Human Factors Evaluation of Code Blue System at a Regional Hospital

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ABSTRACT

Patient Safety Concern

Code blue is a critical and time sensitive event involving multiple clinical disciplines, pieces of equipment, and infrastructure. Any errors or delays may have negative patient safety consequences.

Project Details

A systems analysis of human error potential and system failures associated with the code blue process at a regional hospital revealed opportunities for improvement that were implemented and had long-lasting effects. Each piece of equipment, infrastructure, and individual response in the process of calling, paging, and responding to a code blue was reviewed in depth. This work was done in partnership with site leadership, clinical engineering, maintenance and facilities, switchboard, and the clinical teams who respond to code blue events. System changes include:

- Reliability of the overhead and pocket paging systems was improved and delays in paging a code blue were eliminated.

- A distinct auditory tone for code blue pages was implemented ensuring staff easily recognized a code blue overhead page and reducing alarm fatigue.

- Accuracy of location names for overhead and pocket paging was improved by standardizing location names and eliminating truncation and abbreviations in location display at switchboard.

- Access to all areas within the hospital, including locked units, was granted to all code team members.

- Role responsibility during a code, including responsibility for bringing equipment such as crash carts, was formalized and maintained through on going education and simulations.

Contact humanfactors@ahs.ca for more information about this project