

Enhancing patient and staff experience in CT

Looking towards a future of less patient stress and smoother communication in medical care

What is Ambient Experience?

Ambient Experience is an approach to clinical environment design that aims to help facilities reduce patient stress, increase staff satisfaction and improve workflow. It incorporates dynamic lighting, wall projection, ceiling displays and sound to produce a positive and engaging environment tailored to patient needs.

Ambient Experience designs are available for CT, MRI and a host of other areas. This space fosters trust between patients and staff to improve workflow and increase operational effectiveness. Patients can select room themes with sound to personalize the environment. This helps patients to feel engaged and provides them with positive distraction and a feeling of control. This leaflet explains how Ambient Experience is being used in the CT lab at Tokyo Metropolitan Geriatric Medical Center in Tokyo, Japan.





Yutaka Suzuk

Section Chief, Radiology Department, Tokyo Metropolitan Geriatic Medical Center

"Compared to other countries, clinical care in Japan is cold and impersonal. I'm looking for new approaches to improving care by improving the clinical environment."

Reducing patient stress and improving the examination experience

Every healthcare professional knows that no one likes to go to the hospital. The CT lab at Tokyo Metropolitan Geriatric Medical Center is no exception: almost everyone who comes to the facility feels stressed about what's going to happen to them. The medical staff have noticed this particularly in patients who are not Japanese and who have dementia. In several cases, patients have become confused and have panicked, which raised their heart rate and made it hard to get accurate CT scanning results. Yasushi Unno, Chief Technician, Radiology Department says, "We've tried many different ways to improve the patient's experience. One approach was to paint the walls and test equipment so they're not so blank, cold, and intimidating. But it didn't achieve the effects we hoped for. Even if patients were put at ease when they enter the room, as soon as they lay down and their eyes turned upward, the effect was gone. "The ceiling isn't painted," they pointed out.

"We wanted patients to relax during their examination so we could get acceptable results. At the same time, we wanted to reduce the burden on our staff," says Dr. Keigo Shimoji, Manager, Radiology Department. "It was then that we were introduced to Ambient Experience, and we recognized that this could help us create the ideal scanning environment we were looking for."





Dr. Keigo Shimoji, Department Chief, and Yasushi Unno, Chief Technician of the Tokyo Metropolitan Geriatric Medical Center's Radiology Department

" It's made it easier to break through psychological barriers that technology alone can't overcome."

> Mami Tokuhara, Nursing Department Tokyo Metropolitan Geriatric Medical Center

Creating a sense of togetherness

The Ambient Experience solution and the new Philips CT Iqon scanner were installed quickly and smoothly.
All the medical staff are glad to have the new system and are actively using it.

People love the simple touchscreen controls. Nurse Mami Tokuhara says, "It's our job to stay by patients' sides and build trust. That's a challenge that medical technology alone cannot overcome. The Ambient Experience themes help us immediately connect with them." Nurse Aino Yamazaki says, "Patients relax when they look at the selected theme, which makes the procedure go a lot more smoothly." Patients like it too: one patient said, 'I actually look forward to CT scans now.' The best part, though, was when a patient who had been to the CT lab many times but had never smiled or said a word suddenly asked, 'Are these pictures part of the examination?' That created a sense of togetherness between us," Nurse Yamazaki says, "Since then, that patient smiles and talks to me when we pass each other in the hall. It's a great feeling."



Staff use smartphone-style touchscreen controls to choose themes. Dynamic lighting, wall projection, ceiling displays and sound create a relaxing environment



This will be an indispensable tool in every examination room

The nurses in the CT lab have to create a feeling of trust between patients and radiographers as quickly as possible. They feel that Ambient Experience plays a big part in that process. "It's made it easier to break through psychological barriers that technology alone can't overcome," says Nurse Tokuhara. "It also fosters communication between staff by giving us things to talk about, like who likes which themes or who chooses the theme for the day. It's become an indispensable tool in our examination room." The staff are looking forward to getting more images of flowers. Nurse Yamazaki says, "We'd like to be able to show pictures of cherry blossoms to inpatients who can't see the real flowers and encourage them to get better so that next year, they can go see the flowers for themselves."

New features will help bring more patients in

Ambient Experience has many other benefits besides bringing staff and patients closer together. Once staff connect with patients by talking about the themes, it's easier to tell when patients become mentally disoriented. It's also easier for older patients who are reluctant to complain to tell staff when they're feeling sick. "Seeing these effects got me thinking," Yutaka Suzuki, Section Chief, Radiology Department. "Could we use the value added from Ambient Experience to improve patient visit rates? For example, could it motivate people to come in for emotionally charged breast cancer screenings? My personal view is that the system has this potential. That's why I look forward to further advances in Ambient Experience's capabilities."

Suzuki has already requested a new feature to display examination instructions in multiple languages. Not only would this help patients who don't speak Japanese relax, it would reduce the burden on staff and could lead to more reliable examinations. Suzuki adds, "I'd like the system to include themes depicting Japan's four seasons. For long-term inpatients who have few chances to get out into nature, this could provide real entertainment value. With Ambient Experience, I feel like we can really make the CT examination experience easier on patients and more satisfying for staff."



Mami Tokuhara and Aino Yamazaki of the Tokyo Metropolitan Geriatric Medical Center's Nursing Department

