Abstract

Point-of-care data capture is an important part of a clinical information system. Unfortunately, health care providers find it time consuming and repetitive to perform data entry via computers. In this paper, we designed a user-friendly interface for the entry of patient information which gives the health care provider an easy to use interface for patient data entry. This system uses portable terminals and supports the entire loop of daily nursing work. This system was developed with the aim to make nursing work more efficient, by reducing the time needed for indirect work (patient information documentation, conferring with other healthcare providers, etc.), while increasing the time expended in direct patient care. The proposed system has three main functional parts: 1) Data Browsing which provides patient information such as a brief history, assessments and vital-sign charts; 2) Schedule Planning helps nurses organize doctors' instructions and make To-do lists for the day; and 3) Care Management which reminds nurses when they should execute the doctors' orders and provides tools for data entry. These three functions cover the entire loop of daily nursing work. Results from a preliminary hospital evaluation showed that use of the system can reduce the time needed for nursing
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documentation by 60% (a 10% saving of a nurse's total working time), and that more than 80% of the nurses who used the system felt it would make nursing work more efficient.

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Index Terms

Computer Science

Information Systems

Keywords

Point of care, care, time-varying, nursing, nursing process, nursing care plan