



Patient-friendly environment

Philips Ambient Experience puts X-ray examinations in a completely new light

Who/Where?

With 4000 employees and 240 medical specialists, the Jeroen Bosch Hospital in 's-Hertogenbosch is the biggest employer in the region. It is one of the biggest teaching hospitals in the Netherlands.

- Harm Geraedts, cluster manager for imaging techniques
- Jojanneke de Leeuw, radiology technician
- Sylvana Hoyer, radiology technician
- Roy van Akkeren, radiology technician

Challenge

To make patients feel more comfortable when they visit the radiography room, which ties in perfectly with the hospital's aim of becoming the most patient-oriented hospital in the Netherlands.

Solution

DigitalDiagnost with Ambient Experience.

The Jeroen Bosch Ziekenhuis (JBZ – Jeroen Bosch Hospital) in the town of 's-Hertogenbosch in the southern Netherlands is home to two radiography rooms equipped with Ambient Experience. The soothing combination of soft colored lighting, relaxing video projections and calming music allows X-ray examinations to be carried out in a more pleasant environment, which ties in perfectly with the JBZ's focus on patient friendliness, innovation and quality of care.

With 4,000 employees and 240 medical specialists, the JBZ is the biggest employer in the 's-Hertogenbosch region, and almost all medical specializations are represented among its staff. Every year, the hospital handles more than 500,000 outpatient visits and well over 60,000 hospital admissions. The JBZ is a member of the Stichting Topklinische Ziekenhuizen (STZ – Foundation for Top Clinical Hospitals). What sets STZ hospitals apart is that, in addition to high-quality patient care, their core tasks also include teaching and research. These hospitals focus on the key concepts of 'innovation', 'striving for quality' and 'personal attention'.

Soothing experience

The recently completed new building at the JBZ unites the facilities of three sites in 's-Hertogenbosch: the Carolus, the Groot Ziekengasthuis and the Willem Alexander. The hospital's aims are clear: to become the most patient-oriented hospital in the Netherlands. With these goals in mind, it is no surprise that the proposal from Philips



You can divert the patient's attention with soothing sounds, video projections and colored lighting.

to install Ambient Experience in two radiography rooms was well-received by the hospital board, even after the final building plans had been completed. "Personally, I was very keen to introduce Ambient Experience," explains Harm Geraedts, cluster manager for imaging techniques.

PHILIPS
sense and simplicity



Ambient Experience fascinates patients, which often allows examinations to be completed more comfortably and quickly.

“An X-ray examination is sometimes stressful and normally takes place in a typical hospital environment: a room without any daylight, containing medical equipment that can sometimes be a little overwhelming. So it’s great when you can divert the patient’s attention with soothing sounds, images and colored lighting. With Ambient Experience, we’re able to enrich the hospital experience



Harm Geraedts, cluster manager for imaging techniques JBZ

of well over a hundred patients every day in a very special way. For children in particular, we try to bring the playful, relaxed atmosphere of the waiting room into the examination room.”

Excellent quality

“Of course, the quality of the medical treatment is not compromised in any way,” continues Geraedts. “Philips had explicit input into the design and realization of the rooms. For example, we looked very closely at the lighting. The examination light and the colored cove lighting do not interfere with

“Patients are clearly more relaxed, thanks to the combination of lighting, video projections and sound.”

each other and the radiology technicians are able to perform their work without any problems. In addition, with the DigitalDiagnost from Philips, we know we’ve got excellent X-ray equipment. This system has been part of our permanent equipment for a number of years. The latest model with automatic control prevents strain on the personnel and also has the advantage of a pleasant-to-use touchscreen interface.”

Radiating a sense of calm

Of the four radiography rooms at the JBZ, two are equipped with Ambient Experience. Comparing the rooms shows that a focus on creating a friendlier-looking space has an impact throughout the facility. “Ambient Experience goes further than just colored lighting, video-projections and sound,” says Geraedts. “The examination room must be peaceful and create a pleasant atmosphere. For example, the room has rounded corners,

which makes it look bigger. In addition, medical equipment is kept out of patients’ sight as much as possible so as not to make them unnecessarily anxious.”

“An X-ray room that offers Ambient Experience is definitely a concept with added value.”

Sense of control

Radiology technicians at the JBZ, including Sylvana Hoyer, witness the positive impact of Ambient Experience on a daily basis: “Thanks to the pleasing combination of lighting, video projections and sound, the working environment feels less clinical. That not only takes the patient’s mind off things but also, for me personally, makes my work a more pleasant experience.”

The effect of Ambient Experience on patient satisfaction

An X-ray examination with Ambient Experience is clearly quite different from a visit to a conventional radiography room. The special combination of lighting, video projections and sound helps to distract patients, and allowing them to choose their own specific audiovisual themes gives patients a sense of control in a potentially stressful situation.

Curious about the effect it had in practice, Philips Research conducted a study at the JBZ at the end of 2011. This study focused on the question of what impact Ambient Experience (AE) has on patient satisfaction by measuring the Net Promoter Score (NPS), a figure that indicates to what extent someone is willing to recommend the hospital to people they know. In the study, 121 patients were divided into various groups (see graph).

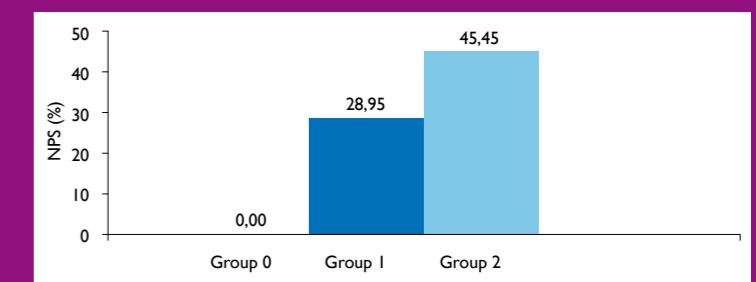
Patients who underwent an X-ray examination in a room with AE showed a noticeably higher NPS than patients examined in a ‘normal’ X-ray room (difference between control group and group 1: +29%). Further inquiry showed that the impact on the NPS could be primarily attributed to the appearance of the room with AE and the ‘feeling’ that AE created upon arrival.

The highest NPS was evident in group 2 (+45.45%). Patients who were informed about AE prior to the examination found the experience more intense and, as a result, were likely to feel that they had undergone excellent medical treatment.

This study was conducted by Marjolein van der Zwaag

in collaboration with Harm Geraedts from the JBZ.

Philips Research Laboratories Europe, November/December 2011.



The effect of AE on patient satisfaction.

Group 0 (control group): AE disabled, no explanation of AE, no choice of an audiovisual theme

Group 1: AE enabled, no explanation of AE, no choice

Group 2: AE enabled, explanation of AE, no choice



Children are mesmerized by the pleasant atmosphere.

Her colleague Jojanneke de Leeuw has noticed the reaction of young patients in particular: “Children who are nervous when they arrive are mesmerized by the pleasant atmosphere. Relaxing music is played and attractive videos are projected on the opposite wall.”

“Thanks to Ambient Experience, the work environment feels less clinical.”

“Children have priority anyway when they need an X-ray,” explains radiology technician

Roy van Akkeren. “We make sure that they go into the room with Ambient Experience and they can also choose a theme for the room. That gives them a sense of control in what is frequently a stressful situation. It often allows examinations to be completed more comfortably and quickly.”

Concept with added value

“Ambient Experience in our radiography rooms offers clear added value,” concludes Harm Geraedts. “I would like to apply the concept to the other JBZ locations. The X-ray diagnostics market is growing particularly quickly now because of population ageing, for example.”



Please visit www.philips.com/AmbientExperience



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