



Multimedia, Interactive Communication in the OR



ORICS transmits surgeries live and in television quality with network support

The biomedical manufacturer BERCHTOLD is one of the technological pioneers in telemedicine. The Tuttlingen-based company integrated a ChromoVision camera in a CHROMOPHARE surgical light in 1988. This innovation allowed a surgery to be transmitted to a monitor in parallel. Then in 2003, ORICS was the first device for telemedicine video transmission on the market. Now users can also record and save images. "The engineers at BERCHTOLD have been continually developing the next generation of ORICS software since 2006," explained Klaus Hammerl, Product Manager at the Tuttlingen-based company. Today, ORICS, the Operating Room Information and Communication System, can display surgeries live and in television quality on various media.

What is ORICS?

An interactive communication system, ORICS transmits the surgical procedure to monitors in the operating theatre as well as PCs and screens located outside of the surgical area. Video images originate from an OR camera or other analogue recording devices. Images taken by an endoscopy camera are suitable as well. The surgeon can receive visual on-screen instructions from the head of surgery or another specialist located outside of the operating theatre. In case of unexpected findings, the OR team can also seek advice from colleagues via headsets. Furthermore, these findings can be discussed post-surgery with experts, colleagues or students, as all images are stored digitally. Fields of application for the ORICS communication system are, above all, for surgical instructional purposes and documentation at university hospitals.

ORICS - the Future

Today's pressure for lower cost presents great challenges to clinic management decision-makers and buyers. They should be saving money but at the same time upholding the rising standards for quality and efficiency for the biomedical products being used. Moreover, hospitals are seeing a growing need for specialisation and consultation. Today's trends in telemedicine show that hospitals are striving for ever greater internal and external networking. As a result, clinics are increasingly digitising their work processes and documentation. With its tele-consulting options, ORICS is the wave of the future: for example, a surgeon can set up more efficient workflows. From his office, he can check into the OR with just a mouse-click and be sure that the

patient has been prepared for surgery. Often, a surgeon is called in prematurely or with a delay. During the surgery, consulting with a supervisor or expert is possible without any of these people having to leave the office and undergo preparations to enter the OR. If someone's presence is required, then she can decide this on a case-by-case basis. "But the opposite scenario also arises," explains Hammerl. "The specialist is present at the procedure, in the OR, and questions come from the outside. The user can answer via headset without having to leave the OR, or the students do not have to be inside the OR." ORICS also offers networking with laptops or PDAs via a wireless LAN connection. This lets experts be reached anywhere and anytime, at the hospital or while they're traveling. The cost for ORICS is limited to one control unit per OR and one software installation per user on a PC.

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