

## User Report

### *Computer and display solutions contribute to the improved patient care at the clinics Dr. Erler*

The clinics Dr. Erler in Nuremberg are a professional association special station and a hospital for orthopedics and accident / surgery with a total of five clinics and other departments. The 244-bed facility specializes in musculoskeletal trauma, hip and knee arthroplasty, laser technology, micro-surgery, anesthesiology and intensive therapy as well as surgical spine therapy and hand surgery using modern techniques such as laser technology and 3D navigation. Every year about 30,000 outpatients and 8,000 inpatients are taken care of and more than 39,500 radiological examinations are made. The eight operating rooms are working pretty to full capacity with about 8,000 operations.

The radiological focus of the house is in the conventional X-ray. For CT and MR images, the clinic utilizes a practice, which has rented rooms in the house. These images are transmitted via an interface in the in-house PACS and are therefore always available to all participating therapists. A special feature of the clinic is the legal status as gGmbH (non-profit limited liability company) of the sole shareholder Dr.-Fritz-Erler Foundation. "This means that the hospitals must bear themselves, there is no financial aid," said the managing director Markus Stark. To ensure this, the hospitals have introduced the Lean Management. "The aim is, on one hand to increase the productivity and quality of medical care, e.g., by streamlining the processes, and on the other hand to also reduce costs." said Stark. As an important prerequisite the house sees the location-independent permanent availability of all previous images including radiographs and findings. In 2008, the hospitals Dr. Erler have decided for the introduction of a digital image data communication and archiving systems (PACS), for JiveX of VISUS, to ensure this.



*Clinics Dr. Erler in Nuremberg*



**Markus Stark**  
Managing director  
The clinics  
Dr. Erler in  
Nuremberg

## ***Quality and reliability of display solutions***

“For a safe diagnosis, however, a high-quality representation of the X-rays, especially in the OR, is necessary. Finally, the front end needs to implement what the PACS is providing, i.e., only with a high quality X-ray we can perform high-quality operations,” says Dr. Klaus-Dieter Haselhuhn, head of the department of trauma surgery and medical director. The monitor and display solution was part of the PACS tendering in which VISUS has acted as general contractor. Although the clinics were not directly involved in the selection, certain requirements existed for the monitors, as Dr. Hazel describes: “Primarily for us it was about quality and reliability. If a display system fails the OR comes to a stop, which is neither acceptable for the patient nor from the qualitative and economic aspects.

High availability and reliability needed to be ensured by the agreed service levels. Of course, the good value for money was also the decisive factor.” For VISUS TOTOKU monitors are the first choice in the radiological field. Also with the sales partner Rein EDV the Bochum IT service provider has always made good experiences. An important advantage: In addition to diagnostic reporting and viewing monitors the Willich company offers with its especially developed and produced VIEWMEDIC products also powerful computer and monitor solutions for the OR, as well as matching accessories. In the special clinic ten TOTOKU finding displays of the type ME 355i2 with a resolution of three megapixels have been installed for radiological findings. In addition to stability and good detail resolution TOTOKU is also convincing in economic terms: The guarantee for five years finding for the i2-models assure the operator a residual brightness according to DIN V 6868-57 at the end of the warranty period respectively a minimum service life of 30,000 hours. This covers a use of 16 hours per working day for the entire 5 years and offers a high investment protection.

**Dr. Klaus-Dieter Haselhuhn**  
Head of the department of trauma surgery and medical director



"The heart of our hospital is the operating room, there the money is earned" Stark, who is also responsible in the clinics for the IT, points out. Here a total of eight sealed 21" LCD PC (VARIO 21C) are used, one per room. To meet the high demands of hygiene-sensitive environment, the clinics are working with special keyboards and mice, the Medigenic set. The computer solution is complete with a total of eleven hygienically packed 21" displays (VARIO 21D). "In addition to the display quality and performance a high degree of stability is required, as the displays and panel PCs are in operation every day for at least twelve hours." Also the equipment must survive frequent disinfections without damage.

### ***Individual solutions for improved patient care***

Speaking about Rein EDV, Stark emphasizes the very high customer focus and service quality: "We have always felt taken seriously and looked after very well as a customer. In addition, Rein has proven to be very flexible in the implementation of our individual requirements. Last but not least that is why all the users of the installed solutions are very satisfied." Even the monitors in the operating room offer the doctor a lot more possibilities than in conventional times, as Dr. Hazel says: "PACS functionalities such as zooming, especially with the section diagram method, provide a much more efficient, because detailed imaging in the operating room. This will at last also increase the quality of patient care."

But the aspect of cost is also represented: the software VIEW-MEDIC Web QA automatically monitors the necessary inspection and continuous constancy tests according to DIN V 6868-57. Since this is a web-based solution it requires no installation on the workstations. For operation it only requires an Internet browser. "This saves us an elaborate workforce," says Stark. The solution centrally manages all the installed equipment, a task scheduler reminds of upcoming constancy exams. Reports and statistics can easily be created as PDF, which clearly facilitates the documentation to the Medical Association. "The central administration implies a considerable work assistance and time saving, especially in the performance of daily grey scale reports," says Stark.



*Clinics Dr. Erler in Nuremberg*

If the solution is maintained centrally, modified test routines have to be entered only once and can then be applied to all connected monitors. This eliminates the time consuming installation of updates and a constant and automatic adjustment to the current regulations is guaranteed. "The quality of the overall solution has done more than impressed us. We would use TOTOKU and MeDiSol again and again", summarizes Stark the lessons learned. Referring physicians' communication should then be pushed on via DICOM Mail.



***Clinics Dr. Erler in Nuremberg***

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