National Patient Safety Goals

Application @ the Bedside: A panel discussion of Pediatric Critical Care Cases

Presented by: Bonnie L. Weaver RN, MSN, CCRN
Clinical Nurse Educator PICU/PICU/CCU
Panel Experts: Elizabeth Rohrer RN, MSN, CCRN
Elizabeth Schaeffer RN, BSN
Sarah Rummet RN, BSN

We have no disclosures
Objectives

- At the conclusion of this presentation the participant will be able to:
  - 1. Discuss application of National Patient Safety Goals at the bedside. "MAKE IT REAL"
  - 2. Highlight barriers unique to the Pediatric ICU population

Jack’s Case

Why is this session important?
Children's Hospital Construction Update

September 23, 2011

PICU

- 12 bed tertiary care center (soon to be 18)
  - Level I trauma center
  - Intensivist on call 24/7
  - Mid-level providers in unit 24/7
  - Dedicated Pediatric Respiratory Therapist
  - 48 Nursing FTE’s
PICU Demographics

- **Gender**
  - Male: 433 (64%)
  - Female: 245 (36%)

- **Age**
  - <1 Month: 62 (9.14%)
  - 1 Month - 23 Months: 239 (35.25%)
  - 2-5 Years: 129 (19.03%)
  - 6-12 Years: 110 (16.22%)
  - 13-18 Years: 125 (18.88%)
  - >18 Years: 10 (1.47%)
  - Median Age: 2 Years 9 Months

- **Patient Type**
  - Scheduled: 270 (39.76%)
  - Unscheduled: 408 (60.24%)

- **Operative status**
  - Non-Operative: 342 (50.37%)
  - Post-Operative: 336 (49.63%)

- **Mechanical Ventilation**
  - Total Admissions: 416 (63%)
  - Total Days: 1510
  - Mean Duration (Days): 2.97
  - Median Duration (Days): 1

- **Race**
  - Caucasian: 469 (69.22%)
  - Hispanic: 96 (14.14%)
  - African American: 64 (9.43%)
  - Unspecified: 28 (4.12%)
  - Asian/Indian/Pacific Islander: 5 (0.74%)
  - Other/Mixed: 16 (2.36%)

PCCM annual report 09-10
National Patient Safety Goals

Purpose:

to promote specific improvements in patient safety.
National Patient Safety Goals (NPSG)

What does the literature say?

Literature Review
Creative approaches

- A Checklist for a Central Venous Line-Based Simulation Scenario to Measure Behavioral Compliance With Joint Commission National Patient Safety Goals
  - Pernar, Luise I. M. MD; Shaw, Tim J. PhD; Pozner, Charles N. MD; Vogelgesang, Kaitlin R. MBA; Peyre, Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare
  - Issue: Volume 6(2), April 2011, pp 117-120

Literature Review

- Application of Electronic Health Records to the Joint Commission's 2011 National Patient Safety Goals
  - Ryan P. Radecki, MD;
  - Dean F. Sittig, PhD

PDCA Performance Improvement

- Act
- Plan
- Check
- Do
Example

- The insertion, management & competency for Nasojejunal Tubes has proven to be a challenge for children in our institution.

PLANNING STEPS

1. Define the problem
2. Scope the process/project
3. Understand the current performance
4. Identify "causes" behind process issues
5. Develop solutions

Getting Started

The “PLAN” phase has several steps to getting started

1. Define the Problem
Scope of Project

Critically important to scope the project into something that is:

- Within your ability to affect change
- Do-able with the resources available
- Work can be completed within 6 months

Plan

2. Scope the process/project

NJ Tube Project Scope

- Evidence Based practice
- Team agreement
- House wide competency
- Medical training
- Radiology
- Nursing competency
If you are unsure of where you should scope your project two tools may assist:

- Pareto
- Cause and effect diagram

The Pareto Principle speaks to the 20% of the items that are the "vital few" that will give you the greatest impact versus the 80% that are the "useful many".

In the 1940's Dr. Juran called this the 80/20 rule.

A clothing store had a steady decline in business. The owner thought the decline was due to the type of clothing—he blamed his supply chain.

To be sure, the owner did a customer survey and found the following results:
Customer Survey Results

- Customer Complaints
  - Significant few
  - Insufficient many

Cause & Effect

Begin by asking:
- What is the problem about?
- Who is affected by this problem?
- When does this problem occur?
- Where does it occur?

Cause & Effect Diagram

[Diagram showing cause and effect relationships between factors and outcomes]
3. Understand the current performance

**TOOL**

To understand the current process, a simple tool is the flowchart. At a high level, describe what steps occur in the process.

**Basic Flow chart Symbols**

- **OVAL** - Used to indicate starting and endpoints of the process. The oval should reflect the boundaries of the process.
- **RECTANGLE** - Used to indicate activities performed as part of the process. The statement inside the rectangle should begin with a verb, an action being taken.
- **DIAMOND** - Used to indicate decision or inspection points of the process. There will always be two directional arrows - one for "Yes," one for "No" decisions.
- **LINE** - Used to connect flowchart symbols.
Jack's Case

Jack's Day

PLAN

4. Identify “causes” behind process issues
5. Develop solutions

PLAN Review

1. Define the problem
2. Scope the process/project
3. Understand the current performance
4. Identify "causes" behind process issues
5. Develop solutions

DO

Implement Solutions
### Action Plan

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brush Teeth every morning &amp; evening</td>
<td>Jack Weaver</td>
<td>November 12, 2011</td>
<td></td>
</tr>
<tr>
<td>Repair current cavities</td>
<td>Dr. Lewis</td>
<td>November 20, 2011</td>
<td></td>
</tr>
<tr>
<td>Track changes in behavior</td>
<td>Mom &amp; Dad</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>Provide rewards for compliance with plan</td>
<td>Mom &amp; Dad</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>Dental Checkup</td>
<td>Dr. Stark</td>
<td>December 30, 2011</td>
<td></td>
</tr>
</tbody>
</table>

### CHECK

**Review Process Performance**

### Measuring Performance

[Graph showing performance metrics over time, with a note indicating a new process implementation in July.]
Measurable Outcomes

ACT

PDCA Performance Improvement

Hold the gains
2011 JC National Patient Safety Goals

1. Improve the accuracy of patient identification.

2. Improve the effectiveness of communication among caregivers.

3. Improve the safety of using medications.

4. Reduce the risk of health care-associated infections.

5. Accurately and completely reconcile medications across the continuum of care.

6. The organization identifies safety risks inherent in its patient population.
Pediatric ICU Challenges

- Patient variety
  - 2012 CAUTI
  - Specialty vs. General Practice

- Evidence based practice
  - AACN Procedure manual
  - System wide reconciliation

- Time
- Resources

References

- Provided at Session
Thank you!!

- bweaver2@hmc.psu.edu