

**PHILIPS**

Ambient Experience



# Customer satisfaction leads to **more patient-centric rooms**

The Philips Ambient Experience at a Dutch hospital is expanded after it proves its effectiveness for both patients and staff.

## **Who/Where?**

With approximately 3,700 employees including 270 medical specialists, the Jeroen Bosch Hospital in 's-Hertogenbosch is the largest employer in the region. It is also one of the leading teaching hospitals in the Netherlands.

## **Challenge**

To make sure that all patients undergoing exams in the hospital's radiography rooms are given a personal experience that helps them relax. This ties in perfectly with the JBZ's ambition of becoming the most patient-oriented hospital in the Netherlands.

## **Solution**

Three DigitalDiagnost systems with Ambient Experience at the main site in 's-Hertogenbosch. One DigitalDiagnost with Ambient Experience at a satellite site in Rosmalen.

When the Jeroen Bosch Ziekenhuis (Jeroen Bosch Hospital) underwent further renovation in 2018, the number of radiography rooms with Ambient Experience was expanded.

The decision was driven by positive feedback on the hospital's existing installations from both staff and patients.



“Back in 2011 we commissioned a survey which revealed that, even though most examinations only take a few minutes, the Ambient Experience was clearly beneficial for both patients and staff,” says Harm Geraedts, business operations manager at the Jeroen Bosch Hospital. “Since then we have had a constant stream of positive reactions, because it clearly helps exams go more smoothly. We are convinced of its value, and wanted to offer it to all patients undergoing radiography exams. This fits in with our aim to become the most patient-oriented hospital in the Netherlands.”

Harm Geraedts, Business Operations Manager at Jeroen Bosch Hospital

#### Ambient Experience in all radiography exam rooms

The hospital therefore commissioned a further Ambient Experience installation at its main site in the Dutch town of 's-Hertogenbosch. “Two of the existing rooms already had Ambient Experience, and we wanted it in the third one as well,” says Daphne Engelen, cluster manager for imaging techniques. “In that way, all our radiography patients could benefit from it: we didn't want to be selective about who got it and who didn't. In the past we had to alter the planning because we thought certain kids would cooperate better if their procedure took place in a room with Ambient Experience, but obviously that's not great from a logistics point of view.”

“We are convinced of its value, and wanted to offer it to all patients undergoing radiography exams.”

Harm Geraedts, business operations manager

Now all three radiography rooms in 's-Hertogenbosch are equipped with this patient-focused solution, with each room handling approximately 100 patients per day. A further radiography room at a Jeroen Bosch Hospital satellite facility in the nearby town of Rosmalen also has Ambient Experience.

#### Personal experience for patients

“Our biggest challenge is that we have something that is in great demand: our radiography services,” says Geraedts. “Yet we want to give all the patients a personal experience, even though we carry out several hundred exams every day. For that you need the right building and infrastructure, competent staff, efficient logistics and good planning. What happens in the X-ray room is also important. We were very satisfied with our existing set-up – DigitalDiagnost with Ambient Experience – and we consciously chose for more of the same.”

#### Harmonized user interface, consistent quality

“Our staff are very happy with the Philips systems, particularly with respect to ease-of-use,” says Engelen. “On top of that, the user interface, image quality and detector are the same for the fixed and mobile units, which

is also important. We only want one user interface and quality level throughout our entire operation here. Even if you are working with different releases you can get to grips with them very quickly. The flat panels are also interchangeable. It's all very intuitive.”

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Daphne Engelen, cluster manager for imaging techniques.

Radiology technicians at the JBZ, including Jayney van Grunsven, appreciate the impact Ambient Experience has on their daily activities. “We always turn it on, it's much more pleasant to work in than the standard white hospital lighting,” she says. “We are in that room more or less all day long. It's nice to see deserts or palm trees. My favorite theme is the Maldives. Patients ask me if they are my holiday photos. If only!”

“We always turn it on, it's much more pleasant to work in than the standard white hospital lighting.”

Jayney van Grunsven, radiology technician

#### Clear preference among staff

This positive impression is confirmed by Daphne Engelen. “Before, when we had two rooms with Ambient Experience and one without, there was clear preference from our staff to work in the rooms that did have it.” Van Grunsven says the appeal is strong enough to influence her choice of workplace. “If I had to choose between working in two hospitals where one had Ambient Experience and the other didn't then – assuming all other conditions were the same – I would choose the one that did have it,” she says.

#### “Positive impact”

Her colleague Kay Smeenk touches on another aspect: the calming effect on patients. “It's particularly noticeable with young children,” he says. “The majority of kids are so distracted by the projections that we can do the scan without them really noticing. With the jungle theme we often ask them if they can spot a monkey or other things taking place, and that really helps focus their attention there instead of the examination. It definitely has a positive impact, and can help scans go faster.”



“The majority of kids are so distracted by the projections that we can do the scan without them really noticing.”

Kay Smeenk, radiology technician

#### About the Jeroen Bosch Hospital

With approximately 3,700 employees including 270 medical specialists, the JBZ is a regional healthcare hub in the Dutch province of North Brabant. In addition to its main site in 's-Hertogenbosch it has six other satellite facilities elsewhere in the town and in surrounding urban areas. Almost all medical specializations are represented among its staff. Every year, the hospital handles close to 1 million outpatient visits and approximately 60,000 hospital admissions.

The drive to become the most patient-oriented hospital in the country is captured in its slogan: Because you really matter.

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’.



A study by Philips Research confirms that the Ambient Experience rooms improve patient satisfaction significantly:

## 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**

### More engaging than a smartphone

"Often parents give their kids smartphones to distract them, but a large projection is much more interesting; they don't have that at home," says radiology technician Linda Gál. "The projection is positioned specifically so that the child or patient can look straight ahead. If they have a smartphone, they have to hold it, look down at it or interact with it. This can disrupt the examination. With Ambient Experience you don't have any of that." Engelen also points out that the whole room is part of the experience, not just one small screen. "No smartphone can compete with that," she says.

"I already stated back in 2012 that Ambient Experience in our radiography rooms offers clear added value," says Harm Geraedts. "It's still the case. In fact, I would even suggest that it should be a standard feature when designing radiography exam rooms."



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[www.philips.com/AmbientExperience](http://www.philips.com/AmbientExperience)  
[ambient.experience@philips.com](mailto:ambient.experience@philips.com)

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