

Case Study: Portable Information System Helps Improve Care Quality



Overview

Country: Germany

Industry: Healthcare

Customer Profile:

Asklepios Schlossberg Clinic in Bad König disposes of 75 beds and is since 1989 specialised in neurological early rehabilitation of patients with severe brain damages.

Business Challenge:

To transform the hospital information system so that the physicians could accurately document the visit right away, easily obtain an overview of the patient medical files and precisely record billing information.

INSONO Solution:

The portable information system allows physicians to document right away, factual and consequential every single step of the patient visit in different hospital departments. This information is any time available and retrievable for the entitled medical personnel on role-based rights.

Benefits:

- Better quality of information
- Improved productivity
- Improved team communication
- More security
- Reduced costs

Key Project Statistics:

- Files sorting before & after the visit: time reduced by 25-35%
- Optimization through central data storage: reduced time for medical staff ca. 30%, reduced administrative efforts ca. 25%
- Optimization of the billing process through direct recording of charging info at bedside: up to 35%

Business Challenge

Asklepios Schlossberg Clinic in Bad König disposes of 75 beds and is since 1989 specialised in neurological early rehabilitation of patients with severe brain damages. The concept "early rehabilitation" expresses the very early beginning of the rehabilitation, ideally starting immediately after the patient suffered the brain damage. The early rehabilitation can be positioned between intensive/emergency care and rehabilitation. The objective of Asklepios Schlossberg Clinic is to maximize patients' ability to manage daily life after recovery.

A substantial source of quality losses in the patient care process reside in lack of the right information at the time of decision-making during the visit at the patient bed. In order to improve treatment and business performance, Asklepios Schlossberg Clinic decided to transform its information system to allow physicians to accurately document the visit right away, easily obtain an overview of the patient medical files and precisely record billing information.

The initial status of information flow that had to be addressed was as follows:

- Patient data were managed using different systems in the clinic.
- The documentation process was carried out predominantly in MS-Word and stored on the server according to patient name.
- The physicians were responsible for documenting their procedures, as well as for saving the information. The patient findings were only available in print format.
- Analyses results were available in the form of CT images, but not assigned to a common electronic database according to patient name.
- Important information regarding laboratory results were available only in printed form and could not be centralized in the patient database.
- Patient diagnosis data were in part stored as MS-Word attachments in the patients' folders.

INSONO Solution

By means of the INSONO mobile solution, Asklepios Schlossberg Clinic was able to address their strategic imperatives, such as physician satisfaction, rising costs, and patient safety.

INSONO information system for hospitals assists all services, quality improvements and rationalization effects which become possible through a digitization and electronic transfer of data recording and communication processes.

The information system implemented by INSONO allows physicians to document right away, factual and consequential every single step of the patient visit in different hospital departments. This information is any time available and retrievable for the entitled medical personnel on role-based rights.

The system simplified the patient folder structure and integrated different data sets combining them in one view to the medical staff. For instance XRays stored on a special server are accessible through the same platform at the bedside.

The solution implemented picture documentation option so that wound or electrocardiogram photos can be taken and sent to remote physicians in critical situations when specialist opinion is needed.

INSONO solution enabled the mobile visit and assisted the clinic to save time with administrative tasks in order to provide better care to its patients and reduce costs.

The digital medical record helped:

- maximize availability of medical information
- improve the quality of the medical documentation
- minimize loss of information
- save time with less complex paper-based medical files
- cut redundant paper-work
- minimize the administrative effort
- eliminate double analyses and clinical measures
- avoid superfluous diagnosis and inadequate therapies
- speed up and simplify the billing process
- reduce costs

Advantages of INSONO solution:

- high customization according to hospital needs
- fast implementation
- little training for the users
- high acceptance among users

Solution Features

INSONO solution was chosen to solve the challenges Asklepios Schlossberg Clinic was facing because it offered high customization according to hospital needs, fast implementation and little time for training the users as the solution incorporates the features of the system they have already been using.

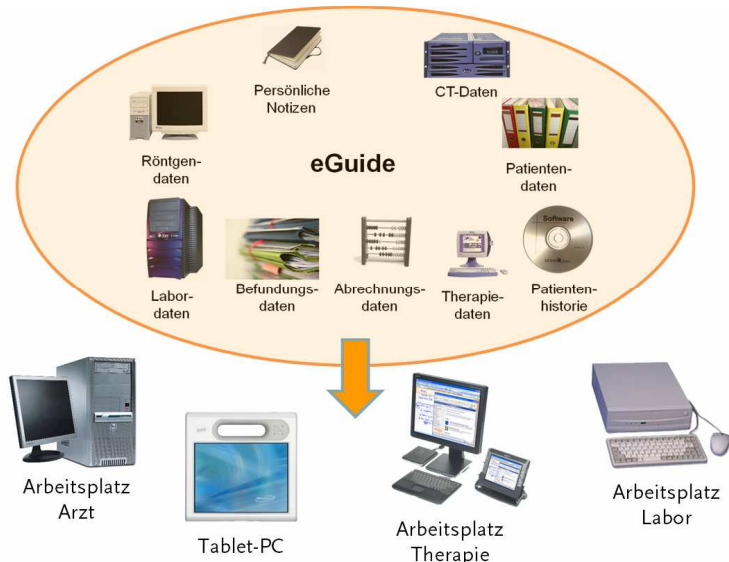
An essential advantage of INSONO solution was that the solution uses a wireless infrastructure and thereby makes it possible to connect existing heterogeneous and independent IT applications and billing components without great expenditure.

The wireless communication over WLAN provides the necessary medium to guarantee cost savings and concurrent rise of the service quality and consequently leads to continuing costs-saving „mobile added value services“.

The solution is based on the newest generation of tablet pc devices - especially designed for use in medical environment.

Architecture & Implementation

The system uses Java Application Server and utilizes a SQL database to organize the information. The user interacts with INSONO e-Guide through a web-based front end.



Status

The newest release integrates an RFID patient / bed recognition to allow physicians instantly retrieve the patient data without browsing the folder structure or having to know the identification number.

This features will lead to further time savings and quality improvements.

Results

Better quality of information

It has become a critical asset for hospitals' efforts to improve the quality and safety of patient care. The solution enabled real time digital documentation during the visit that significantly reduced paper-based medical records, the after visit typing efforts and subsequent mistakes and loss of information that usually arise during manual transfer in electronic format.

Improve productivity

INSONO mobile solution facilitated the physicians' decision making at the point of care. The solution offered access to electronic medical records at the patient bedside enabling a comprehensive overview of the medical history, previous medication, lab results, wound pictures, billing information and other data. This resulted in time savings with reviewing paper files which the physicians dedicate instead to patients.

Improve team communication

The solution allows a universal, comprehensive and up-to-date information processing and communication between all parties involved in the treatment process. As updates are immediately visible to all clinical personnel concerned, redundant work is eliminated and a cooperative and co-ordinated collaboration is enabled.

More security

The solution allows only authorised users to access patient files and the paper folders are eliminated. Moreover, the data is accessible through the web interface which makes it independent on the device.

INSONO Consulting GmbH offers an advanced set of flexible, cost-effective solutions.

For more information about INSONO services please:
www.insono.com