**Spotlight on Practice:**
**EBP Exemplar: Nurse Placement of Esophageal Temperature Probe in the Cardiac Catheterization Lab**

H. Tom Blanchard, MEd, MS, RN, ACNS-BC, CEN
CNS Cardiac Catheterization Lab

**Background / Problem:**
In an effort to improve door-to-balloon (D2B) time for out of hospital patients who have a cardiac arrest with return of spontaneous circulation, the STEMI Quality Improvement Team worked with emergency medical care providers and the emergency department (ED) to improve patient access to the cardiac catheterization lab (CCL). The improved process allowed ambulance teams to take patients directly to the CCL if it were deemed appropriate by an ED physician. While this shortened the time to cardiac treatment, it also created a procedural dilemma by having patients arrive to the CCL ready to receive definitive cardiac care but also requiring brain-saving therapeutic hypothermia.

When an out-of-hospital patient arrives directly to the CCL there is no core temperature probe in place to provide feedback to the surface cooling console required for therapeutic patient cooling. Placing or changing a temperature probe in a urinary catheter competes with preparing the patient’s groin for the catheterization procedure.

**Trigger:**
Problem focused trigger based on the Iowa Model

**Clinical Question (PICO format):**
- **Patient**—For a patient arriving in the cardiac catheterization laboratory without a bladder temperature probe in place,

  - **Intervention**—is placement of an esophageal temperature probe by an RN, concurrent with initiation of patient cooling and procedure site preparation,

  - **Comparison**—compared to placement of a urinary catheter temperature probe

  - **Outcome**—appropriate nursing intervention in order to avoid a delay in treatment?

**Process:** An inquiry from an intensive care unit nurse to a nurse researcher was referred to the evidence based practice team clinical project specialist (CNS). Discussions among the CNS's and the clinical project specialist identified the problem and raised the question of esophageal probe placement by an RN in the CCL in order to avoid a delay in treatment and enhance patient outcomes. Assisted by a medical librarian, a literature search was performed.
Findings / Outcomes / Recommendations:
The literature review yielded little evidence. The American Association of Critical Care Nurses procedure manual included information that proved to be the best evidence related to the clinical question. A procedure for esophageal probe placement and relevant case studies were found. Although the evidence was scant, it was the “best evidence.” An evidence based policy was drafted, reviewed and approved. The new policy went into effect in July 2011 and has been successfully utilized with positive patient outcomes.