




A Healthy Solution: Buchholz/Winsen Hospitals Set the Course for Digitalisation



www.krankenhaus-buchholz.de 

www.krankenhaus-winsen.de 

High cost and competitive pressure, shortage of skilled workers, innovation bottleneck: the German health care system is ailing. Digitalisation could solve many problems, but progress in the inpatient sector is slow. Regardless of this, the hospitals Buchholz and Winsen gGmbH, in Germany, are putting their heads together and with a geo-redundant communication network based on the Avaya UCaaS/ Avaya Aura platform, they are creating the foundation for efficient collaboration, flexible workplace models and satisfied patients and employees. These are important aspects for creating a modern basis for digital networking.

As in many industries, the pandemic fuelled digital transformation in the healthcare sector. Nevertheless, many hospitals continue to suffer from outdated IT infrastructures and insufficient networking. The Hospital Future Act is now intended to put the inpatient sector on the road to recovery and to further advance digital hospital solutions through generous financial injections. The acute hospitals in Buchholz and Winsen also want to benefit from this. "The aim is to make the information technology equipment of the two hospitals fit for the future and at the same time to make the administration of the two sites more efficient," explains Jan Paul, deputy IT manager at Krankenhäuser Buchholz und Winsen gGmbH.



In order to implement innovative hospital processes, a future-oriented infrastructure is needed. Avaya Aura is the tool of choice for us.”

—**Jan Paul**, Deputy IT Manager, Buchholz and Winsen gGmbH Hospitals

Two important aspects in view of high demands are process quality and increasing cost pressure. To lay the foundation for this, Jan Paul and the team of the IT/Organisation department worked at full speed to bring the information and telecommunications infrastructure of the hospitals up-to-date.

Fail-safe Communications Solutions

A decisive milestone on this journey: the replacement of the ageing communication infrastructure in summer 2021. "After all, perfectly functioning telephony is elementary for hospital operations," Paul emphasises. Emergency rooms and outpatient clinics must be accessible around the clock, the exchange between doctors, nursing staff and administration must function reliably. In view of the increasing demands on availability and operational reliability, however, the hospitals' outdated telecommunications landscape was increasingly reaching its limits. In addition, the discontinuation of ISDN necessitated a new telecommunication solution. "Thanks to Avaya, this went smoothly," Paul looks back. Today, the hospital association operates a highly available IP communication solution based on the Avaya Aura unified communications platform (UC) in its data centres in Buchholz and Winsen. At the core of the solution

are two geo-redundant, virtualised servers that are connected to the Telekom network via SIP trunking - and thus offer maximum fail-safety.

"From the very beginning, we placed great emphasis on developing a highly available geo-redundancy concept," says the deputy IT manager. "Avaya provided us with excellent support during the implementation, put the concept through its paces and documented and prepared all conceivable failure scenarios enormously well." The hospital association thus has solid proof that the communication landscape is adequately protected and thus meets the requirements of the IT Security Act.

Call Flows Relieve Employees

But the Avaya UCaaS solution scores not only with maximum reliability, it also opens up completely new communication and collaboration possibilities for the two hospitals. For example, automated call flows noticeably reduce the workload of the switchboard staff: "If, for example, calls were received for our outsourced radiology practice in the past, the colleagues had to answer and forward them manually. Today, this is fully automated," Jan Paul praises.

CHALLENGES

- Establish future-proof communication solution based on SIP technology
- Further develop service-oriented environment and entertainment for patients

VALUE CREATED

- Avaya UCaaS tools increase flexibility and employee satisfaction
- Geo-redundancy concept ensures high availability and operational reliability
- SIP technology creates the basis for innovative collaboration possibilities
- Delivering a service environment attracts patients from competitors

SOLUTION USED

- Avaya Aura
- Avaya Workplace Client
- Avaya Aura Media Server

Innovative Collaboration Makes Room for New Working Time or Home Office Models

Similar solutions are soon to be implemented for the departmental secretariats and administration. What's more, Avaya Workplace Client is causing a veritable storm of enthusiasm among the employees of both hospitals. No wonder, with the help of the SIP-based UC client they can conveniently start audio and video calls with the swipe of a finger, exchange information with colleagues via multimedia chat and view appointments and contact data regardless of location.

"Innovative working time or home office models can be implemented in no time at all via Avaya Workplace Client. This is a great help, especially in the times of the pandemic," says Paul. He and the IT department wouldn't want to be without the app, "It has established itself in no time at all and forms an indispensable basis for location-independent workplace models."

Prepared for Emergencies at All Times

Another advantage of the Avaya solution is the integrated MACS alarm server. In the event of a fire, for example, it automatically alerts the individual stations and thus accelerates the evacuation. But that's not all; with the help of the MACS server, in the event of a disaster or a mass casualty incident, specialists from the region can be alerted in no time at all.

And there is something else that distinguishes the new emergency call system of the acute clinics. It also functions as a cardiac and resuscitation alarm in the Buchholz and Winsen hospitals. In plain language, this means that in the event of life-threatening incidents on the hospital premises, the alarm can be triggered by pressing a single button on all DECT telephones of the resuscitation teams. They can see at a glance where they are needed and can be on site as quickly as possible. This saves time, which is crucial especially in the case of cardiovascular arrest or strokes because then, as we know, every minute counts.

The Avaya solution not only optimises internal communication it also delivers top-class service environment and thus gives hospitals an important competitive advantage. "When choosing a hospital, selective patients increasingly consider not only the treatment offered but also the surroundings," says Jan Paul. Accordingly, hospitals have to focus on the service concept and thus on the needs of the patients.

The supporting organisation has succeeded in this. Patients in the elective wards there now benefit from an extensive range of entertainment. Mobile terminals offer access to media libraries, online video libraries and a digital newsstand with daily newspapers, magazines, e-books and digital games.

Employee Experience Gains Importance

Improving the customer experience of patients is only one side of the coin, according to the deputy head of IT. In times of a shortage of skilled workers, a good employee experience is also important. "Employees have a certain expectation of internal hospital processes," he says. Nurses want to maintain digital patient files during rounds, doctors want to exchange information in digital tumour boards, for example. This is another reason why Paul has already set his sights on the next optimisation project. He is currently examining whether the existing stand-alone video conferencing system can be replaced by an IP-based solution, which would also allow external participants to be integrated into the video conferences.

Jan Paul sees the Buchholz and Winsen hospitals on the right track in terms of digitalisation, not least thanks to the communications solution from Avaya. "In order to implement innovative hospital processes, you need a future-oriented IT infrastructure. Avaya is the solution of choice for us," Paul emphasises. Now it is time to take further steps.



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— **Jan Paul**, Deputy IT Manager, Buchholz and Winsen gGmbH Hospitals





About the hospitals Buchholz and Winsen gemeinnützige gGmbH

The hospitals Buchholz and Winsen gemeinnützige gGmbH is the operating company of two economically successful acute hospitals and is one of the largest employers in the region. As academic teaching hospitals of the University of Hamburg, the two hospitals have almost 560 beds and treat around 32,000 inpatients and 80,000 outpatients annually. More than 1,800 employees ensure that everything runs smoothly in the 14 specialist departments, four centres, CPU and stroke unit as well as the administration. You can find further information at www.krankenhaus-buchholz.de and www.krankenhaus-winsen.de.

About Avaya

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Learn more at www.avaya.com.