consultants bring healthcare expertise and technology know-how to create and implement performance improvement programs. Combining clinical pathway redesign, patient flow/process optimization, and operational excellence and analytics, the Philips team helps you realize your goals for better health outcomes and lower cost of care.

"We wanted to do more with our established structures and existing staff – and this project matched this perfectly. We have achieved an outstanding increase in our efficiency, with satisfied employees who feel appreciated and valued."

**Pia Koch**, Commercial Manager,  
UKE Hamburg Eppendorf, Germany



## Performance improvement

Improve operational efficiency, clinical flows, patient throughput and experience across the health continuum



## Demand and capacity planning

Simulate the impact of predicted patient volumes on necessary resources and model scenarios for a solution roadmap



## Clinical pathways

Facilitate best practice pathways complemented with analysis of methods to reduce unnecessary variation



# Creating exceptional care experience through design



It is critical to create an optimal experience for patient and staff when you are planning to build a new hospital, future medical service center, or renovate a department. By integrating design thinking, data analytics, medical technology planning, service experience design, and healthcare facility design expertise, our team can help you create exceptional care experiences that are ready for the future.

"In a short amount of time, the Philips team managed to identify key bottlenecks in a structured way and translated these, together with our clinical team, in a comprehensive redesign master plan for our future emergency department and day clinic."

**Julien Heider**, Directeur des Operations (COO),  
L'Hopital de La Tour, Switzerland



## Service experience design

Optimize the patient journey and service experience through care pathway (re)design to support personalized, value-based care



## Ambient Experience solutions

Create innovative, efficient, and calming environments for an enhanced patient experience and improved staff satisfaction



## Facility design

Employ an integrated medical technology and facility (re)design approach to meet and future-proof patient, staff and facility needs

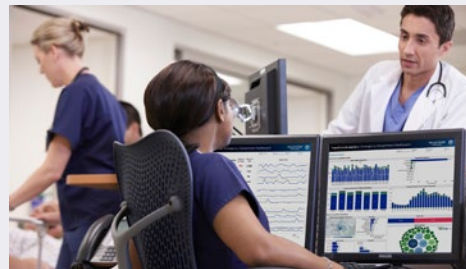
# Leading with digital transformation and analytics



We guide digital enablement and data strategies – integrating new technology and industry trends, while effectively managing patient and system data to drive healthcare innovation. Analytics consultants provide data-driven insights and performance dashboards to support confident decision-making and sustainable performance improvement.

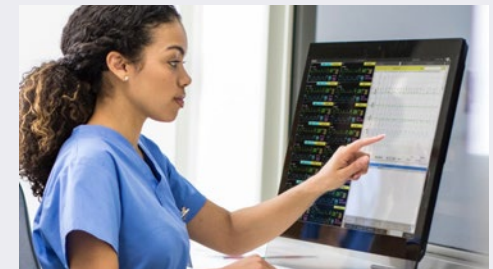
“The Philips team uncovered all the data needed to improve my department and constantly adapted with us during the implementation phase.”

**Dr. F. Roodhevel**, ED Chairman  
Flevoziekenhuis, the Netherlands



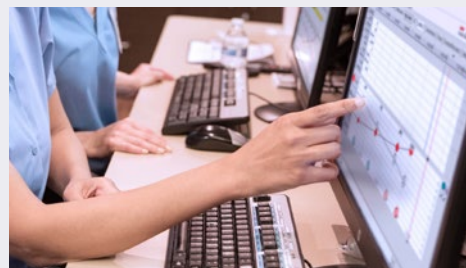
## Performance analytics

Leverage data, benchmarking, best practices, and visualization tools to provide actionable insights for meaningful change



## Digital transformation

Provide global thought leadership and expert guidance to harness data and digital technologies



## Healthcare modeling and simulation

Develop actionable operational insights by defining KPIs and testing plausible scenarios for viability, ROI, and workflow efficiency



## Enterprise care collaboration

Utilize real-time decision support tools to improve care experience, efficiency, and outcomes across the care continuum



# Why we are distinctively different

As a global health technology leader and innovator, we know that achieving progress requires collaboration. Experienced Philips consultants work together with your leadership and staff to collectively create tailored, targeted improvement strategies for lasting change.

We combine integrated clinical, operational, and technological expertise with design thinking to ensure better experiences, better outcomes, and more sustainable health systems. We leverage our innovative and successful methodologies to help you truly transform the healthcare experience and your care delivery model.

## People-centered

We care deeply about patients, families, and staff. In every engagement we take a people-centered approach, drawing on skills such as experience flow mapping to define the patient journey and make healthcare easier and less stressful for all.

## Expert-led

Our consultants have deep clinical, operational, management, and technology expertise. As a company we bring a longstanding history of healthcare knowledge and excellence to every engagement including cocreation workshops that involve you and your staff.

## Data-driven

We provide online analytics-based dashboards and simulation tools to leverage the power of your data. Insights gained through critical analysis of clinical, operational, technological, and experiential aspects of care help you be more efficient and productive.

## Future-ready

Drawing upon our leadership in research and development, we help transform your organization today, with tomorrow in mind. Our services are ready for a future that our next-generation technologies are helping to shape and enable.





## Our collaborative approach

### Co-creating for effective results

By involving your staff in every stage of the project, they play an active role in shaping the transformation. Interdisciplinary teams are crucial, as the design thinking methodology we use is based on embracing different perspectives.

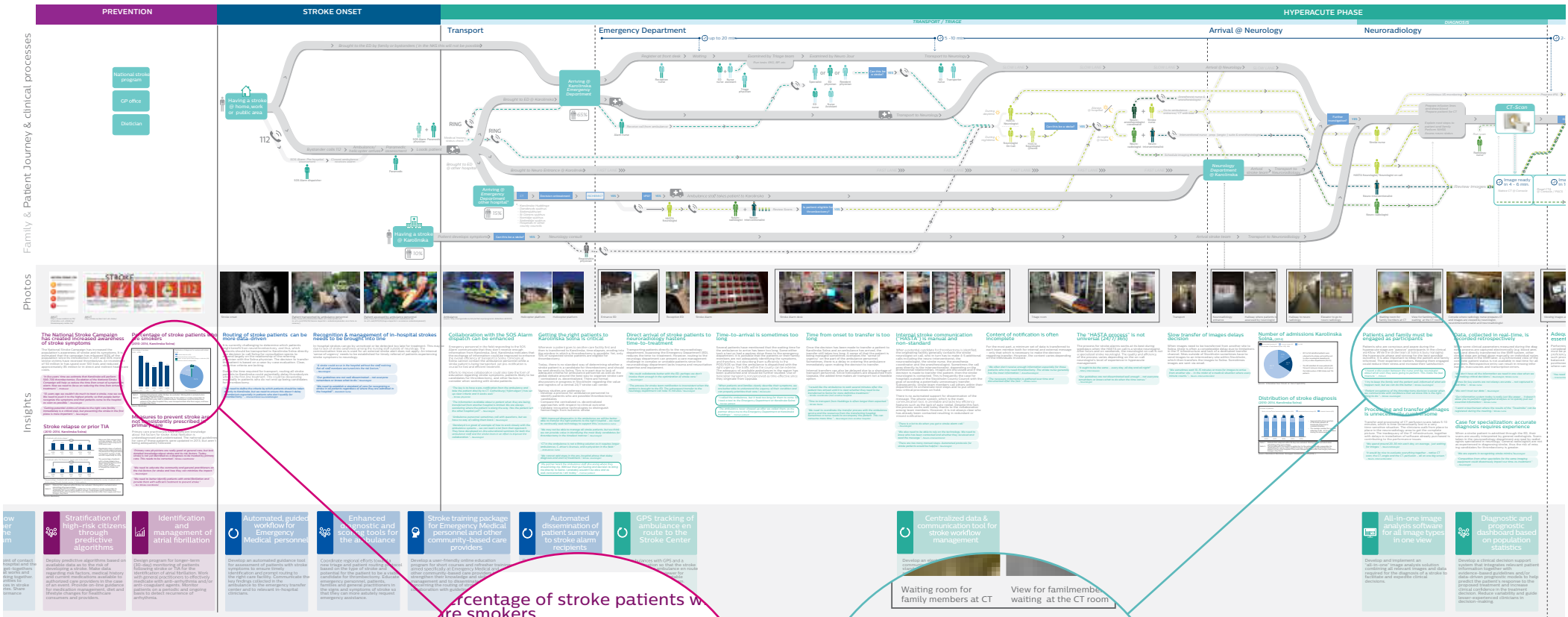
Cocreate sessions bring people together from various departments, professions, and hierarchy levels so that they can be creative together in a safe space. The more diverse the teams, the greater the potential for innovative ideas.

### Experience flow mapping

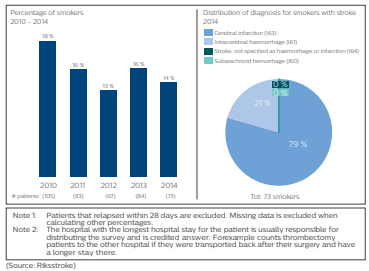
A unique structured methodology that provides an insights-based view of the patient journey integrated with clinical processes and is visually represented in poster form. It provides a helicopter view of the entire flow and often uncovers challenges that may not have been identified in the stakeholder input phase. The resulting flow visualization clearly demonstrates areas of concern and helps to identify improvement opportunities across environments.



Experience flow mapping



Percentage of stroke patients who are smokers (2010-2014, Karolinska Solna)



Patients and family must be engaged as participants

Patients who are conscious and aware during the hyperacute stage are "passive" participants in the clinical workflow. While the stroke team at Solna is busy managing the hyperacute phase and striving for the best possible outcome, it is also important to keep the patient and family informed. Their experience matters. Keeping them engaged could reduce their stress and increase their satisfaction.

"I heard a discussion between the nurse and the neurologist about what scan they were going to perform. This made me feel insecure." - Patient

"I try to keep the family and the patient well-informed of what will happen next, but we can do this better." - Stroke neurologist

"Patient acceptance of the thrombectomy decision is easier when we communicate with confidence that we know this is the right thing to do." - Stroke neurologist

# Health systems we've helped transform

Decades of dedication to healthcare product and process innovation means that choosing Philips as a consulting partner ensures a team attuned to the realities of this complex industry – a partner with extensive healthcare technology and clinical knowledge, ready to push the limits and secure your success. We've assisted clients through more than 600 engagements across 17 countries, proving that our expertise can help you transform to reach your potential.

Flevoziekenhuis, the Netherlands

---

Universitätsklinikum Hamburg-Eppendorf (UKE), Germany

---

GenesisCare, Australia

---

Heart Hospital, Tampere University Hospital (TaUH), Finland

---

L'Hopital de La Tour, Switzerland

---

Broward Health Medical Center, USA

---

Reinier de Graaf Hospital, the Netherlands

---

Herlev Genofte University Hospital, Denmark

---

Noah's Ark Children's Hospital, United Kingdom

---

Beverly Hospital, USA

---

# Flevoziekenhuis, the Netherlands

## Challenge

Optimize the emergency department (ED) processes to meet the care demand more effectively at busy times and create an internal relocation plan to address the ED space for Flevoziekenhuis.

## Solution

Detailed root cause analysis incl. interviews to determine the causes of closures and slow throughput. Identify nine improvement initiatives together with ED staff and help to implement these.

"The Philips team uncovered all the data needed to improve my department and constantly adapted with us during the implementation phase."

**Dr. F. Roodheuveld**, ED Chairman  
Flevoziekenhuis



**47%**  
improvement  
in triage speed

Patient transfer from  
**32 to 3**  
minutes<sup>1</sup>

**50%**  
fewer unnecessary  
referrals

**Domain:** Emergency care

**Project:** Performance improvement

<sup>1</sup> During business hours, for specific patient groups

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Universitätsklinikum Hamburg-Eppendorf (UKE), Germany

## Challenge

Help UKE optimize their OR performance with existing resources and improve staff satisfaction.

## Solution

Detailed data analysis, interviews with stakeholders and process observations captured in an OR process flow poster. In a co-creation workshop help identify solutions for areas for improvement and provide support with project coordination, moderation and standardized structures during the implementation phase.

"We wanted to do more with our established structures and existing staff – and this project matched this perfectly. We have achieved an outstanding increase in our efficiency, with satisfied employees who feel appreciated and valued. And, the communication and collaboration between our teams has improved as well. Great!".

**Pia Koch**, Commercial Manager  
UKE Hamburg-Eppendorf



**77%**  
reduced downtime  
in the central OR

**1400**  
more  
surgeries

**Blueprint**  
for future  
transformation  
projects

**Improved  
staff  
satisfaction**

**Domain:** Operating room (OR)

**Project:** Performance improvement

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.



# GenesisCare, Australia

## Challenge

Create 'The Cancer Service of the Future' by focusing on the patient's experience of their quality of care for GenesisCare.

## Solution

Complete assessment of the current hospital system including data analysis, deep dives with patients and cross-functional staff, cocreate sessions and a complete redesign of the flagship facility in Wembley.

"The huge benefit we got from collaborating with Philips was to be able to pull it all together, in a very comprehensive fashion, and quickly get some tangible and concrete outcomes from the process."

**Andrew Saunders**, Group Manager  
GenesisCare



# 16

'Quick Wins' to improve patient experience **prioritized and implemented**

# 84

Net Promoter Score **doubled** to eighty-four

**Domain:** Oncology

**Project:** Service strategy and facility redesign

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Heart Hospital, Tampere University Hospital (TaUH), Finland

## Challenge

Identify areas of improvement in work processes and premises usage for the cardiac catheterization labs and heart surgery department of Heart Hospital TaUH.

## Solution

Assessment of processes by using careflow mapping for the cardiac catheterization labs and heart surgery department to identify and guide improvements to enhance patient experience, promote staff well-being and improve operations.

"The Philips consultants were very thorough in their review and assessment of our processes and experiences. From comprehensive analyses came a targeted list of improvement opportunities we feel certain will reinforce our commitment to exceptional patient care and sustain us as we move forward."

**Aki Haukilahti**, CFO  
Heart Hospital TaUH



## Streamline workflow

by creating interfaces for **strong integration of IT systems**

## Increased utilization

of cath labs and heart surgery rooms

## Expand the role of nursing

allowing physicians to **focus on core activities**

**Domain:** Cardiology

**Project:** Cardiac careflow optimization

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# L'Hopital de La Tour, Switzerland

## Challenge

Hôpital de La Tour achieved significant growth and wanted to optimize their emergency department services, and introduce day clinic services.

## Solution

An interdisciplinary consulting team conducted an on-site assessment reviewing key aspects of care delivery: clinical workflow, operational efficiency, technology, and patient experience. Co-create sessions with clinical teams helped translate recommendations into scenarios to optimize workflow and the patient experience. A facility master plan was developed as input for a hospital-wide investment plan.

"In a short amount of time, the Philips team managed to identify key bottlenecks in a structured way and translated these, together with our clinical team, in a comprehensive redesign master plan for our future emergency department and day clinic."

**Julien Heider** Directeur des Operations (COO),  
L'Hopital de La Tour



# 10+

Mid- to long-term **strategic patient experience improvement and innovation opportunities** identified

# 3

**Future-proof facility transformation** masterplan scenarios

**Domain:** Emergency department and day clinic

**Project:** 360 assessment and masterplan design

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Broward Health Medical Center, USA

## Challenge

Modernize the environment and improve operational performance for the busy infusion center of Broward Health Medical Center.

## Solution

Understand the patients clinical, functional, and emotional needs to redesign the environment. Include process improvements to enhance staff workflow and efficiency and support anticipated volume increase.

"This new design is absolutely going to impact positively on the patient's experience. It is going to take it to world-class. It is going to impact our financial results."

**Gena Conroy**, Chief Marketing & Patient Experience Officer, Broward Health



**100%**  
Increase in patient  
satisfaction after opening

Broward was **awarded** the healthcare  
**Avatar award**

**Domain:** Infusion Clinic

**Project:** Workflow analysis and experience design department development

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.



# Reinier de Graaf Hospital, the Netherlands

## Challenge

How can throughput be improved so the cardiology department at Reinier de Graaf Hospital no longer has to freeze admissions to their Chest Pain Center (CPC)?

## Solution

Detailed root-cause analysis based on data to identify key issues. Throughput improvement ideas were considered together with staff. Simulations were used to decide which initiatives had the most improvement potential, and these were implemented.

"I am not such a fan of consultants. It's an investment and doesn't always produce results. But this team had great communication skills and helped us make the right choices. This is the first time I really have the impression that an improvement project will bring lasting results."

**Jolanda Versteegen**, Interim Business Manager Cardiology  
Reinier de Graaf Hospital



**1 hour**  
on average patients go  
home an hour earlier

**9%**  
decreased CPC intake, by set up  
of emergency outpatient clinic<sup>1</sup>

**57%**  
decrease in CPC  
admission freezes<sup>2</sup>

**Domain:** Cardiology

**Project:** Throughput improvement

<sup>1</sup> During office hours

<sup>2</sup> From January to September 2018. Several factors contributed to this reduction, including the initiatives described in this article. It is not possible to determine the percentage that each initiative contributed.

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Herlev Genofte University Hospital, Denmark

## Challenge

Help improve patient satisfaction and help differentiate the healthcare services at Herlev Genofte University Hospital.

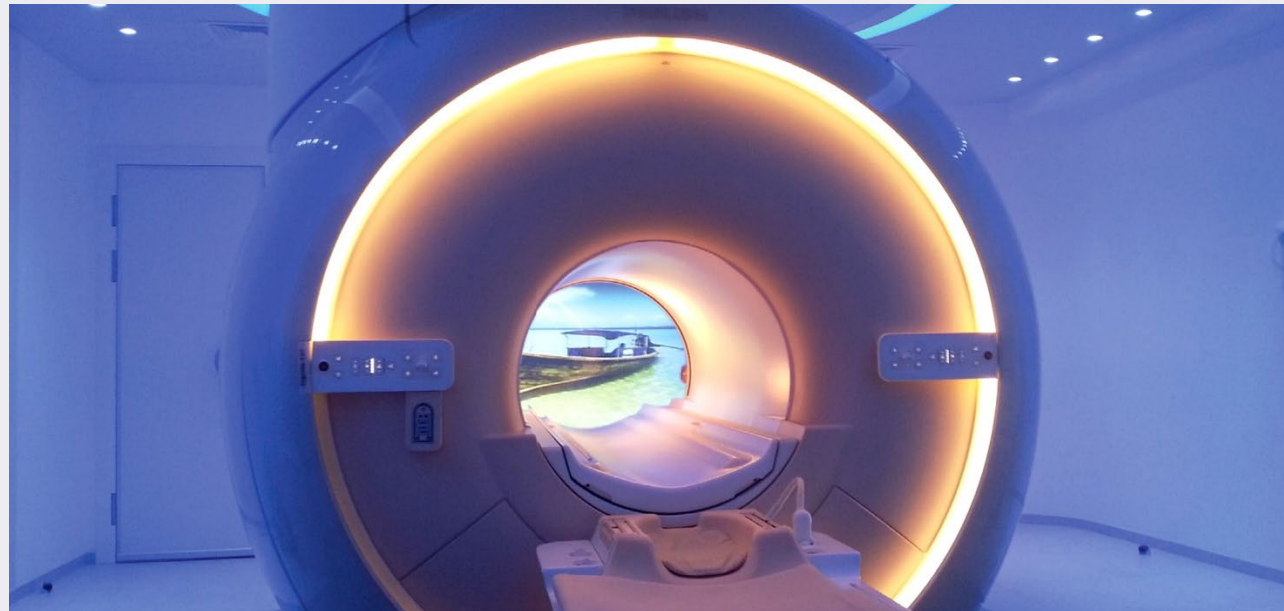
## Solution

The In-bore Connect was added to the Ingenia 3.0T MRI system with Ambient Experience, providing information and guidance to the patient during scanning. Leading to improved patient experience and patient satisfaction.

“Our data demonstrate a significantly reduced number of interrupted scans (rescans) in the scanner room where the Patient In-bore Solution is installed – which directly contributes to a more predictable throughput.”

### Jeanette Brus Mortensen,

Department Radiographer & Leader for the MRI Department,  
Herlev Genofte University Hospital



**70%**  
reduction in number of rescans\*

**90%**  
better patient comfort level

**Domain:** Radiology

**Project:** Ambient Experience MR Patient In-bore Solution

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Noah's Ark Children's Hospital, United Kingdom

## Challenge

Children's charity LATCH, and Noah's Ark Children's Hospital wanted to enhance the experience of children with cancer.

## Solution

After reviewing ongoing plans, consulting staff and patients on deeper needs, the Philips team created a child-friendly radiology department improving patient satisfaction with environment design.

"We've achieved something fantastic here. It is better than we anticipated and more effective than we anticipated. Children are more cooperative and we get the scans we need."

**Dr. Susan Morris**, Pediatric Radiologist  
Noah's Ark Children's Hospital



**78**  
Net Promoter Score

**85%**  
of parents say that their  
child was **less stressed in**  
**the new department**

**89%**  
of parents rate the  
department as **better**  
**regarding child friendliness**

**Domain:** Pediatric radiology

**Project:** Ambient Experience department design

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.

# Beverly Hospital, USA

## Challenge

Help improve operational efficiency in the emergency department at Beverly Hospital with analytics consulting, and tools.

## Solution

Detailed data insights, create custom analytics dashboards for insight in daily operational performance, and change implementation support. These custom analytics dashboards were created:

- **Physician and nursing dashboards** to track volume, throughput times, and acuity level
- **Outlier dashboard** to track patients experiencing extended throughput times

“Philips worked with our leadership, staff, and IT teams to create a performance dashboard, customized for our needs. The daily updates provide a quick look at our performance without each team running multiple reports and the teams can dig into to their department data as needed.”

**Kimberly Perryman**, MMHC, RN, VP, Patient Care & CNO  
Beverly Hospital, part of Beth Israel Lahey Health



# 31%

**reduction** in time between  
bed request and inpatient  
bed assignment

## Improved staff alignment

avoiding a \$1.3M  
operational expenditure

## Reduced time spent on

collecting,  
analyzing and sharing  
performance metrics

**Domain:** Emergency care

**Project:** Performance analytics and dashboards

\* Results from case studies are not predictive of results in other cases. Results in other cases may vary.



# Global presence, local expertise

The Philips consulting team consists of global network of experienced consultants with clinical proficiency and a broad knowledge of healthcare technology and health systems. Regional experts are versed in the demographic trends, regulatory compliance, and acquisition procedures of their home countries.



**240** clients  
through  
**more than 600**  
**17** engagements across  
countries

# We look forward to **partnering** with you to make healthcare transformation real

## **Learn more**

Through collaborative and people-focused engagements, Philips can help develop innovative solutions to solve your most complex challenges of care delivery. We can help you achieve meaningful and sustainable improvements in clinical excellence, operational efficiency, care delivery, and financial performance to improve value to your patients.

**For more information, please visit**  
**[www.philips.com/healthcareconsulting](http://www.philips.com/healthcareconsulting)**

