# 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 A-3 process contribute to Emergency Department RNS being Addmore engaged in addressing patient safety issues?

## **EBP Model/Synthesis of Evidence**

Model: Johns Hopkins Nursing Evidence Based Practice

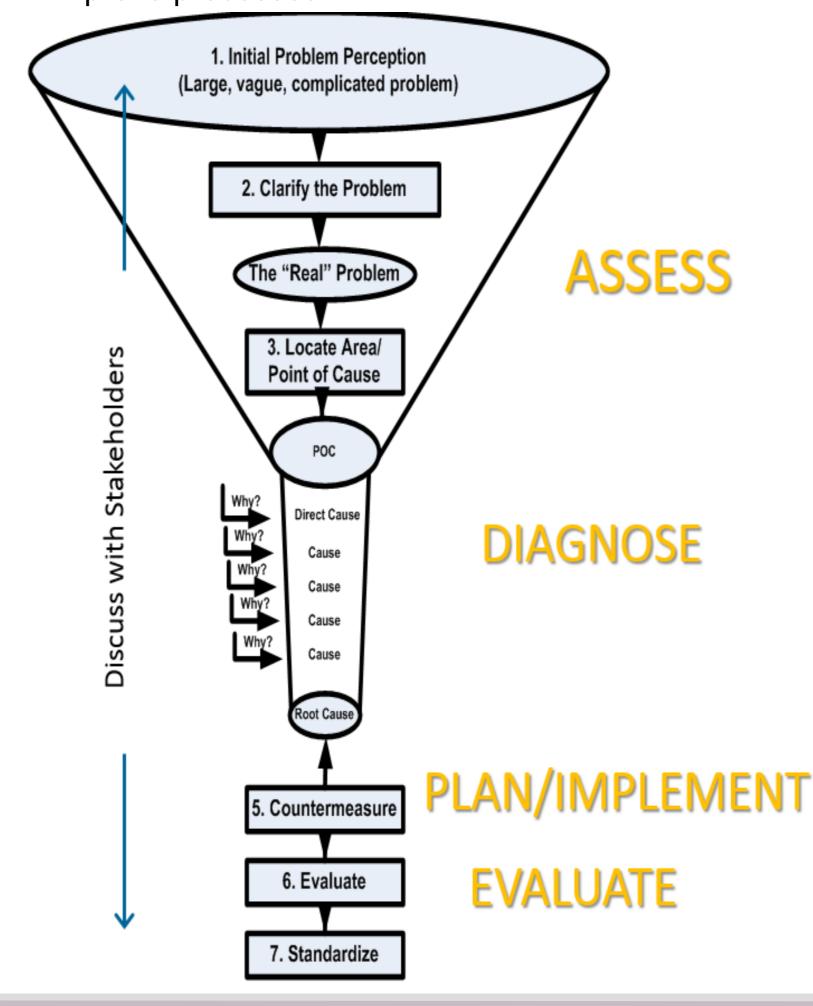
Databases: Medline and PubMed

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

