National Patient Safety Goals (NPSG)

Steven D. Chinn, DPM, MS, MBA, FACHE, CPHQ, CPHRM, CJCP
Consultant
Joint Commission Resources
**NPSG Background**

- The purpose of the National Patient Safety Goals is to improve patient safety. The goals focus on problems in health care safety and how to solve them.
  - NPSGs first announced in 2002
  - Goals have been shifted into the standards
  - Program-specific
  - The Joint Commission Patient Safety Advisory Group

---

**NPSG.01.01.01 Patient Identification**

- Use at least two patient identifiers when providing care, treatment and services:
  - **First:** Identify the person for whom the test or procedure is intended for
  - **Second:** Match the intended service or treatment to that person
- Label containers used for blood and other specimen in presence of patient.
Use of Two Unique Identifiers

- What do you use for the match? Does it include the 2 identifiers AND the care, treatment, or services to be provided?
  - Lab tests
  - Diagnostic imaging
  - Invasive & non-invasive procedures
  - Medication administration
  - Arm/wrist ID banding
  - Patient rooming
  - Medical records
  - Transport
  - Food trays

NPSG.01.03.01
Patient Identification: Transfusions

- Eliminate transfusion errors related to patient misidentification:
  - Match blood to order
  - Match patient to blood
  - Use two-person verification process or one-person verification process accompanied by automated identification technology (e.g. bar coding)
  - One of 2 persons must be qualified transfusionist
NPSG.02.03.01
Improve Communication

- Report critical results of tests and diagnostic procedures on a timely basis:
  - Define critical results
  - Define by whom and to whom results are reported
  - Define acceptable time from results available to reported
  - Implement the procedures
  - Evaluate timeliness of reporting

NPSG.03.04.01
Medication Safety: Labeling

- Label all medications, medication containers, and other solutions on and off the sterile field:
  - Label when not **immediately** used
  - Label even if only ONE medication or solution
  - Label at time of transfer
  - Include medication/solution and strength
  - Include expiration date/time, if applicable
  - Verification process, especially if the one preparing is NOT the one administering and when change of staff
  - Immediately discard any meds found unlabeled.
NPSG.03.05.01
Medication Safety: Anticoagulant Therapy

- Reduce likelihood of harm associated with anticoagulant therapy:
  - Use oral unit-dose, prefilled syringes, or premixed infusion bags when available
  - Use approved protocols for initiation & maintenance
  - For warfarin therapy, use baseline and “current” INR
  - Use authoritative resources to manage potential food and drug interaction for warfarin
  - For heparin, use programmable pumps
  - Provide education to prescribers, staff, patients, families
  - Evaluate anticoagulation safety practices

NPSG.03.06.01
Medication Safety: Information

- Maintain and communicate accurate patient medication information:
  - Document current medication list upon admission or during outpatient encounter
  - Define type of med info collected in non-24 hour setting
  - Compare information with meds ordered to identify and resolve discrepancies
  - Provide written information on meds patient should be taking when discharged or at end of outpatient encounter
  - When only additional meds prescribed are for short duration, medication information provided may include only those meds
Medication Reconciliation
<24 HR Settings

- How is the process designed for outpatient settings?
  - IV contrast
  - Infusions (e.g. chemotherapy)
  - OP surgery
  - Clinic or physician office visits
  - Other settings

NPSG.06.01.01
Improve Safety of Clinical Alarm Systems

- Quite complex to address

Rationale:
- May compromise patient safety if not well managed
- Signals may be difficult to detect
- Staff become desensitized
- Staff miss, ignore, disable
- Default settings not at actionable levels
- Universal solutions have yet to be identified
Defining the Problem

- Medical alarm systems are out of control
  - Hundreds of auditory alarm signals
  - Tens of thousands in every hospital
- ECRI Top Health Technology Hazard for several years
- FDA four year period
  - 500 patient deaths
  - 2010: 2,500 adverse events with ventilators
    - 1/3 alarm system-related issues

Defining the Problem

- Major contributing factors to deaths related to alarms:
  - Absent or inadequate alarm system
  - Improper alarm settings
  - Alarm signals not audible in all areas
  - Alarm settings inappropriately turned off
Types of Alarms

- Infusion Pumps
- Feeding Pumps
- Pulse Oximeter
- Cardiac Monitors
- Bed alarms

NPSG.6.01.01 Clinical Alarm Safety

- **EP 1:** Leaders establish alarm system safety as a hospital priority
- **EP 2:** The most important alarm signals to manage are identified based on the following:
  - Input from med staff and clinical departments
  - Risk to patients, if the alarm signal is not attended to or if it malfunctions
  - Whether specific alarm signals are needed or unnecessarily contribute to alarm noise and alarm fatigue
  - Potential for patient harm based on internal incident history
  - Published best practices and guidelines

*More info on managing med equipment risk, see EC.02.04.01*
EP 3: Establish policies and procedures for managing the alarms identified in EP 2, at a minimum, address the following:
- Clinically appropriate settings for alarm signals
- When alarm parameters can be disabled
- When alarm parameters can be changed
- Who in the organization has the authority to set alarm parameters
- Who in the organization has the authority to change alarm parameters
- Who in the organization has the authority to set alarm parameters “off”
- Monitoring and responding to alarm signals
- Checking individual alarm signals for accurate settings, proper operation, and detectability

EP 4: Educate staff and licensed independent practitioners about the purpose and proper operation of alarm systems for which they are responsible
Practical Strategies

- Leaders establish alarm management as priority
- **Dedicate resources** to interdisciplinary team
  - Clinicians, medical staff, risk management, IT, biomedical engineering, facilities, vendors, patients
- Establish work plan with targeted dates
- Consider monthly report out at:
  - Safety committee, EOC committee
- Review trends & patterns of adverse events
- Process for continuous improvement

Practical Strategies

- Identify Default alarm settings and Limits appropriate for each care area
- Develop Guidelines:
  - Alarm settings, alarm signals not clinically necessary, tailoring alarm settings & limits
- Training:
  - Process for safe alarm management and for response in high-risk areas; Safe use of alarmed medical devices; New alarmed devices; Updates to alarmed devices; New staff
Practical Strategies

- Identify & reduce nuisance alarms
- Develop standardized practices for periodic ECG-electrode & lead-set inspection & replacement & proper electrode-site skin preparation
- Do acoustics allow for audible signals?
- How many channels of telemetry are too many to monitor by one person?
- Assess the alert process for lethal arrhythmias
- Assess communication between end user & observer
- Consider HCAP impact: night-time alarm sounds

Clinical Alarm Safety Resources

- National Patient Safety Foundation's - Alarm Systems Management Free Webinar Series
  - npsf.org/updates-news-press/alarm-systems-management-free-webinar-series-announced/
- AAMI Medical Device Interoperability
  - aami.org/interoperability/Interoperability_Summit_publication.pdf
- AAMI Foundation HTSI Alarms Best Practices Library
  - aami.org/htsi/alarms/library.html
Clinical Alarm Safety Resources

- ECRI Alarm Management Resources:
  - ecri.org/Forms/Pages/Alarm_Safety_Resource.aspx
- Pennsylvania Patient Safety Authority
  - patientsafetyauthority.org/Pages/Default.aspx

Goal 7
Healthcare-Associated Infections

- NPSG.07.01.01
  - Hand Hygiene
- NPSG.07.03.01
  - Multiple Drug Resistant Organisms (MDRO)
- NPSG.07.04.01
  - Central Line-Associated Bloodstream Infection Prevention (CLABSI)
- NPSG.07.05.01
  - Surgical Site Infection (SSI) Prevention
- NPSG.07.06.01
  - Catheter-Associated Urinary Tract Infections (CAUTI)
HAI Reduction Goals

- Provide surveillance data to key stakeholders (not required for CAUTI)
  - Leaders, licensed independent practitioners, nursing staff, and other clinicians
- Implement policies and practices aimed at reducing the risk of infections
- Measure and monitor prevention processes and outcomes

Evidence-Based Practice

- A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge
- In these cases, the element of performance refers to a practice that is cited in scientific literature or endorsed by professional organizations
### Requirements for CLABSI, CAUTI, SSI, & MDRO

- Periodic risk assessments
  - (refer to LD chapter overview)
- Implement evidence-based practices
- Educate staff and LIPs at hire (privileging) and annually (exception CAUTI)
- Documentation of patient and family education (except CAUTI)
- Implement surveillance programs based on risk assessments

### Requirements for CLABSI, CAUTI, SSI, & MDRO

- **Targeted Surveillance Expectation**
  - MDROs
  - Surgical Site Infections
  - Catheter-Associated Urinary Tract Infection
- **Total Surveillance Expectation**
  - Central Line Associated Bloodstream Infections
NPSG.15.01.01
Suicide Risk Assessment

- Identify patients at risk for suicide
  - Applies only to psychiatric hospitals and patients being treated for emotional or behavioral disorders in general hospitals
    - Conduct risk assessment that identifies specific patient characteristics & environmental features that may increase or decrease risk for suicide
    - Address immediate safety needs and most appropriate setting for treatment
    - When at risk, provide suicide prevention information (such as crisis hotline) to patient & family

NPSG.15.01.01
Patients at Risk for Suicide

- Applicability Scenarios
  - Patient seen in ED for sustained fracture in the act of attempting suicide
  - Patient admitted to ICU for detoxification

- Check out Sentinel Event Alert #46 Suicide Risks in the Med-Surgical Setting Suicide BoosterPak™
  - Describes NPSG and implementation suggestions
  - Describes survey discussion re: NPSG, including the documents needed for review
  - FAQs for suicide risk
  - Defines key terms and supporting documentation, evidence, value and historical information
Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™

- Applies to all surgical & nonsurgical invasive procedures
- Three components
  - Conducting a Pre-procedure Verification Process (UP.01.01.01)
  - Marking the Procedure Site (UP.01.02.01)
  - Performing a Time-Out (UP.01.03.01)

Conducting a Pre-procedure Verification Process (UP.01.01.01)

1. Implement a pre-procedure process to verify the correct procedure, for the correct patient, at the correct site.
2. Identify the items that must be available for the procedure and use a standardized list to verify their availability. At a minimum, these items include the following:
   - Relevant documentation (e.g. H&P), consent form, nursing assessment, and pre-anesthesia assessment)
   - Labeled diagnostic and radiology test results (for example, radiology images and scans, or pathology and biopsy reports) that are properly displayed
   - Any required blood products, implants, devices, and/or special equipment for the procedure
3. Match the items that are to be available in the procedure area to the patient
Marking the Procedure Site (UP.01.02.01)

1. Identify those procedures that require marking of the incision or insertion site. At a minimum, sites are marked when there is more than one possible location for the procedure and when performing the procedure in a different location would negatively affect quality or safety.

2. Mark the procedure site before the procedure is performed and, if possible, with the patient involved.

3. The procedure site is marked by a licensed independent practitioner who is ultimately accountable for the procedure and will be present when the procedure is performed.

4. The method of marking the site and the type of mark is unambiguous and is used consistently throughout the hospital.

5. A written, alternative process is in place for patients who refuse site marking or when it is technically or anatomically impossible or impractical to mark the site (for example, mucosal surfaces or perineum).
Performing a Time-Out (UP.01.03.01)

1. Conduct a time-out immediately before starting the invasive procedure or making the incision.
2. The time-out is standardized
3. When two or more procedures are being performed on the same patient, and the person performing the procedure changes, perform a time-out before each procedure is initiated.
4. During the time-out, the team members agree, at a minimum, on the following: Correct patient identity, the correct site, the procedure to be done
5. Document the completion of the time-out.

If You Were The Surveyor...

- The attending physician has delegated the 2nd year resident to do the informed consent, site marking, time out, and initial incision. The attending physician enters the room after the procedure has started
  - What do you think?
  - What follow up questions would you ask?