

SYSTEMATIC INTERRUPTION MANAGEMENT IN INTENSIVE CARE

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Challenge

Intensive Care Unit (ICU) nurses receive frequent Interruptions particularly from other ICU personnel. An approach to block interruptions may remove flow of potentially important information and does not address the complexity of this work setting. Our previous research shows that ICU personnel use information about the tasks performed by nurses to regulate the timing of non-urgent interruptions. However, these tasks are not always immediately visible to an interrupter.



Methodology

A participatory design approach was used to design a task-severity awareness tool (TAT). The tool consists of an LED display hung on top of the ICU room and several buttons and a foot pedal inside the ICU room to let nurses indicate the severity of their current task. An observational study was conducted in the Cardiovascular ICU at the Toronto General Hospital to evaluate the effectiveness of the tool in reducing non-urgent interruptions during high-severity tasks. The room with TAT along with 11 other rooms with no TAT were observed for 3-weeks. A handheld data collection display was designed to facilitate real-time data collection.



Results and Impact

Nurses in the room with TAT received significantly less interruptions during high-severity tasks compared to other rooms. In particular, personal interruptions during high-severity tasks were completely eliminated in the room with TAT. In addition, other nurses and MDs did not interrupt when a high-severity task was in progress. This awareness display showed promise in mitigating non-urgent interruptions.

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