

**Increasing Patient Satisfaction in a Rural Hospital Emergency Department:  
A Quality Improvement Project**



**Benson Hospital:**  
Ken Goranson, CFO  
Teresa Vincifora, CCO

Ali Gabriel, MA, MPH, CPH  
DrPH(c), Public Health Policy & Management  
[algabrie@email.arizona.edu](mailto:algabrie@email.arizona.edu)  
[ali28@mac.com](mailto:ali28@mac.com)  
602.206.3885



---

---

---

---

---

---

---

---

---

---

**Sponsored by:**

- Benson Hospital
- The AZ Center for Rural Health
- Rural Hospital Flexibility Program (FLEX)

2

---

---

---

---

---

---

---

---

---

---

**Project Goal**

- Conduct a Quality Improvement (QI) project to develop and implement interventions to improve ED patient satisfaction in a Critical Access Hospital (CAH).

3

---

---

---

---

---

---

---

---

---

---

## QI Process

Total Quality (TQ)	Six Sigma	Lean Management
Plan	Define	1. Charter
	Measure	2. Describe Present & Future
	Analyze	3. Analyze the Differences
Do	Implement	4. Implement & Monitor
Study	Control	5. Evaluate
Act		6. Celebrate, Spread the Results, & Return to Step 1

4

---

---

---

---

---

---

---

---

---

---

## QI Planning Process: Most Team Meetings in This Phase

Total Quality (TQ)	Six Sigma	Lean Management
Plan	Define	1. Charter
	Measure	2. Describe Present & Future
	Analyze	3. Analyze the Differences
Do	Implement	4. Implement & Monitor
Study	Control	5. Evaluate
Act		6. Celebrate, Spread the Results, & Return to Step 1

5

---

---

---

---

---

---

---

---

---

---

## Planning Tools Used at Benson Hospital:

- **Team Charter**
  - Purpose: To summarize problem, scope, leadership sponsors, team members, and goals.
  - Why: To communicate with team members & stakeholders about the project.
- **Glossary**
  - Purpose: To define all acronyms and terms used.
  - Why: To explain terms to team members & stakeholders.
- **Force Field Analysis**
  - Purpose: To identify forces for and against change.
  - Why: Initially to help the team understand where they can get help and where there may be a challenge. As the planning progresses, the team reviewed this to ensure they addressed all concerns.

6

---

---

---

---

---

---

---

---

---

---

## Planning Tools Used at Benson Hospital:

- **Fishbone**
  - **Purpose:** To capture the team's initial thoughts about what causes lower patient satisfaction scores.
  - **Why:** Initially to help team members to explain to each other what they know about the causes. As planning progresses, the team reviewed this to ensure all potential causes were addressed in the intervention plans.
- **High-Level Process Map (SIPOC)**
  - **Purpose:** To identify key ED Inputs and Outputs.
  - **Why:** To focus the team's efforts and to explain to stakeholders what affects the ED and how the ED affects all stakeholders.

7

---

---

---

---

---

---

---

---

---

---

## Planning Tools Used

- **SWOT Analysis**
  - **Purpose:** To identify internal strengths & weaknesses, external opportunities & threats.
  - **Why:** To help team understand potential sources of assistance or challenges when brainstorming interventions.
- **Spaghetti Map**
  - **Purpose:** To document the flow of process, things, or people.
  - **Why:** To help the team identify "bottlenecks."
- **Process Maps**
  - **Purpose:** To document the team's conversations about how a process works.
  - **Why:** This is not a detailed procedure, but gives enough information to allow team members to explain a process to each other and to stakeholders to help identify strong areas and potential failures.

8

---

---

---

---

---

---

---

---

---

---

## Planning Tools Used

- **Failure Mode & Effects Analysis (FMEA)**
  - **Purpose:** Part 1 to analyze potential failures in the system *AND Part 2 to analyze the effect of potential interventions.*
  - **Why:** Part 2 Results in a prioritized schedule of interventions.
    - Each intervention has its own PDSA cycle.

9

---

---

---

---

---

---

---

---

---

---

### Keys to Success in QI at Benson Hospital

- Used an interdisciplinary team and ensured consensus at every step.
  - Included executives and leaders of multiple depts.
  - Taught each other details of all processes.
  - Reflected on each day's work.
  - Briefed all staff members between team meetings.
  - Sought input from external stakeholders.
- Used an iterative process.
  - Reworked previous tools as they learned more about each area's processes, strengths, and weaknesses.
  - e.g., The first time a tool was used, it was normal for it to be slightly inaccurate. As the team completed another tool, they learned more and returned to update previous work.

10

---

---

---

---

---

---

---

---

---

---

### Keys to Success in QI at Benson Hospital

- Analyzed process maps.
  - For each process map, the team numbered the steps and created a separate list of information about each step: strengths, weaknesses, metrics, and notes.
- Used FMEA to create a comprehensive plan of interventions.
  - Completed BOTH parts of the FMEA. Analyzed both the potential failures and the potential interventions.
  - Developed a comprehensive list of interventions most likely to improve overall patient satisfaction in the ED.

11

---

---

---

---

---

---

---

---

---

---

### Results

- Overall Patient Satisfaction Improved.
- General Self-Efficacy scores of the participants improved.

12

---

---

---

---

---

---

---

---

---

---

## Next Steps

- Continue to implement additional interventions from the implementation schedule.
- Continue to evaluate and revise existing interventions.
- Charter additional QI projects within Benson Hospital.
- Celebrate!

13

---

---

---

---

---

---

---

---