Using Context Management Across Electronic Intraoperative Nursing Documentation Systems

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Introduction

The heartbeat of BWH's OR is an electronic home grown system called OR Times. Perioperative nurses enter key surgical events which translate real time into OR scheduling communications clinicians rely on. However, most of the nursing clinical data remained charted on paper. Perioperative leadership charged our team, comprised of nursing informatics, anesthesia clinical informatician and information systems analysts, with converting the paper documentation to an electronic form.

Method

Analysis determined that OR Times must remain intact as vendor systems could not accommodate its existing functions. It was determined that it was more resource effective to implement a vendor system rather than building upon OR Times. The challenge became that the 2 unique systems could not easily communicate with each other. Our goal was to provide a seamless experience to the end user, avoiding multiple log-ins and struggles with minimizing windows.

Results

We redesigned OR Times into a "side bar application" of the larger vendor system consuming only 25% of the computer display screen, leaving 75% for the vendor application. The principles of Clinical Content Object Workgroup (CCOW) HL7 standard protocol were employed so users remained in the same patient's record while charting in both applications and could switch between programs on one screen.

Discussion

Perioperative nurses' frequently multitask across various systems. Our approach to "blending" 2 distinct applications avoided additional distractions and increased user satisfaction. By allowing users to chart on one screen we reduced the margin of error for incorrect data entry while leveraging electronic workflow efficiencies.