THE REPORT CARD ON THE NATIONAL PATIENT SAFETY GOALS—SO, HOW *ARE* WE DOING!?

Al Heuer, PhD, MBA, RRT-ACCS, RPFT, FAARC

Co-Owner, A & T Lectures

Professor--Rutgers School of Health Professions

LEARNING OBJECTIVES

- Provide an overview of the origin and purpose of the NPSG's.
- Review selected high-profile goals and progress towards achievement.
- Analyze case studies which demonstrate the NPSG's in action.
- Provide additional resources for those wishing to learn more about the NPSG's

BACKGROUND-THE JOINT COMMISSION'S NATIONAL PATIENT SAFETY GOALS (NPSGS)

- The National Patient Safety Goals (NPSGs) were established in 2002 to help accredited healthcare organizations improve in specific areas of concern with regard to patient safety.
    - ***Reduce Preventable Harm***
- The first set of NPSGs was effective January 1, 2003
- The Patient Safety Advisory Group advises The Joint Commission on the development and updating of NPSGs.
- Updated Annually

THE JOINT COMMISSION

- Accredits > 90% US healthcare organizations
- Quality Enhancement Initiatives
  - Survey Standards (over 1/2 target patient safety)
  - Sentinel Event Policy (targeting "Unexpected occurrence involving death or serious injury…"
    - Reporting is Encouraged
    - Root Cause Analysis
    - Improvement Plan Implementation
- ***Patient Safety Goals (NPSG's)*** & Tracers for Surveys

NATIONAL PATIENT SAFETY GOALS – KEY POINTS

- Site-Specific Goals Related to Patient Safety
  - Ambulatory
  - Behavior Health
  - Home Care
  - Hospital
  - Lab Services
  - Long-term Care

NPSG CATEGORIES

- Goal 1—Improve Patient Identification
- Goal 2– Effective Communication
- Goal 3 – Improve Medication Safety
- Other Categories:
  - Infection Prevention
  - Alarm Safety
  - Fall Prevention
  - Pressure Injury Prevention
  - Suicide Prevention
  - Universal Protocol

GOAL 1- PATIENT IDENTIFICATION

* Improve the accuracy of patient identification.

* **Recommended Actions**:

1. Use ***at least two patient identifiers*** when providing care, treatment and services.

2. ***Update:*** Use distinct methods of identification for special populations & high risk procedures:

Newborn Infants: mother's first and last names and the newborn's gender: e.g., Smith, Judy Girl

High Risk Procedures: Blood Transfusions: Before administering blood/related products, use a two-person verification or a one-person plus automated identification (e.g., bar coding)

* **Current Status/Action**: ***Notable Progress!***

- 98% compliance with two-identifier checks
- Wristband barcode scanning expanded to all inpatient units
- Reduction in wrong-patient specimen errors by 32%
- Challenges persist for special populations and procedures

GOAL 2 - IMPROVE COMMUNICATION

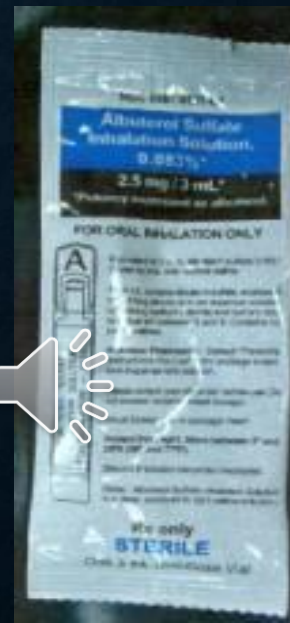
- Improve the effectiveness of communication among caregivers.
- <u>Two Areas of Focus:</u>
  - Timely reporting of critical results of tests and diagnostics.
  - Standardized handoff processes

- **Recommended Actions:**
  - Reporting Critical Data:
    - Written procedures for managing critical test results that address the following:
      - The definition of critical results of tests and diagnostic procedures
    - By whom and to whom critical results are reported
    - Acceptable length of time between the availability and reporting
  - Implementing evidence based handoff-SBAR

- ***Current Status/Grade - Notable Progress***
  - Average critical result reporting time reduced from 45 to 18 minutes
  - SBAR adopted system-wide embedded in EHR systems
  - 100% of units trained in structured handoff tools.
  - Use of Interprofessional rounds is growing.

GOAL 3 – MEDICATION SAFETY

- ***Areas of Focus:***
- Label all medications, medication containers, and other solutions on and off the sterile field in perioperative and other procedural settings.
- Reduce the likelihood of patient harm associated with the use of anticoagulant therapy.
- Label meds which are not labeled.
  - Before a Bronchoscopy, label syringes
    - Mucomyst
    - Epinephrine
    - Normal saline



GOAL 3: MEDICATION SAFETY-CURRENT STATUS

- **Current Status: *Some progress—More work needed!***
  - Influx of generic medications is posing challenges
    - Non-standard packing from multiple producers
  - **Medication Labeling**
    - OR and procedural areas at 100% compliance
    - Color-coded labels implemented
  - **Progress on Medication Reconciliation**
    - Reconciliation accuracy improved from 72% to 91%
    - Pharmacy-led review for high-risk patients
  - **Progress on Anticoagulation Safety**
    - Standardized dosing protocols
    - Bleeding complications reduced by 14%

Goal 6 – Ensure Medical Equipment Alarms are Functional and Proper Response Time

- Areas of focus-
  - IV pumps—
    - Occlusion
    - Free-Flow Prevention
  - Ventilator alarms
    - Properly set
    - Functional, including remote alarms
    - Ensure proper settings (ventilators)
- **Actions:**
  - Regularly test and document alarm function of device.
  - Ensure remote alarms interface function as designed.
  - Equipment with malfunctioning alarms should be tagged and removed.
  - Implement an improvement plan if there is a problem
    - Home ventilator alarm being disabled.
    - Educate caregivers, patients and clinicians
- ***Current Status: Notable Progress!***
  - ***Alarm fatigue continues to be a troubling issue!***

Goal 7 - Reduce the Risk of Health Care-Associated Infections

- Implement evidence-based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI).
- **Recommended Actions:**
  - Rapid removal of catheters
  - ***Update:*** Use of alternative, non-invasive collection systems
    - "Pure-wick" non-invasive urine collection systems
  - Education on aseptic techniques for removal and insertion, especially non-acute settings
  - Judicious use of and removal of catheters

GOAL 7: REDUCE HEALTHCARE-ASSOCIATED INFECTIONS (HAIS)-CONT.

- **Current Status: Some progress—More work needed!**
  - UTI rates are lower but still troubling.
- **Progress- Hand Hygiene**
  - Compliance increased from 82% to 94%
  - Real-time feedback systems implemented—
    - e.g. Swipe-Sense system-Calculates actual vs optimal hand hygiene
- **Progress — CLABSI & CAUTI**
  - CLABSI rate ↓ 28%
  - CAUTI rate ↓ 22%
  - Daily line necessity review adopted
- **Progress--Surgical Site Infection Progress**
  - Pre-op antibiotic timing compliance at 97%
  - Chlorhexidine bathing expanded

GOAL 9 – REDUCE HARM FROM FALLS

- **Recommended Actions:**
  - If they occur: Incident reports-Root-Cause analysis
  - Prevention:
    - Early identification of high-risk patients
    - "Earmark" patients as such: bracelet, label medical record
    - Interventions: Restraints, alarm cushions, sitters.
    - Clinician Re-education: ***Bedrails up after ABG*** or other intervention.
- **Current Status/Grade - Some progress—More work needed!**
  - Falls with injury ↓ 19%- but still too many patients are suffering falls…
  - Bed alarms standardized
  - Hourly rounding compliance at 95%

GOAL 14--PREVENT PRESSURE INJURIES

- Assess and periodically reassess each resident's risk for developing a pressure ulcer and take action to address any identified risks.
- **Recommended Actions:**
  - Identify high risk patients – Immobile patients
  - Rotating beds, reposition patient every two hours
  - Skin surveillance-Regularly assess all patients, ***especially new ones.***
  - ***NIV/BiPAP-***
    - Gel-patches- Bridge of nose for BiPAP
    - Skin assessment embedded in NIV EHR templates
  - Early Mobility protocols
  - Other prophylaxis- Duoderm or specialized cushions on high risk areas (buttox)

PRESSURE INJURY (CONT.)

- **Current Status/Grade** - Some progress—More work needed!
  - Hospital-acquired pressure injuries ↓ 27%
  - New turning schedule compliance at 92%

GOAL 15: SUICIDE PREVENTION (BEHAVIORAL HEALTH & ED)

- **Actions**: Suicide Prevention:
  - Conduct a risk assessment that identifies specific patient characteristics/environmental features that impact **risk for suicide.**
  - **Conduct an environmental risk assessment-No scissors, tubing, etc in the psych unit**
  - Safe Transitions-When a patient at risk for suicide leaves the care of the hospital, **provide suicide prevention information** (e.g., crisis hotline).

- **Current Status/Grade: Notable Progress**
  - Universal screening in ED at 100%
  - Ligature-resistant renovations increasing
  - Warm-handoff (detailed) protocol implemented, including risk assessment and preventative/special measures

UNIVERSAL PROTOCOL: PREVENT WRONG SITE, WRONG PROCEDURE, WRONG PERSON SURGERY

- ***Impetus:*** Wrong site surgery should never happen. Yet it is an ongoing problem in health care that compromises patient safety.
- **Recommendations:**
  - Conduct a pre-procedure verification process.
  - Mark the procedure site.
    - The procedure site is marked by a licensed independent practitioner who is **accountable for the procedure** and **will be present** during the procedure.
  - A time-out is performed before the procedure.
  - A written, alternative process is in place for patients who refuse site marking or when it is technically or anatomically impossible.
    - Surgery through a natural orifice
    - Teeth.
- ***Current Status/Grade*** – **Fair/Good**

- Notable Progress but, use of Pre-procedures Time-out is limited.
  - How many have observed such "Time-outs"?
    - Endoscopy
    - Bronchoscopy
    - Thoracentesis

FOR MORE INFORMATION ON THE NPSGS

- The National Patient Safety Goals for each program and more information are available on The Joint Commission website at **www.jointcommission.org**

- Questions can be sent to the Standards Interpretation Group at (630) 792-5900 or via the Standards Online Question Submission Form

OTHER ORGANIZATIONS WHICH SUPPORT PATIENT SAFETY AND NPSG'S

- Centers for Medicare and Medicaid Services (CMS)
  - Has Partnered with and granted statutory authority to TJC
  - Release of Medicare Physician Outcomes Data
  - Hospital Compare Tool

- Agency for Healthcare Research & Quality (AHRQ)
  - Fund much of the research supporting NPSG's
  - Patient Safety Culture Survey http://www.ahrq.gov/qual/hospculture/
  - Publish "Steps to Safer Health Care"

CULTURE OF SAFETY – AGENCY ON HEALTHCARE RESEARCH & QUALITY (AHRQ)

- AHRQ Patient Safety Culture Survey
- Involve all staff in patient safety culture survey
- Patient focus groups to ensure multiple stakeholder input
- Organizational leadership makes "Patient Safety Rounds"
- *Five steps to safer healthcare*
  - 1. Ask questions if you have doubts or concerns.
  - 2. Keep and bring a list of ALL the medicines you take.
  - 3. Get the results of any test or procedure.
  - 4. Talk to your doctor about which hospital is best for your health needs..
  - 5. Make sure you understand what will happen if you need surgery.
- Current Status:
  - Safety event reporting ↑ 35% (indicates trust)
  - Leadership safety rounds expanded

DATA & OUTCOMES—OVERALL STATUS

- **Metrics Summary-Much Progress…but…More work to do**
  - HAIs ↓
  - Falls ↓
  - Medication errors ↓
  - Patient satisfaction ↑
- **Next Steps-Sustaining Progress**
  - Continue high-reliability training
  - Expand predictive analytics for risk detection
  - Strengthen cross-department collaboration
  - Use of AI!

CASE 1—PATIENT IDENTIFICATION

- Case: You attempt to scan a patient to identify him before giving a DuoNeb treatment. However, you note he does not have a wrist/ankle-band. You then simply ask him his name and he eagerly says yes, that's me!
- Question: Is that an acceptable way of identifying the patient and what could have been done differently. ?
- Answer: No, the patient could be *alert, but not oriented*. He may well say yes to everything including that he is the President of the US, and he just won the lottery. Best to ask the nurse and ensure that is the patient and that he promptly gets a replicant identifier band.

CASE 2-STAFF COMMUNICATION

- A resident physician siting at a workstation six feet away from you just interprets a chest x-ray for an intubated and mechanically ventilated patient and notices that the X-Ray ETT is 6 cm above the carina. Via the EHR system, he simultaneously orders the ET tube be advanced 3 cms and orders a repeat chest x-ray. 15 minutes later, you note the radiology tech preparing to take a repeat x-ray, but are wondering why another is being done. Despite being very busy in the ICU, you then log into the EHR and see both orders. Given that you are just now seeing the order to advance the ET tube, you ask the tech to wait to take the X-Ray until you advance the ET tube.
- Question: Is this an example of effective staff communication and what could have been done differently?
- Answer: No the resident should have used closed loop communication to ensure the RT knew about order to advance the ET tube. They also should not have waited until they knew the ET Tube was advanced before putting in the second order for the CXR. Lastly, we should not assume that the other clinicians are always logged in to the EHR and also employ face-to-face communication in such circumstances.

CASE 3-VENTILATOR REMOTE ALARM SAFETY

- A mechanically ventilated patient need to be transported to CT scan on a transport ventilator. After placing the patient on the transport ventilator, the RT doing the transport turns the ventilator in the room off and disconnects the remote alarm cable. When the patient is brought back to the room, they are safely placed back on the ventilator in the room. However, the remote alarm cable is not plugged back in. That night, the patient inadvertently disconnects from the ventilator, however no one hears the alams for almost 10 minutes. As a result, the patient sustains an anoxic brain injury.
- Question: What should have been done differently?
- Answer: The ventilator should have been placed on stand-by mode allowing the remote alarm cable to stay plugged in. In addition, the ventilator/patient flow sheet should have required that the alarm cable and functioned be checked Q3-4 hours.

CASE 4-FALL AFTER ABG

- A new graduate RT places the bedrail down and removes a wrist restraint to obtain an ABG. They forget to put the bedrail up and the restraint back on. Later, the patient becomes agitated pulls out their IV, and falls out of bed, injuring their head.
- Question: What could have been done differently and how could have this been avoided?
- Answer: Obviously, the inexperienced RT should have placed the restraint back on and put the bedrail back up. However, it is also important to examine how the new RT was trained and oriented on ABGs, including restraints and bedrails. This may be more than just the RT's fault.

CASE 5-PRESSURE INJURY PREVENTION

- A ventilator-dependent patient was trached five days ago and the trach tube was secured with twill. The twill was embedded in the crease of the patient's neck and eventually eroded the skin, despite "trach care" being documented as being done at least every shift. Once discovered, wound care needed to be involved to treat the skin erosion and infected skin.
- Question: What could have been done differently to prevent this form of pressure sore?
- Answer: It seems like the staff was delinquent on examining the trach tie, as well as cleaning and inspecting the neck and replacing the tie at routine intervals, with each round of trach care. However, the definition of trach care should be expanded to include such and the staff should also be trained on this as well.

CASE 6-CULTURE OF SAFETY

- A health care system wishes to both gauge the extent to which their "organizational culture" promotes safe and effective patient care and seeks to continually enhance care quality. They are considering either developing a survey and process for using one which is commercially available.
- Question: What approach would you recommend to accomplish both objectives?
- Answer: While the health system could develop and validate a survey themselves, there is a science to do so in the realm of psychometric testing. Validity testing is specialized and requires specific skill-set. As a result and due to the availability of the "Culture of Safety" survey for free from the Agency for Healthcare Research and Quality, this survey should be used and can either be administered by internal staff via platforms such as RedCap or Survey Monkey, or through an external partner/consultant.

TAKE HOME POINTS

- Healthcare is one of the most complex industries
- Consequently, ensuring patient safety is complex.
- There are an abundance of tools and resources which can be used to enhance patient safety.
- One such resource as the NPSG's and related resources from governmental agencies and The Joint Commission.
- Stay abreast as things change with regard to NPSGs and resources.

SELECTED REFERENCES

- Ransom, Joshi, el, al, The Healthcare Quality Book: Vision, Strategy, and Tools, Fifth Edition, Healthcare Administration Press, 2023.
- AHRQ Patient Safety Culture Survey http://www.ahrq.gov/qual/hospculture/
- The Joint Commission (TJC) http://www.jointcommission.org/
- Institute of Medicine http://www.iom.edu/
- Centers of Medicare & Medicaid Services http://www.cms.gov/
- The Leapfrog Group http://leapfroggroup.org/