

PHILIPS

Healthcare

Experience Solutions



Turning healthcare into
human care



The transformation **imperative**

Healthcare today is full of complex challenges, continually testing your ability to deliver high quality care. This calls for an innovative approach to healthcare. With a focus on high quality care and human empathy, our holistic approach provides deep insights to patients, family and healthcare professionals' needs.

Based on our expertise in design, clinical and operational consulting and technology, we can work with you to innovate and shape your facility. Using people-centric design thinking methodology, to better meet your care delivery challenges.

How do we improve value for your patients, family and staff

Philips Strategic Design

Philips Strategic Design offers a holistic approach to the healthcare experience, taking into account clinical, operational, and experiential aspects. A multidisciplinary team of experts will collaborate with patients, staff, and key stakeholders to deliver solutions with a people-centric focus. Solutions range from experience research, planning and experience design to implementation and management.

Consider that a friendlier hospital can lead to happier patients, which in turn enables you to provide better care. This is our guiding vision. Together with your key stakeholders our experience consultants apply a unique methodology – a collaborative and multi-disciplinary approach to innovation and problem solving. We help you address the complex challenges of creating an environment that instills a sense of wellbeing.

The collective thoughts, intentions and creative ideas of your medical staff and hospital leadership, are used to create breakthrough solutions. Insights will be prioritized and translated into customized, meaningful environments that can enhance patient satisfaction, increase staff productivity, optimize workflow, and establish a unique brand differentiator for your healthcare facility. And as all key stakeholders are involved from the start, buy-in is included, which makes implementation easier.



“The Philips design team - they get healthcare. They understand what a patient is experiencing; they understand what a patient feels. So they design the workflow to complement the ambient environment. They gave us some fantastic ideas.”

Elise MacCarroll, Administrative Director, Florida Hospital

Philips has a robust program to observe, assess and evaluate the way that care is delivered, to provide excellent patient and staff experiences, and build an inclusive strategic plan to achieve your institutional goals.

Our process is research based. Each relevant stakeholder group in the care cycle is evaluated. Pathways and interactions are mapped, from initial contact to completion. Based on these findings as well as data analytics, areas that can be positively influenced are pinpointed.

Our recommendations range from articulation of experience strategies to detailed implementation plans, and continuous process improvement. By focusing on the quality of the delivery of care, you can have an impact on clinical excellence and operational efficiency.



Strategy

- Community outreach research
- Experience flow mapping
- Future experience scenario development
- Experience design strategy plan



Concept

- Work flow design and lay-out optimization
- Architectural design
- Interior design
- Lighting design
- Ambient Experience design



Realization

- Final interior design guidelines
- Lighting plan
- Experience technology development, implementation and guidance
- Design supervision



Evaluation

- Post occupancy analysis
- Customer experience evaluation & rapid improvement
- Patient experience evaluation
- Staff experience evaluation



We can support you in many ways, ranging from development of high-level strategies to resolution of discrete operational issues. The objective is always to get an in-depth understanding of the patient, family and staff experience needs and to identify optimization opportunities.

Strategy

We will conduct relevant research to help define what it means to be people-centric and guide you through creation of a 'whole health' and wellbeing proposition. Demographic and ethnographic studies, market analysis, and assessments of current facility design help us gain insight into the goals your hospital should embrace to better support your audience.

For each stakeholder group, we determine key functional, behavioral and emotional touch-points across the care continuum. These 'slices of life' help us map experience flows where needs analysis substantiates applicable strategies.

Examples:

- Vision alignment, through dialogue with the hospital leadership
- Ethnographic study to better position the hospital within the community
- Insight generation and analysis, e.g. generating in-depth knowledge of the end-users
- Experience flow mapping to visualize different roles, interactions, and dependencies

Concept

How does the strategy defined impact the physical, organizational, and operational structure in your hospital? To answer this we develop concepts supported by sketches, schematics, and visualizations. Once a final direction is formulated, we create detailed specifications for implementation of this new vision.

We work closely with architects and interior designers to describe an environment that is psychologically supportive, has less negative associations, and increases patient and staff satisfaction.

Examples:

- Partnering with consultant/advisor to the hospital board
- Scenario building – physical/procedural reorganization
- Experience concept creation, e.g. narrative storyboards, experience zoning, Interior space design
- Detailed experience design specifications

Realization

Following the detailed specification, we carry out all steps toward implementation including planning, creative direction, installation, technology implementation and support. An on-site director will work closely together with local contractors to help provide quality and adherence to design specifications and expectations.

For the physical environment we can provide our off-the-shelf Ambient Experience room solutions, we can tailor Philips solutions, or we can integrate third party offerings. Other key enablers include lighting, communication technology, behavioral training, and data management.

Examples:

- Greenfield (new construction) and Brownfield (renovation) schematic design
- Realization of final design according to specifications
- Overall creative direction
- Project oversight

Evaluation

A transformed healthcare experience can bring significant change. You may need to make minor adjustments to reinforce behavior. Through ongoing assessment, we can identify where there are issues, intervene, and work to bring them back to appropriate predefined levels.

In this way Philips becomes your partner for continuous experience improvement so you can maintain a high level of service delivery that maximizes its positive impact. This can reduce workload for your staff and create a higher level of satisfaction for all.

Examples:

- Post occupancy analysis
- Measurement of improvements
- Patient experience evaluation
- Staff experience evaluation
- Rapid improvement process



Ambient Experience room solutions

Patients who enter a hospital may be frightened as they are anxious about the outcome and the procedure itself. Anxiety increases stress levels in patients and impacts the patient's experience. Yet, anxiety can be reduced at each interaction, each point of contact, by providing attentive care and the proper information.



Ambient Experience is a purposefully designed healthcare environment. Ambient Experience integrates technology, spatial design and workflow improvements to create a comfortable and stress-reducing environment for your patients, and an efficient, clutter-free workspace for your staff.

Patients can personalize their surroundings, wrapping themselves in a relaxing ambience.

Patient can gain a sense of control via the selection of different themes, thereby becoming more at ease with the proceedings. When combined with an improved workflow, processes and procedures can run more smoothly.

A customized Ambient Experience environment can lead to increased patient and staff satisfaction.

- 1 Side wall projection
- 2 Rounded corners
- 3 Audio system
- 4 Ceiling lighting element 'Halo'
- 5 Integrated coil cabinets
- 6 Dynamic LED 'Ambient Lighting'
- 7 Floor island



MRI
Provide tools to sooth anxious patients.



CT
Boost your investment by reducing clutter and speeding throughput in a patient-friendly exam environment.



Intervention Suite
Improve workflow for a more organized, efficient cardiovascular procedure.



Radiography
Focus on the values and needs of both patients and medical staff in your X-ray suite.



PET/CT
Integrate AE across uptake, exam and control rooms for a unifying approach to oncology studies.



Mammography
Helps women relax with soothing audiovisual and lighting atmosphere.



Uptake Room
The Ambient Experience uptake room transforms a standard uptake room into one that changes according to the various workflow steps.



Custom Solutions
Ambient Experience can be customized to your unique needs and facility.

Validated room designs can help support the specific procedure for different clinical areas, which are part of all our Ambient Experience solutions.

Ambient Experience designs are available to support the radiology, cardiology, oncology, emergency department and increasingly also new areas such as NICU and ICU. The solution can be extended from the procedure room to the control room, waiting areas and even whole departments.

Depending on your clinical requirements, budgetary constraints and project parameters, we can offer you a variety of scalable Ambient Experience solutions that work best for you:

Ambient Experience Tier 3: including dynamic Ambient Lighting, thematic video/sound and a ceiling lighting or video element above the imaging system

Ambient Experience Tier 2: including dynamic Ambient Lighting and thematic video/sound

Ambient Experience Tier 1: adding soft colored, creative lighting encouraging a sense of well-being.

When your situation requires a unique response, Philips can customize one. Work with us to tailor any of the elements to bring maximum benefit to your space.

Best practices

With over 100 consulting projects realized and an installed base of more than 900 Ambient Experience Solutions, proof of success can be measured. Philips customers who have invested in transforming the overall patient and staff experience across their care setting find that there is **added value** in this approach. Their voices reflect the advantages of a revitalized healthcare environment.

Strategic Design successes

Broward Health Infusion Center, US,

wanted to modernize an outdated, busy adult infusion center to provide a better experience. The Strategic Design team gained insights about workflow, space usage, and staff and patient experiences using Experience Flow Mapping and experience design.

The Philips' team led a clinical and operational assessment and process redesign for superb efficiency. Based on data, experience flows and experience inputs, a complete spatial redesign was carried out. Broward won the significant healthcare Avatar award, based on the continued experience improvements over a sustained period.

A US based community hospital

wants to ensure that the flow and experience of the new hospital meets the communities' needs, making the hospital the preferred destination for patients living in the area. The Philips' team led a collaborative consulting engagement using research, insights, key user needs and experience flows, creating experience concepts and guiding implementations. The areas addressed are the inpatient future 200+ bed hospital, the Emergency Department, Imaging Center and Medical Office Building. The client has currently started to build the new hospital, in which many of our concepts will be implemented.

Sparks Health System in Fort Smith, Arkansas, US,

is a large regional hospital that offers a broad range of innovative cancer care services. They wanted to implement state-of-the-art techniques for improving patient experience in the PET/CT suite. Philips healthcare consulting experts worked closely with key stakeholders to understand the clinical, functional and emotional needs of the patient population. Design thinking in healthcare was then applied to transform the patient experience. At the Sparks Radiation Treatment Center, the Ambient Experience suite incorporates innovative elements in the uptake room and the PET/CT exam room designed for improving patient experience and enhancing the clinical process.

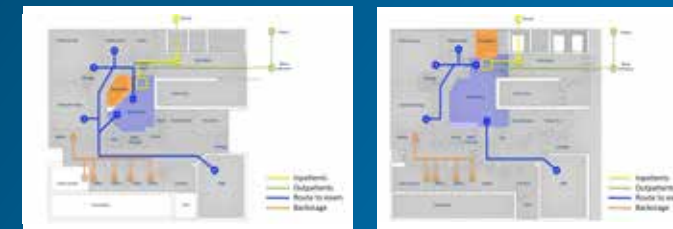
Children's hospital Wales, Cardiff

Latch, a children's charity, wanted to enhance the experience of children with cancer at a major pediatric center in Wales. Philips was engaged for their unique capabilities in the patient experience enhancement area. A team of designers and clinical consultants dug into the clinical and emotional needs and worked with the staff to map the journeys of the children throughout the radiology department. Philips created rooms and spaces that soothe at different levels of engagement for different age groups. And children have the possibility to personalize their own experiences.

The hospital and Philips just very recently conducted a survey on 116 parents/caregivers of pediatric patients (of which 47 were familiar with the former radiology department). Compared to the experience of the 'old' pediatric department:

- **89%** indicated that it was easier or a lot easier for their child to relax in the new radiology department.
- **72%** indicated that, compared to their experience in the 'old' radiology department, the experience of the imaging procedure was a lot better for their child.

The Net Promoter Score of the new radiology department is **78** (116 respondents).



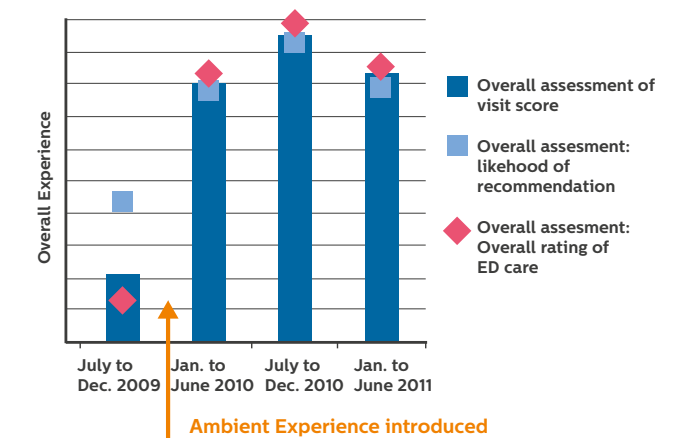
Results from case studies are not predictive of results in other cases. Results in other cases may vary

The Walt Disney pavillion at Florida Hospital for Children

includes a pediatric Emergency Department that stands as a case study for how an entire department can be transformed by Philips Ambient Experience.

- Ranked in 2010 as the best pediatric ED in the country in patient satisfaction by Press Ganey
- ED visits almost doubled since the introduction of Ambient Experience
- Won prestigious iF design award
- Generated visibility and thought leadership via peer industry conferences

Ambient Experience at Florida Hospital for Children



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Ambient Experience room solution successes



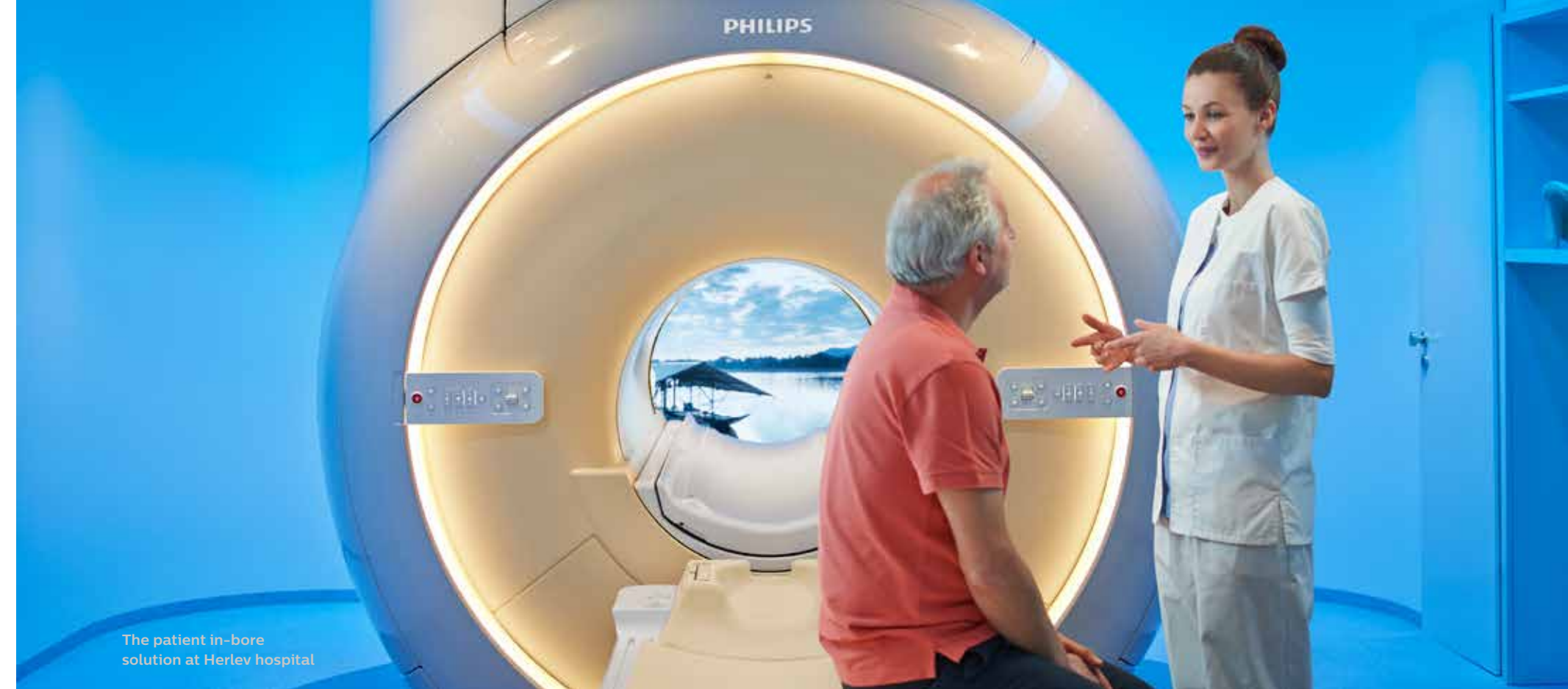
Installed base survey

When 100 customers in 27 countries were interviewed, the consensus was that Ambient Experience works.

- 76% saw an increase in staff satisfaction (they prefer the AE rooms)
- 70% feel the Ambient Experience is worthwhile, one in four gave AE an Net Promtor Score of 9 or 10.

- **Highest impact on NPS score:** Advantages with highest influence on NPS score
- **Increased productivity:** less repeat imaging needed as patients are less likely to move due to reduced stress/ anxiety levels
- **Increased staff satisfaction:** staff finds it easier to focus on patients needs and prefers working in a nice, spacey environment
- **Increased patient volume** (depends on country situation): more attractive to claustrophobic or frightened patients, children

Source: Suazio Consulting Installed base survey, September 2011
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Results in other cases may vary



The patient in-bore solution at Herlev hospital

The effects of Ambient Experience on patient satisfaction at Jeroen Bosch Hospital

Two of four radiography rooms at Jeroen Bosch Hospital, in 's-Hertogenbosch, the Netherlands, are equipped with Ambient Experience. A study with 121 patients was conducted to determine the impact of AE on patient satisfaction. Net Promoter Score (NPS), a figure that indicates to what extent someone is willing to recommend the hospital to people they know, was used to judge the results. Patients who underwent an X-ray exam in an AE room, showed noticeably higher (favorable) NPS of +29% than those examined in a 'normal' X-ray room, which increased to +45% when patients were informed about AE prior to the exam.

Source: The influence of AE on anxiety and patient satisfaction in a digital X-ray room., Philips Research Laboratories Europe in collaboration with Jeroen Bosch Hospital, the Netherlands (Nov 2011)

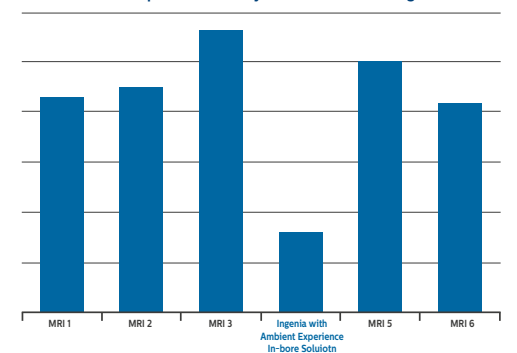
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Patient in-bore solution at Herlev Getofte University Hospital, Denmark

Patient experience is a crucial factor for the successful operation of the radiology department at Herlev Getofte University Hospital in Denmark. In their Ingenia 3.0T imaging room they have installed a full Ambient Experience solution, now also with the patient in-bore solution. The patient in-bore solution distracts head first patients when they move into the MRI, helping them to relax and hold still during an MRI exam. Patient experience and department efficiency go together. Dr Nemery, neurologist and chairman of the radiology dept, and team conducted a survey of patients scanned in the patient in-bore solution. About 30% said time went by quickly. Patients are very positive and do ask for this scanner when coming back.

Source: Survey results from Herlev Hospital published in FieldStrength - Special issue ISMRM 2015

Number of interrupted scans in a year in the six scanning rooms



Patient and staff experiences

“It calmed me down when I was feeling stressed. I had a really good experience. I even forgot about the exam. It was nothing like what I experienced before.”

Régine Fontaine, patient, Clinique de la Porte Verte, Paris, France



“I aggressively recommend the Disney Family Cancer Center because there is a destination for cancer treatment that can make you feel lighter at heart and better.”

Racelle Schaeffer, patient, Disney Family Cancer Center, Burbank, California, USA

“...I was initially concerned about investing in Ambient Experience as we went into the project, but felt this was a good way to stand out in our market. Now, I tell everyone that Ambient Experience is the most impactful thing we did as a part of the of the total \$9M imaging department project ... it has made a huge difference...”

CEI, Midwest Medical Center, US



“With all the additional media coverage and press, we feel Ambient Experience has provided us a substantial and very valuable amount of market awareness and advertising.”

Tom Lonergan, Executive Operations Director, HOAG Heart and Vascular Institute, California, US

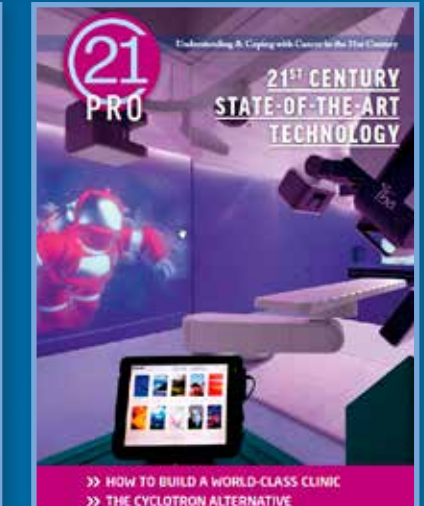
“The fact that we have provided [patients] with a distraction... or entertainment to take their mind off the radioactive agent is a really positive thing. It gives them something else to focus on.”

Dr Bruce Cross, Sparks Health System, Arkansas, US



Media exposure

Ambient Experience can really differentiate your institute from other healthcare facilities and act as a ‘magnet’ for staff and patients. Below a fraction of the media attention that Ambient Experience has created for our customers.





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