Using A3 Thinking to Address Safety Issues in the ED
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Background
- The American Nurses Association defines the “Nursing Process” as the essential core of practice for the registered nurse (RN) to deliver holistic, patient-focused care. The steps in the nursing process are: assessment, diagnoses, planning, implementing, and evaluating.
- The experienced Emergency Department (ED) RN rapidly uses the nursing process to determine if the patient is experiencing a life-threatening event. Nurses are trained clinical problem solvers.
- When nurses are faced with process-related problems, they problem solve, using the tools from their training. Process problem-solving requires a more structured, continuous improvement approach. A3 problem solving, which was first employed at Toyota, is based on the principles of Plan-Do-Check-Act (PDCA), the manufacturing version of the nursing process.
- Baseline Culture of Safety Survey (2016) of ED staff indicates opportunity for staff to be engaged in preventing errors and improving patient safety.

Practice Question
Does using the A3 process contribute to Emergency Department RNs being more engaged in addressing patient safety issues?

EBP Model/Synthesis of Evidence
Model: Johns Hopkins Nursing Evidence Based Practice Databases: Medline and PubMed
Keywords: “Lean; Lean thinking, interventions, safety interventions; quality improvement; A3”
Seventeen articles reviewed, nine were of good quality to answer the question.

Practice Recommendations
- Evidence suggests using Lean interventions, including A3 thinking, promotes staff engagement in:
  - Identifying and solving process problems
  - Developing standard work to sustain process changes
  - Improving patient safety
  - Lean activities increase safety awareness among front-line staff
  - A Lean culture views problems as opportunities to improve processes.

Practice Changes
- AHRQ Culture of Safety survey was administered to ED staff prior to A3 education (2016) and post education (2017, 2018)
- Supporting the health system vision “to create 15,000 problem solvers”, ED staff was educated on A3 process using daily safety huddles to practice team problem-solving
- 1 on 1 coaching sessions between Manager and Staff using the A3 tool
- Staff ownership of OFIs and the A3 tool, engaging with their team to elicit feedback and contribute to solving process problems

Results
Procedures & Systems are good at preventing errors

We are actively doing things to improve patient safety