

Leading international trauma hospital looks to technology to transform patient care

Unfallkrankenhaus Berlin is one of the world's leading trauma care hospitals, renowned for its stroke, burn, and spinal cord treatment, in addition to its tele-medicine and tele-neurology practices. While the hospital is at the top of its game, a culture of relentless improvement powers its care ethos. Looking to make great care even better, innovative clinicians chose Microsoft Surface Hub to help them meet new challenges in clinical collaboration, patient processing, virtual care, professional training, and doctor—patient communication.

Unfallkrankenhaus Berlin (Emergency Hospital Berlin) www.ukb.de 1,000+ employees Germany Healthcare







Germany's Unfallkrankenhaus Berlin is recognized internationally for excellence in trauma care, telemedicine, and tele-radiology. The hospital treats more than 100,000 patients each year.

Making great collaboration even better

When someone has a stroke in a rural location, local physicians may need to call on an expert in an urban center to ensure the best patient outcome. Making the right choices requires in-the-moment, collaborative decision-making backed by ongoing professional training.

One of the world's leading emergency hospitals, Unfallkrankenhaus Berlin (UKB), knows this challenge intimately. Opened in 1997, UKB is a maximum-care trauma hospital that serves more than 100,000 patients every year while leading research and training for clinicians across Germany.

In its pursuit of better care, UKB has focused on digital transformation in three areas: facilitating real-time collaboration among clinicians, strengthening training, and improving doctor–patient communication.

The hospital's radiology practice is one example of transformative collaboration. Rural physicians often have access to life-saving equipment, but may lack the specialized training to best assess patient images. To be effective, they need to collaborate with experts at UKB.

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 Professor Dr. Sven Mutze, Institute Director for the Department of Radiology and Neuroradiology, Unfallkrankenhaus Berlin



Professor Dr. Sven Mutze and his colleagues from UKB knew there was a better way to collaborate. They got a glimpse of it when they first saw Microsoft Surface Hub and began to explore its capabilities. "We'd never seen anything like this before. The technical possibilities and the performance were very impressive," says Dr. Mutze.

For Mutze, the Institute Director for the Department of Radiology and Neuroradiology, Surface Hub makes collaboration possible. "Radiology works best if you discuss the images interactively." With Surface Hub, clinicians can connect via Skype for Business on dual 1080p cameras with a single click, saving critical time when connecting with remote colleagues and allowing them to interact as if they were in the same room.

Mutze recognizes that continued education is central to the innovative care that UKB provides. "We have to teach the physicians in the smaller hospitals and techs who perform examinations. And it's very important to show them once or twice a week how they can do their work better."

With the inclusion of large-screen, easy-to-use applications like Surface Hub, students, clinicians, and faculty can meet for ongoing training. People can use multiple personal devices alongside Surface Hub, which makes it easier to connect with remote specialists to extend teaching and learning far beyond a single hospital.

Surface Hub helps the hospital overcome another challenge: doctor–patient communication. It can often be difficult for a neurologist to explain the nature of a problem to a patient, yet doing so makes for better care. "These are very complicated interventions," says Dr. Mutze. "Without sophisticated visual aids, it's not so easy to explain what we are doing."

Clinical collaboration. Clinician training. Patient communication. These are age-old healthcare challenges that demand integrated partnerships and simple-but-breakthrough technology. Too often, hospitals solve these challenges with patchwork solutions that create stress for IT specialists and result in increased capital expenditures and inefficient operations.

UKB has begun to explore how Surface Hub can help address the array of challenges its groups must solve today. In 2016, UKB purchased two Surface Hub devices to integrate and test before expanding deployment. "Surface Hub was so modern and so impressive that we wanted to find a way to use it to support our most pressing care challenges," says Dr. Mutze.



More than a device for getting work done

Care coordination, critical decision-making, and engaging, productive meetings have always been central to a healthcare facility, but with integrated computing platforms, hospitals are finding new ways to unlock the power of their teams.

Surface Hub is a large-screen, high-definition touch device that provides integrated videoconferencing and runs native Windows 10



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 Professor Dr. Sven Mutze, Institute Director for the Department of Radiology and Neuroradiology, Unfallkrankenhaus Berlin applications, like Skype for Business, the Microsoft Edge browser, and a digital whiteboard based on Microsoft OneNote.

The UKB team can begin to address clinical collaboration, training, and care coordination quickly, because Surface Hub:

- Runs Windows 10 universal applications natively without requiring authentication or needing another device to power it
- Offers the flexibility to connect individual devices
- Runs split-screen office and care-specific applications

Mutze sees Surface Hub supplanting dated videoconferencing technology. "We expect meetings to be much easier and more interactive with Surface Hub. That's a very promising scenario for us."

What does that scenario look like? Up to three people can write simultaneously, and remote participants can automatically see the whiteboard and add their own ideas.

Connections become effortless

Having embraced the shift toward collaboration that Surface Hub helps make possible, the UKB team anticipates improvement across departments and throughout its locations.

The radiologists that Mutze works with can be located anywhere in Germany, and as he points out, "We want to have this collaboration with the smaller hospitals." Because videoconferencing is so easy with Surface Hub, those connections can become effortless.

Patient care gets better, too. It's hard for a person to face the prospect of brain surgery. Lacking clarity about the process makes it harder still. Radiologists can use Surface Hub to show patients dynamic images of their brains, which they and their doctors can review and discuss.

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New areas of impact

Surface Hub has sparked interest across the hospital network of IT leaders and clinicians and could offer solutions to challenges they never anticipated addressing, such as patient processing, hospital administration, surgery ward control, and more.

In rehab programs, for example, Mutze envisions patients and healthcare professionals using Surface Hub to gain a better understanding of treatment plans and become more engaged partners in their own recovery.

Surface Hub will also have a place in emergency rooms, where it can facilitate the flow of patients through their courses of treatment.

Smaller hospitals, too, can better meet their IT challenges by adopting Surface Hub devices because they will no longer need the level of inhouse tech expertise that their current systems require.

UKB is looking forward to the near future where an unprecedented level of collaboration and care will be possible.

Microsoft Surface Hub

Surface Hub is a collaboration device designed to unlock the power of the group, powered by Microsoft software and services like Windows 10, OneNote, and Skype for Business.

For more information about Microsoft Surface Hub, go to: www.microsoft.com/surfacehub

