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Designing New Clinical Systems: Innovative Approaches to Support Practice

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ABSTRACT

In order to effectively influence patient outcomes, it is important to build and provide Clinical Informatics systems that reflect and enhance current practices. At the Hospital for Sick Children, we successfully moved from paper based records to an electronic permanent patient record in the early 90s. We are now transitioning from this DOS-based text interface, to a system with a Graphical User Interface (GUI). We have developed valuable insights into the design and development of the new GUI system through the use of the following three tools: practice review, staff engagement and the findings of a quantitative research project.

First, a variety of methods, including questionnaires, were used to review current clinical practices and processes, with clinical and other staff. Secondly, to ensure that all hospital staff were aware of the upcoming transition and engaged in the process, a number of activities to profile the project, including user group meetings, were developed. Finally, we also employed the findings from an ongoing research project involving data collection through non-participant observation, interviews with staff, and textual and visual rhetorical analysis of the current system. This research indicates that the visual and textual design of an electronic record system impacts on the daily practices of the health care professionals.

In using these three tools, we strive to achieve a specific goal: ensuring that the design of the new system supports healthcare providers in decision-making and care provision across the hospital.

ABOUT THE AUTHORS

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