

Care for the Clinic App

Typical hospital work is increasingly being carried out on smartphones and tablets. With the Cortado Server, GNH – Gesundheit Nordhessen (a provider of healthcare services in Germany's Northern Hesse region) retains control of its mobile applications and devices.

The head physician, who enters his or her report directly into the notebook (on the trolley) during rounds, has become a common picture. In the meantime, app technology in hospitals has taken a significant step forward. Using their smartphones, doctors can enter vital data directly into the hospital information system (HIS), orderlies receive delivery orders in a push process, there are apps for transmitting patients' meal requests, etc.... The range of applications would appear limitless. Due to patient data sensitivity, IT departments are required to centrally monitor and administer smartphones, tablets and the apps installed on them. GNH uses Cortado's mobile device management for this purpose.

The clinic network based in Kassel, Germany operates four acute hospitals, several smaller facilities and employs almost 600 doctors. Each of them also performs professional tasks via their smartphone and, in addition to telephone and e-mail, use apps such as the Cerner HIS, which has been in pilot use in GNH since the beginning of 2016.



Mirko Schäfer, infrastructure management team leader in the central IT department at GNH, knows the medical profession's preferences when it comes to using their smartphones: "If they have a period of quieter time during the night shift, they sometimes play around on their devices and possibly install private apps. In IT you then have your hands full trying to reset and reinstall the devices." Comprehensive patient data protection requires strict regulation of what the user may do and not do on their device, whether they mix private and professional telephone and app features for example.



Mirko Schäfer, infrastructure management team leader in the central IT department at GNH

Patient Data Protection

In addition to iPhones, iPad minis have been increasingly used in the hospital network for almost two years. They fit easily into a smock pocket. If the doctor accidentally takes home the device, which may also contain sensitive data, patient data protection is no longer guaranteed. At the same time, the number of apps and hospital workflow use cases is increasing. Responsibility for managing mobile devices was therefore transferred from the central building and technology division to the IT department at the end of 2016. Together with Cortado, they developed a concept for controlling and administering devices and the apps installed on them from a central location, developing profiles and settings taking into account the patient data protection requirements and the unique data retention periods in the healthcare system.

"Mobile device management is essential in hospitals"

"In light of the advances in IT technology, a hospital can no longer avoid mobile device management," said Dr. Henning Janssen, Head of IT at GNH. Every single device is inventoried in Cortado Server. The IT department can use it to centrally administer, lock, set up and remotely maintain iPhones and iPads. This ensures that data protection is guaranteed on every device and that every user only uses the apps that correspond to their job profile. "Of course, there are also onboard resources from Apple and Android," says Mirko Schäfer. "But this only works for a few devices, no longer for several hundred, as they will be in use here."



Dr. Henning Janssen, Head of IT at GNH

GNH which purchases new devices from its reseller, is a participant in Apple's Device Enrollment Program and operates an inhouse Apple-Store with healthcare-specific apps via the Volume Purchase Program. This means that a newly purchased device no longer needs to be set up with the required apps beforehand. The reseller receives the DEP number and remotely sets up the new device with the serial number, Apple ID and all personal settings of the user. As soon as the user unpacks the device and goes online for the first time, it automatically connects to Cortado Server, is registered and receives the basic settings as well as all the apps for which the user has permission to use.

HIS Delivers Vitals Directly to Smartphones

Using the Cerner app, doctors can view patient data stored on the hospital information system directly on their smartphone. It was initially installed on 50 devices on a trial basis in several wards in the clinic environment. While the required range of features is not fully complete, according to Cerner it will be expanded continuously. Temperature charts and other vital values saved in the HIS such as blood pressure, pulse, and medication plans can be viewed on smartphones. In addition, doctors can request x-ray images, adjust medication and initiate further tasks. Communication takes place via the HL7 protocol, which is widely used in the healthcare sector... long gone are the days of paperwork which was sent via pneumatic post.

Cortado Server also supports GNH in the field of teleradiology. Night shift radiologists often work from home where they can view x-ray images via their specially configured PCs and receive the patient data in advance by e-mail to their smartphones via a secure VPN connection. This integrated mail functionality provided by Cortado is according to Mirko Schäfer, a far smarter and faster process than if the radiologist first had to connect to his or her e-mail program in the hospital via a Citrix connection. This enables the radiologist to decide within a very short period of time thanks to the data available whether the patient should be x-rayed or not.

At a completely different level, colleagues in facilities management benefit from Cortado's mobile device management. Thanks to its mobile access to file resources, they can use their tablets to view maintenance plans, circuit diagrams and operating instructions which are all saved on their department's central drive – and all via Wi-Fi, or for those areas without Wi-Fi, via the integrated UMTS card.

Growth for Mobility Projects on the Horizon

Meanwhile, as Wi-Fi is being expanded within the clinic network, the possibilities for medical professionals to access the HIS from anywhere with their mobile devices is constantly increasing. Not just the Cerner app will therefore be rolled out further using Cortado Server. "We can no longer turn a blind eye to mobility projects, no matter from where they come," said Mirko Schäfer. This includes patient transport, which receives its orders via smartphones, apps such as Orgacard for ordering food and in the field of mobile geriatric care are in the starting blocks. With the latter, nursing staff can document the services they provided on site and, back at the head office, print them out

for the patient file (which still exists in paper form) directly from their mobile device using Cortado's integrated print feature.

According to Mirko Schäfer, the investment in mobile device management is already paid off as soon as a new device is purchased. "The license fee is €5 per month and user," he notes. "Just physically restarting a mobile device or deleting forbidden apps would result in costs higher than the license and thanks to Cortado's central maintenance feature, this is no longer necessary." The user license has another distinct advantage for the clinic group – the costs for mobile device management can easily be assigned to the investment budget and to individual cost centers and user groups.



ABOUT GESUNDHEIT NORDHESSEN HOLDING

Gesundheit Nordhessen Holding (GNH) bundles competencies in Germany's North Hesse region in order to offer high-quality medical and nursing care. GNH comprises four hospitals, outpatient medical care and rehabilitation facilities as well as senior citizens' residential facilities with outpatient care services. The GNH hospitals care for about 73,000 inpatients annually. The focus of the hospital group is Kassel Clinic which is the largest municipal hospital in the state of Hessen. In the surrounding area, hospitals in Bad Arolsen, Hofgeismar and Wolfhagen ensure care close to patients' place of residence. With over 4,800 employees and over 420 apprenticeships, GNH is one of the largest employers and provider of vocational training in the region. In cooperation with the University of Southampton, the Kassel School of Medicine (KSM) offers bilingual medical studies for around 30 students each year.



ABOUT CORTADO MOBILE SOLUTIONS

Cortado Mobile Solutions creates enterprise mobility and file sharing solutions for companies, teams and freelancers. Whether on premises or from the cloud – Cortado solutions consistently focus on improving the user's mobile ability to perform. At the same time, the security requirements of companies are of the highest priority. Cortado Mobile Solutions follows the philosophy that the combination of working with native apps and the use of operating systems' own security architecture brings the highest levels of user acceptance.

An important mainstay for the company is its on-premises solution, Cortado Server. It is a unique enterprise mobility solution that combines the easy, secure management of mobile devices and apps with true mobile productivity. Cortado Cloud, the cloud variant of Cortado Server, enables mobile work without requiring installation or operation of its own server landscape. The portfolio of Cortado is completed by Teamplace – cloud storage for teams. It is available to private users as well as companies, teams, and freelancers who easily store, share, and collaborate on files thanks to Teamplace.

Cortado solutions are developed and tested at its headquarters in Berlin. In addition to the highly qualified consultants in Germany, we also have experts at our branch offices in the USA, UK, Australia and Japan ensuring availability and support for all our global customers.

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