MOBILE ACCESS TO THE HIS FOR THE KNAPPSCHAFT HOSPITAL IN BOTTROP

Modern, paperless documentation with the iMedOne® Mobile app at the patient's bedside

To provide patients with better care and to be more competitive, hospitals are increasingly turning to digitization. The Knappschaft Hospital in Bottrop has been using the iMedOne® hospital information system (HIS) to digitally record and archive data for the last nine years. To enable doctors and care staff to use the system's benefits anywhere in the facility, the hospital has opted to use the iMedOne® Mobile app, distributed by Telekom Healthcare Solutions. An iPad is used at the patient's bedside to manage and document treatment in the HIS. Diagnostics are requested from service centers, and medication and therapy are prescribed. As a result, the high-performance app has made hospital trolleys and paper-based archives largely superfluous at the Knappschaft Hospital in Bottrop. Seven other hospitals with which the Knappschaft is involved are already working hard to introduce the app.

AT A GLANCE

- An intuitive app for mobile access to the HIS
- Almost paperless documentation saves time and improves quality
- Camera and dictation functions
- Custom filter settings enable simple task management
- Digital inquiries, sending jobs to service facilities and permissions result in faster communication between personnel
- Individuals have mobile access to their own schedules and to the organizational unit's calendar
- Little training required and high acceptance amongst personnel
- To be used with: iPad, iPad mini, iPhone and iPod
- Selected managers can communicate with HIS via WiFi or VPN tunnel
- Simple mobile device management to manage all mobile devices

HEALTHCARE SOLUTIONS

THE REFERENCE IN DETAIL

THE CUSTOMER. The Knappschaft Hospital in Bottrop combines tradition and modernity. Established in 1931 to care for miners, the primary and secondary care hospital has become a modern, forward-looking healthcare services organization. Some 900 staff tend to 13,500 inpatients and over 44,000 outpatients each year. There are almost 350 beds in the nine specialist facilities. As an academic teaching hospital attached to the University of Duisburg-Essen, the facility places particular value on continuously improving its services. Quality management is regularly subjected to the "Cooperation for Transparency and Quality in Healthcare" (Kooperation für Transparenz und Qualität im Gesundheitswesen, KTQ) certification process. With annual revenues of 56 million euros, the Knappschaft Hospital in Bottrop is comparable to a large enterprise.

THE CHALLENGE. To support the hospital's workflows and speed up data processing, the hospital has been using the iMedOne® HIS since 2005. Initially, staff were only able to access the system from static desktop computers. Doctors and care staff then had to use cumbersome trolleys to take the computer to the patient's bedside. Moreover, there were too few trolleys to cater for the demand. A device was needed which doctors and care staff could have with them all the time and use to access the relevant clinical data from anywhere. There had to be a capability to input and edit data, and not just access it. Previously, care staff had entered vital signs, such as blood pressure and pulse, on paper forms. This process, too, needed to be done digitally, at the point of care, so that the data could be saved straight to the HIS. Other requirements included a user-friendly interface for the solution and a reasonable price.

THE SOLUTION. The iMedOne Mobile team, which at that time belonged to the Finnish IT company Tieto, worked with the Knappschaft Hospital in Bottrop to develop the iMedOne® Mobile app, which Deutsche Telekom Clinical Solutions is now upgrading and distributing. The app provides mobile access to the HIS via WiFi, which is accessible throughout the hospital. Now the doctors and care staff can input vital signs, appointments and orders into an iPad mini from the patient's bedside. They can also access relevant clinical data, such as X-rays and laboratory values, wherever they are. The devices are merely input and output devices, and the data remains in the in-house data center. Staff can also use the mobile devices to take photos of wounds, record how the wound is progressing, and store it in the digital file. A dictation function allows dictations to be input and send straight to a transcription service. Should an employee need a doctor to give their permission for something, this can also be obtained quickly via the mobile devices.

WPA2 WiFi encryption is used to protect access to iMedOne®. Users also have to authenticate themselves in the HIS. Some managers can also connect to the HIS from home via a secure VPN tunnel. All the devices are managed centrally so that, at any time, access rights can be blocked or the app can be deleted from individual devices from outside.

CUSTOMER BENEFITS. With iMedOne® Mobile, the Knappschaft Hospital is saving time on documentation and improving quality. This gives doctors and care staff more time for the patients. The hospital is saving money and, at the same time, improving its reputation as a modern, patient-centered facility.

With the mobile interface to the HIS, documentation is almost totally paperless and data can be saved directly, with no intermediate steps which are prone to error. Because data is input to the HIS from the patient's bedside, it is available to everyone involved with no time delay. Communication, too, is faster – care staff can get permissions rapidly via the app. Doctors issue orders electronically and respond quickly to inquiries. Moreover, every access is logged precisely – who changed, added or deleted which data in the HIS, and when.

As the app can be used intuitively, the training the Knappschaft Hospital requires for each employee is limited to just twenty minutes, on average. "Because the app is so easy to use, our staff have accepted iMedOne® Mobile quickly," says Sabine Cittrich, Project Manager at the Knappschaft Hospital in Bottrop.

"The doctors and carers are actually enjoying creating the documentation digitally on their mobile devices." Moreover, instead of carrying around multiple devices such as digital cameras and dictation machines, doctors and carers now just have the one device which combines all the functions. The app also makes it easier to plan work. For example, doctors can use the filter settings to only access the operations for which they still need to write a report, or they can produce a list of patients for whom there are new findings, or they can define various useful to do lists.

KNAPPSCHAFT