Integrating Technology into Sepsis Education

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Goal
Strengthen the nurse’s knowledge of Systemic Inflammatory Response Syndrome (SIRS) and sepsis, improve staff Electronic Medical Record (EMR) skills and transform the nurses’ attitude empowering them to practice within their scope.

Background and Significance
Over 240 people died in our institution in 2010 from sepsis. To affect change we utilized our EMR system and identified the initial screening process for the nurse. The six-month evaluation of this process change revealed poor compliance and comprehension with resistance of nurses to act on the SIRS alert.

Description of Methods
Examination of sepsis safety initiative outcome measures prompted staff reassessment. Face-to-face surveys revealed nurses felt the initial mandatory eLearning focused more on the click of the computer, and less on the nurse’s role with screening and intervention. Findings stimulated the creation of a scenario based, interactive, foundational curriculum to inform nurses of their role in sepsis survivability.

The traditional format of lecture presentation needed transformation. For practice change to occur nurses needed to be educated in situations in which they worked. This presented a challenge for a 580-bed hospital with 1800 nurses. For nurses to be able to practice as they practice, vignettes of nurses caring for patients at all stages of sepsis were developed. This also created the opportunity for nurses to observe and document their assessments utilizing the EMR as they would at the patient’s bedside. Following this exercise, debriefing sessions focus on decision-making processes and role expectations. These dialogues, built upon previously learned knowledge, create an empowering realization of the nurse's role in decreasing sepsis mortality.

Major Results
Since the initiation of this program, the sepsis mortality rate has decreased by 12.4%. Nurse compliance and understanding of their role in screening “at risk” patients has increased by 28%. No longer are nurses questioning whether to act, they are acting based on their knowledge of their role in the screening process.

Conclusions
The role of the nurse is changing, and technology is a vital component of nursing practice. Innovative education focused on the use technology to advance to practice of nursing is essential. We have demonstrated when nurses use technology to enhance bedside care they have positive patient outcomes.