Doctor’s Use of Video Conferencing Leads to Improved Patient Care

Creating a cross-location and cross-sector video communication platform with Avaya Equinox™

Video is improving patient care

The regional clinic association of St. Josefs-Hospital Wiesbaden includes St. Josefs-Hospital Rheingau and Otto-Fricke Hospital in Bad Schwalbach. To ensure excellent patient care in the future, while facing increasing numbers of patients and rising health care costs, the association is pursuing new, innovative paths in technology. With Avaya Equinox™ videoconferencing platform, the collaboration between the sites has been simplified and strengthened, especially with daily case discussions. The group also plans to use the platform to involve external parties in the future.

1 January 2016: St. Josef’s Hospital Rheingau in Rüdesheim became a subsidiary of St. Josefs-Hospital Wiesbaden GmbH (JoHo). The company maintains the only non-profit, Catholic emergency hospitals in the region of the Wiesbaden / Rheingau-Taunus district. Thanks to its Christian and patient-oriented culture, modern equipment and high quality standards, the hospital network, with its approximately 2,000 employees, has earned an outstanding reputation. “To ensure the quality of our services and to constantly provide our patients with added value, we are relying on new, innovative technologies.”
We are thinking not only of the internal knowledge and information transfer within our hospital network, but also of the coordinated treatment of patients with other service providers beyond sector boundaries,” says Martin Bosch, CEO of St. Josefs-Hospital Wiesbaden GmbH. “Rural regions in particular are characterized by a growing lack of specialists - with increasing patient numbers. To ensure high quality patient care in the future, the resources of the existing medical and nursing professionals must be put to best use,” adds Jens Gabriel, medical director of St. Josefs-Hospital Rheingau in Rüdesheim.

St. Josefs-Hospital Rheingau in Rüdesheim is a hospital for basic and standard care. St. Josefs-Hospital Wiesbaden in contrast is an emergency hospital focusing on specialized care with broad specializations. Otto-Fricke Hospital in Bad Schwalbach in turn focuses on geriatric emergency treatment. “It was clear from the outset that we in patient care needed to intensify the level of collaboration and interaction between medical professionals within the association. That was our motivation to look for an appropriate technology solution,” explains CEO Martin Bosch. Video conferencing provides the possibility of integrating patient data and vital data of all kinds in real time, which is an important advantage. There were a number of technology solutions considered in early 2016 and the Avaya Equinox™ Video was chosen.

The Avaya Equinox™ Video solution prevailed in terms of security and reliability. “The absolute strength of the Avaya solution as a reliable connection in terms of picture, sound and comprehensiveness, over any distance is key. It also provides maximum security, since we are dealing with confidential patient data,” says Thomas Gorniok, IT manager at JoHo Wiesbaden. Gorniok also values the existing function scope: “We did not want island solutions, but a future-proof, open platform that is hosted at our site and allows us to build up many of the conceivable video

Challenges

- The need for doctors located in different locations to effectively confer on patient care in real time
- With a shortage of qualified specialists in rural areas, the ability to provide high quality care for all patients, regardless of location
- The time doctors spent traveling to meet with other specialists was taking away from caring for patients
scenarios for health care little by little.” Due to these advantages, the implementation of Avaya Equinox™ Video was launched in March 2016. Also on board was the implementation partner euromicron. “We chose euromicron because of its major project experience, but also because of its proximity to us and its direct proximity to Avaya in Frankfurt. Euromicron took care of the entire technical implementation and the coordination with our IT departments locally. Everything worked out very well.” says Gorniok.

**More Time for Patients**

In an initial step, the Wiesbaden site was equipped with an Avaya XT 5000 video room system, Rudesheim with an XT 4300 video room system, and the site in Bad Schwalbach is connected via Avaya Equinox™ Video running on a tablet device—Avaya Elite 6100 MCU serves as the platform. “Currently, we use the solution with inpatient applications, from clinic to clinic. Our doctors are able to easily support each other, whether in daily case discussions, in our weekly tumor board or when a precarious emergency case is admitted,” is how Gabriel explains the current usage.

Video conferencing saves time and intensifies the coordination between the sites. During the discussion of cases, doctors can view and discuss data and imagery together, such as X-rays, MRIs or lab data. Without long travel times, experts from different disciplines are able to connect. In addition, the hospital network involves the assistant doctors in the conferences. “The learning curve is great, not only for the young doctors,” says Dr. Michael Rössler, Chief Physician for General and Emergency Surgery at JoHo Rheingau. “Something new in the health care sector is our tumor board by video conference,” says Senior Physician Dr. Carsten Hartig from the Oncology Department of St. Josefs-Hospital Wiesbaden. “Here the clinical history and data from cancer patients is presented by each attending physician and treatment decisions are made by a panel of experts.”

But St. Josefs-Hospital Wiesbaden with its subsidiary hospitals is thinking much further ahead. “Our ultimate goal is to actively involve other health care providers as well via video in the treatment of patients, such as medical supply stores, nursing homes or the emergency practices of the Association of Statutory Health Insurance Physicians. Only then will video technology reach its full potential,” said Jens Gabriel. Currently the hospital association wants to jointly establish video consultations with private physicians, and thus counter the issue of the lack of rural doctors. To achieve this, organizational issues have to be clarified, such as doctors’ practices being able to sign up for the required consultation at the clinics. It is also essential for meaningful medical diagnoses to transmit vital patient data in real time. “For example, with our partner GETEMED, via a small measuring instrument that is placed on the patient’s chest, we are able to feed an ECG into the video visit,” says Gabriel. “We are therefore also drawing on recent developments, because in the context of e-health law, in 2017 practicing physicians should be able to address this type of treatment using statutory health insurance.”

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**Value Created**

- The three sites of the regional hospital grouping are connected seamlessly via the Avaya Equinox™ Video conferencing platform.
- The constant exchange between sites ensures the high quality of patient care.
- The solution saves resources. The tumor board’s video meetings alone save approximately one day’s worth of travel time.
- The video solution can help to compensate for the lack of specialists in rural areas.
- Innovative technology enables new organizational forms of medical treatment.
- Different service providers can be integrated effectively.

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Integrating Other Service Providers

There are currently many scenarios such as patient hours, obtaining a second medical opinion, preliminary talks for operations, video connection of the ORs, complex emergency scenarios such as integrating the control centers upon admission of emergency patients (IVENA), field cameras in ambulances or planning inpatient measures which can benefit from this new platform. Innovative video technology makes a variety of entirely new organizational forms of medical treatment possible. “With the video communication platform from Avaya, we have decisively strengthened collaboration within our hospital. We can also integrate other health care providers effectively. In this way we are helping to guarantee first-class patient care for the future too,” CEO Martin Bosch says with conviction.

At A Glance

St. Josefs-Hospital Rhinegau in Rudesheim, alongside Otto Fricke Hospital Bad Schwalbach, is part of a regional hospital group under the aegis of St. Josefs-Hospital Wiesbaden. The group wants to permanently ensure the quality of services at its three locations, in times of increasing patient numbers and an increasing shortage of skilled doctors and nurses.

The doctors in Wiesbaden, Rüdesheim and Bad Schwalbach now hold their daily case discussions and the weekly tumor board via the Avaya Equinox™ Video conferencing platform. They can view, discuss and exchange patient data in real time. Traveling between sites is no longer necessary and the time saved benefits patient care.

The group is planning on expanding video communication with other innovative applications, and involving important external service providers beyond its own borders.

“With the video communication platform from Avaya, we have decisively strengthened collaboration within our hospital. We can also integrate other health care providers effectively, which helps to ensure first-class patient care in the future.”

– Martin Bosch, CEO, St. Josefs-Hospital Wiesbaden GmbH
Solutions

- Avaya XT 5000 (large rooms), XT 4300 (small rooms) and XT 240 (individual workstations)
- Avaya Elite 6100 MCU for virtual conference rooms
- Avaya PathFinder Firewall Traversal
- Avaya Equinox™ Video

About the Association of St. Josefs-Hospital Wiesbaden

St. Josefs-Hospital Wiesbaden is a modern, Catholic emergency hospital for specialized care and has approximately 500 beds with twelve disciplines. Here more than 23,000 inpatients are cared for annually. Since 2012 Otto Fricke Hospital, Bad Schwalbach, Specialist Clinic for Geriatrics and Conservative Orthopedics, has been a subsidiary of St. Josefs-Hospital in Wiesbaden. Since January 1, 2016, St. Josefs-Hospital Rheingau, a Catholic hospital providing basic, standard and emergency care based in Rudesheim, has also belonged to the association. With its approximately 300 employees and 150 beds, it ensures steady, high quality health care on site. The range of services offered includes the specialist disciplines of internal medicine and general and trauma surgery, supplemented by the departments of geriatrics, anesthesia and intensive care, foot surgery, plastic and hand surgery, gynecology and radiology. More information can be found at www.joho.de, www.joho-rheingau.de and www.otto-fricke-krankenhaus.de.

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