A monitoring infrastructure for supporting strategic information management in hospitals based on key performance indicators

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Introduction

➤ To successfully run a hospital, its IT has to be planned, directed and monitored professionally.
➤ Information management's goals have to be in line with the company's goals [1]
➤ Although planning and directing of information systems are discussed frequently in literature, monitoring is neglected both in literature and in practice [2].
➤ But only systematic monitoring enables corrective action and strategic decisions [3].

Questions

➤ What key performance indicators are suitable to provide information management with appropriate information concerning the hospital's information system?
➤ How can a monitoring infrastructure be implemented?

Methods

➤ To provide information management with the information needed to manage and enhance the information system, we decided to use key performance indicators showing, how the information system is used and to which extent the information management's goals are reached and where weak points exist.
➤ Procedure:
  1. Analysing the information management's goals
  2. Defining key performance indicators for each of them
  3. Examining, how the data can be selected and if the benefit will justify the effort
  4. Installing the "HIS-Monitor" for the Leipzig academic medical centre as a combination of quarterly bulletin distributed by email and an online version at the centre's intranet

Results

➤ At this time presented key performance indicators predominantly reflect the information system's usage
  ➤ relative number of documents, medical reports and nursery documents created on each ward using the clinical documentation and management system
  ➤ accesses statistics for scientific databases
  ➤ trouble ticket statistics
➤ Besides there exist quarterly reports which are enriched by textual justifications for uncommon data.
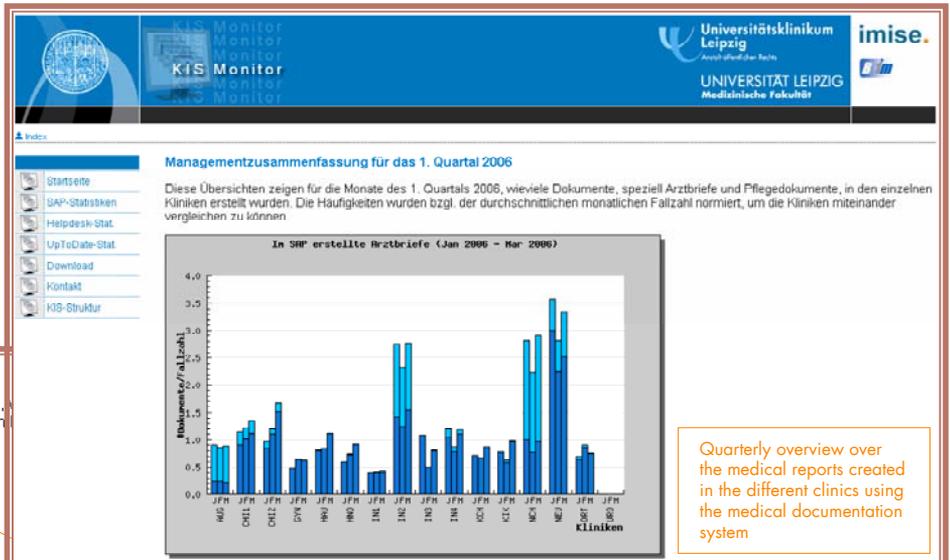
Quarterly overview over the medical reports created in the different clinics using the medical documentation system
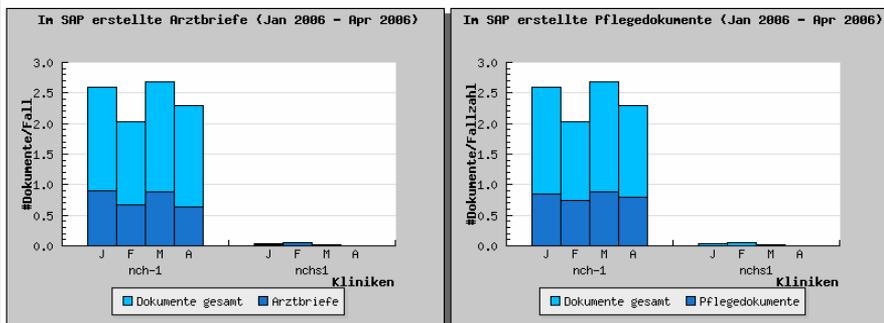
SAP-Statistiken

Mit dem folgenden Formular lassen sich Diagramme generieren, die zeigen, den Stationen der gewählten Klinik erzeugt werden. Die Häufigkeiten wurden Kliniken miteinander vergleichen zu können.

Management can choose the clinic and the period it is interested in.

Conclusion & Outlook

➤ The current acceptance of the HIS-Monitor is debatable, feedback or recommendations for other key performance indicators are rare.
➤ The most important task for the future is increasing the acceptance by integrating the HIS-Monitor respectively the key performance indicators in daily work.
➤ The data has to be presented and discussed in the meetings of the information management board.
➤ A problem was and is the acquisition of the data. Since no automatic reports exist, most of this data presently has to be collected by hand.
➤ Help we await from the data warehouse system.
➤ In this context the current application has to be revised and enhanced, interfaces that include data from other application systems like the trouble ticket system have to be created and different views for the different users have to be offered.

References

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