

STAFF ACTIONS AND ALARMS IN A NEONATAL INTENSIVE CARE UNIT

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Abstract

Operators of complex systems must perform routine actions while attending to and responding to unexpected events. The current study extends previous laboratory experiments on the performance of such complex tasks to the analysis of the medical staff's actions in a Neonatal Intensive Care Unit (NICU). Observations showed that the attendants usually do not respond directly to warnings given from monitors, but that the sequence and timing of actions is affected by the warnings. The staff initiated most actions. There was no evidence for discrete decision points, but rather a continuous flow of activities. However, the overall pattern of actions corresponds to the predictions from analytical scheduling methods. These results and other observations of the staff's actions were analyzed in terms of "naturalistic decision making" and analytic decision analysis.