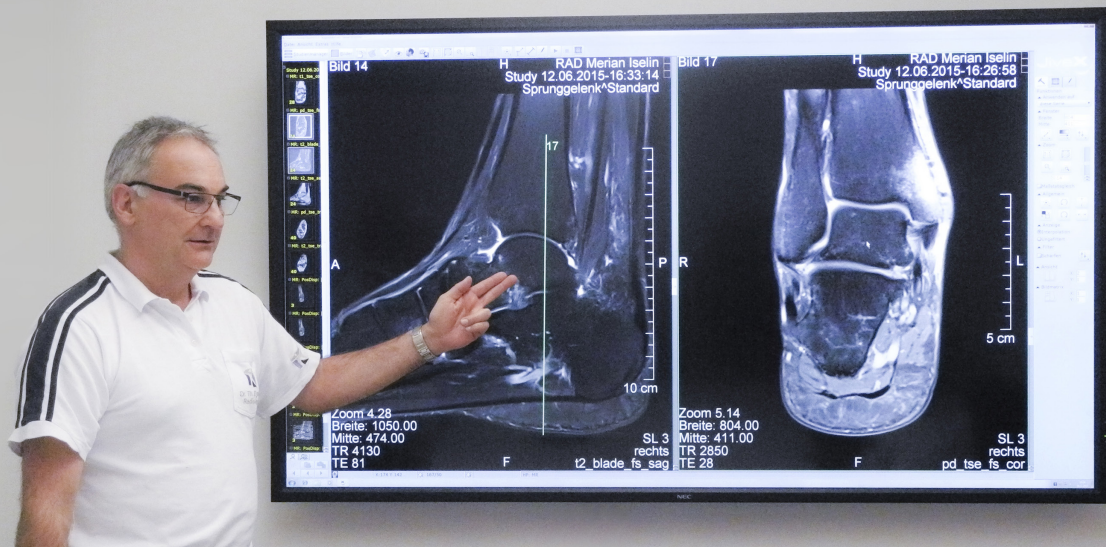


NEC Display Solutions Customer Installation Healthcare

Merian Iselin Hospital

UHD 8MP Displays deliver extreme detail & patient confidence



Competition between medical facilities and hospitals is growing. In an environment such as this, the Merian Iselin Hospital for Orthopaedics and Surgery consistently focuses on high quality and best service in the care of its patients and equally with its physicians to differentiate itself.

SITE INFORMATION

Sector

- Healthcare

Client information

- Merian Iselin Hospital for Orthopaedics and Surgery
Basel / Switzerland
www.merianiselin.ch

Partner information

- Visus PACS (Picture Archiving and Communication System)
image management system JiveX
www.visus.com
- medavis RIS (Radiologie Informations System) Workflow
Management
www.medavis.com

Installed

- July 2015

EQUIPMENT AND BENEFITS

Display equipment

- MultiSync® X841UHD
- MultiSync® MD322C8



The Challenge

The Merian Iselin Hospital for Orthopaedics and Surgery is one of three large private hospitals in Basel, Switzerland and nationwide one of the houses with the largest number of surgical interventions in knee and hip surgery. The most important centre piece of the hospital is the radiology department, which creates imaging reports for both external and in-house physicians. More than 20,000 radiological examinations were carried out here in 2014.

In order to strengthen and further expand this leading position, it is important, according to Dr. med. Thomas Egelhof, chief physician for radiology, "to create further confidence - on the one hand with the patients, but on the other hand also with the external and referring physicians". Quality and expertise are the most important criteria for success in the medical field, where the focus is on the health of each individual.

This trust in quality was also reinforced by the certification according to ISO 9001 achieved in 2014. For this purpose, the hospital reviewed all work processes using quality management, to work in an even better and more efficient manner.

Efficient communication and discussion between patients and cooperating physicians is crucial for success. "Modern medicine is team work", says Dr. Egelhof. "It works best, if you can assess and discuss the examination



The diagonal dimensions of more than two metres allow several images to be shown alongside each other for direct comparison. The sheer size permits groups of up to 10 people to gather in front of the screen with unrestricted views. Thanks to the high display brightness, images remain stable regardless of the ambient room lighting. Whilst in operation, the monitor does not emit any audible sound, therefore concentration is not impaired, even in larger groups or sensitive meeting situations.

Thanks to the wide variety of connection options, several signal and cable types allow a flexible choice of playback sources. Picture Archiving and Communication System (PACS) software permits the communication of findings and distributes image data to the connected peripheral devices. The monitor supports the Visus viewer used and can thus be integrated in the solution without any problems. The Radiology Information System (RIS) from medavis is used for the workflow management.

results together with the doctors involved and the patients. For this purpose, the image display must be so precise that from the different viewing angles and distances in the meeting room good conditions are found, to carry out and obtain a profound analysis.”

Common diagnostic monitors were not suitable for this purpose, as they are far too small for larger groups of people to gather around. Previously used large-format display technologies offered only lower resolutions and therefore could not display detail with the precision nor colour nuances required. The hospital was seeking a new solution, one which would meet their requirements for resolution, colour quality and signal processing in UHD quality, whilst impressing on patients and physicians that they are a meticulous care provider.

The Result

“The Merian Iselin Hospital offers its customers and patients best service and highest quality. Therefore, the requirements which the hospital imposes on itself, also apply to the technical equipment”, says Christoph Kreutner, Technical and IT Manager of the hospital. “The discussion of the x-rays is now possible for the first time at the highest level, as the image can now be shown in the same quality and grade as on the diagnostic monitor.”



“A good diagnostic monitor says more than 1000 diagnostic words”, says Dr. Egelhof. “With the use of the new meeting room resolution, the diagnostic work could be visualised and thus the credibility of the findings could be increased, as the lesions are shown in a better and more precise manner.” This leads to less uncertainty for all involved and increases productivity both in radiology itself as well as referring physicians and other incorporated medical specialisations.

The Solution

The Merian Iselin Hospital selected the NEC MultiSync® X841UHD 8MP monitor featuring a screen diagonal of more than two metres and DICOM mode for clinical review of x-ray images for use in the MDT room. An NEC MultiSync MD322C8, with the same resolution as the large-format display, is used as an input monitor for the radiologists.

The extreme detail achieved with the UHD resolution display permits more precise diagnoses and allows extremely low viewing distances. Medical image data is reproduced correctly thanks to precise calibration and DICOM mode. *“Black is really shown as black, just like white is really white on the screen”,* says Dr. Egelhof with delight. A semi-matt surface restricts the effect of reflections on the screen.