



Medical centre improves patient care and reduces waiting times with the support of a BlackBerry solution

Klinikum Bad Hersfeld is one of the largest hospitals in the state of Hesse, Germany, with around 24,000 in-patients and 40,000 out-patients using the medical centre each year. There are 1,400 employees who look after the patients' well-being and ensure a smooth work flow in the hospital. The broad portfolio of medical and nursing services makes the hospital a centre of expertise with an excellent reputation that extends beyond the region.

The Challenge

On the Bad Hersfeld medical centre's extensive premises, the coordination of internal patient transportation is a crucial factor for smooth and efficient operations. Every day, patients need to be taken from the nursing stations for medical examinations such as ECGs or X-rays, to the operating theatre and other departments of the hospital. An average of 400 to 500 transports per day and a poor coordination system resulted in considerable waiting times for patients and reduced productivity in the various medical departments. As well as patient transportation, staff also have to transport up to 200 medical supplies and equipment deliveries every day.

In the past, the transport manager had been handling and communicating any request – via a mobile telephone solution – either directly on the phone or by SMS. This meant an extremely high number of phone calls were required every day to exchange information with the nursing personnel and transport staff. Furthermore, SMS proved a rather unreliable and limited form of communication.

In recent years, growing patient numbers and an increase of diagnostic measures led to a tremendous rise in the number of patient transports required on a daily basis. Combined with the extensive changes in the German public health system, a mobile solution that could optimise the daily work flow was truly needed.

Benefits

Waiting times for patients reduced by 30-60 minutes

Optimised utilisation of treatment rooms and diagnostic equipment

More efficient staff communication and ability to deal with increased patient transport volumes

Easy, cost-efficient implementation

The Solution

Bad Hersfeld medical centre selected the BlackBerry® solution with BlackBerry® smartphones, and to overcome internal logistic issues effectively, developed its own software-based application planning tool called KliniTOS®, which in combination with the BlackBerry solution now optimises internal communications and the coordination of patient transports.

Employees at the nursing stations or treatment rooms now enter transport requests via a user-friendly interface on their PC. KliniTOS then supports the transport manager in the coordination of all internal transports via a central control point. The application considers distance, urgency, availability of transport vehicles and the required qualification of the staff depending on the patient's physical condition, and sends the transport request to the chosen employee's BlackBerry smartphone.

Before implementing the BlackBerry solution, mobile telephones had been used and had proven inefficient, unreliable, and unable to deal with the increasing volume of patient transport requests. Now the BlackBerry solution allowed the full automation of data exchange and, fundamentally, facilitated transport coordination for everyone involved.

"After looking into a few options, we chose the BlackBerry solution for various reasons," explains Dennis Helbing, responsible for software development at the hospital.

"The fact that the BlackBerry platform enables third party developers to design applications of their own clearly encouraged our decision. The reliability and the fast, push technology data transmission added to our positive impression."

The Benefits

"The introduction of the BlackBerry smartphones was basically a learning-by-doing process: thanks to their intuitive usage, our staff didn't need any training at all," Torsten Wennemuth, head of IT at Klinikum Bad Hersfeld, remembers. "Compared to the previous solution, the BlackBerry smartphones also provide much more flexibility in terms of information display. Besides the increased number of characters that fit into a message we can also add graphic elements."

The new coordination application helps speed up the process and makes much better use of staff capacity. Thanks to the BlackBerry solution, waiting times for patients in the treatment rooms have been visibly reduced by 30 to 60 minutes. Appointments can now be met more reliably and down time can be avoided. The use of equipment for expensive diagnostic methods such as CT or MRI has finally been optimised as well. Although from 2008 to 2009 the number of patient transports increased by about 15 percent, teams are now able to meet all demands with the same number of staff. Beyond peak times, staff members receive transport requests automatically on their BlackBerry smartphones and the set-up runs without a transport manager needing to oversee the coordination.

The implementation paid off after about a year, states Wennemuth. However, in the light of the current situation in the German health sector, the major success of the solution lies in the first class quality of patient care the hospital continues to offer – despite an increasing demand and without the need for further human or technical support.

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"Above all, it is our patients who benefit from the implementation of the KliniTOS application for BlackBerry smartphones. We can provide them with important examinations much quicker now and avoid the previously extremely long waiting times in the treatment areas."

Michael Gottbehuet
vice-director of nursing and head
of the KliniTOS project
Klinikum Bad Hersfeld