Translating Evidence to the Bedside: Recognizing Delirium

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Research Questions:
In hospitalized adults on a medical-surgical unit, how does the CAM tool compare to the NU-DESC for identifying acute changes in cognition?

Problem Focused Triggers:
- Studies indicate that each year more than 2.5 million hospitalized older adults experience delirium
- Patients who develop delirium during hospitalization have a mortality rate of 22-76% and a high rate of death during the months following discharge
- In elderly and postoperative patients, delirium may result in prolonged hospitalization, increased complications, and long-term disability
- It is estimated that complications associated with delirium cost Medicare 6.9 billion dollars annually

Form a Team:
- Administrator, Evidence-Based Practice & Clinical Excellence
- Coordinator, NICHE Program
- Patient Care Specialist, Medical-Surgical Intensive Care Unit
- Patient Care Specialist, Progressive Care Unit
- Patient Care Specialist, Medical-Surgical Unit
- Quality Specialist, EBP & Clinical Excellence

Institute the Change in Practice:
- Initiated an education program for all nursing staff with validation and application of the tool
- Developed patient and family education
- Incorporated the tool into electronic nursing documentation
- Developed a nursing care plan for the patient with delirium
- Implemented hospital-wide use of the CAM tool
- Future: Develop a nurse-managed clinical practice guideline for delirium detection and intervention

Assemble Relevant Research and Related Literature:

Pilot Change in Practice:
- Select outcomes to be achieved:
  - Determine delirium tool with the highest inter-rater reliability.
- Collect baseline data:
  - Patient Care Specialist (PCS) applied five identified delirium tools on three different clinical units and compared scores, resulting in the elimination of all tools except the CAM and Nu-Desc.
- Develop evidence based practice guideline:
  - Develop standardized education plan for CAM and Nu-Desc tools on pilot units. Educate 6 RN’s on use of both scales on 3 pilot units.
  - PCS and RN concurrently assess patients for delirium using CAM and Nu-Desc tools.
  - Record and analyze tool results assessing for inter-rater reliability.
  - Develop and review staff evaluation tool.
- Implement on pilot unit:
  - Nu-Desc 238 trials, CAM 82 trials conducted on 3 units.
- Evaluate process and outcome:
  - CAM tool had the highest inter-rater reliability, Nu-Desc had an overly high sensitivity; evaluation found staff trusted the CAM tool.
- Modify the practice guideline:
  - CAM tool to be utilized by all RNs to assist in identifying delirium indicators.

CAM
- The Confusion Assessment Method (CAM) is designed for detection of delirium by nonpsychiatrists.
  - It is an algorithm-based tool that operationalized DSM diagnostic criteria.
  - Sensitivity and specificity are both above 90%, and interrater reliability between trained lay interviewers and experts is high.

Nu-DESC
- The Nursing Delirium Screening Scale is an instrument still in development.
  - The 1-minute, 5-item, 10-point nurse-scored instrument has shown a sensitivity and specificity of 86% at a 2-point cutoff, and has excellent potential for repeated "continuous" measurement.
  - This scale still needs further evaluation in older patients, and for its ability to differentiate delirium from dementia.