

Ideas Challenge – Canada Health Infoway 2011

Putting the Rapid into Rapid Response Teams (RRT)

Our team will showcase the improvements in care coordination across multiple disciplines that is possible for the care of patients outside of the Intensive Care setting. Using Early Warning Systems (MEWS and PEWS) and automation to support them, rapidly deteriorating patients will be referred to the hospital's Rapid Response Team more reliably and earlier. The team will build on existing Computerized Provider Order Entry (CPOE), electronic Medication Administration Record (eMAR), and Clinical Documentation systems and add the Cerner Lighthouse RRT module.

Impact on Health and Health Care

The RRT module will improve quality for rapidly deteriorating patients since their care will be coordinated real time. The care team will all be using the same software tools. The goal is to reduce the number of code blues outside of our ICU setting.

For the Rapid Response Team, the system will improve productivity by efficiently documenting their clinical care, rapidly submitting orders, and collecting performance indicators as a by-product of system use. Longer term there is the potential for direct file submission to the Critical Care Information System which would eliminate the need for double documentation.

The rest of the patient care team will have online access to RRT documentation (currently it is all paper based). Nursing staff will also receive education regarding the PEWS and MEWS early warning scoring systems which will enhance their skills for identifying rapidly deteriorating patients.

Finally, this initiative addresses sustainability for a significant quality initiative for Safer Healthcare Now. A comprehensive, accessible system will allow for hard wiring of the processes to support the RRT team.

Innovative and Originality

The project combines existing CPOE, eMAR, and Clinical Documentation modules and infrastructure with a new module that layers on top of these systems.

Many hospitals have RRT teams and they have been successful in improving patient outcomes. However, they depend on successfully recognizing a deteriorating patient. The project will introduce a standard scoring system (PEWS, MEWS), which can identify at risk patients sooner so that they can get care more quickly (see IHI URL in reference material).

Effective Use of Technology

The module incorporates alerts notification to the Rapid Response Team in addition to a dashboard that integrates large amounts of complex data in a standardized, easy to interpret way.

The system is always on, gathering data from the routine vital signs that nurses are inputting to the Cerner system for all inpatients.

Access to data will be anywhere, anytime including remote access capability via our existing VPN system.

The RRT module from Cerner is developed as a standard implementation (12-16 weeks) with standardized workflow, reports and performance indicators.

Feasibility

TEGH has good clinical engagement for the project. It is part of our Designing the Ideal Patient Experience quality improvement project. It will be introduced along with a significant enhancement to our Clinical Documentation system in October 2011.

TEGH expects measurable results with performance indicators to be available 6 months post implementation. Definite trends should be clear in the one to two year timeframe.

Although TEGH will be the first hospital to implement this module with Cerner, the technology uses tools that TEGH has already deployed successfully and has used for 2 years.