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Module 4: Patient Safety

Welcome to Patient Safety

- Assess organization's culture of safety
- Identify the role of technology in enhancing patient safety
- Integrate safety activities throughout the organization
- Analyze the use of human factors engineering, high reliability, and systems thinking in safety activities
- Participate in safety and risk management assessment activities, including incident reporting, sentinel event review, root cause analysis, and failure mode and effects analysis



Why focus on patient safety?

- Humans make mistakes and errors
- Preventable harm continues despite patient safety improvements
- 44,000-98,000 Americans die each year due to preventable harm
- Great opportunity still exists to reduce harm
- Managing Mistakes and Errors
- Patient Safety
- To Err is Human: Building a Safer Health System (2000). Institute of Medicine.



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Assess organization's culture of safety

Patient safety culture



ORGANIZATIONAL MEASUREMENTS BELIEFS, VALUES, SUPPORT NORMS



Creating a safety culture





Creating a safety culture

- Vision
 - Does the culture have a clear vision?
- Assessment
 - Where is the organization compared to its stated values or goals?
- Leadership
 - Does leadership own the safety culture?
- Tools
 - How do you create tools to reinforce the behaviors and culture desired?
- Performance Reviews
 - How do you link safety culture and the annual performance review?



Company Details for: ABC Medical Group

SUMMARY BRIEF

 ABC Medical Group noted several recent events where the wrong patient's information was entered into charts. This created several close calls where treatment decisions were nearly made on wrong information.

THE COMPANY

 ABC Medical Group is a 10-office group of multispecialty provider practices. Each office is staffed with front office personnel, medical assistants, and LPNs. Each office also has a dedicated practice manager.

THE PEOPLE

Front office personnel, medical assistants, LPNs, practice manager



Company Details for: ABC Medical Group

THE CHALLENGES

 Busy practice, staffing challenges, no standardized process in place to verify patient identification, no clear responsibility for ensuring accuracy of information entered.

THE GOALS

 A team was developed, supported by a corporate quality resource, to understand the processes and to determine why these events occurred. Looking at the processes, it was identified that when busy, errors were easily made. The action taken was to embed error prevention tools within the front office team, reinforced by practice managers, to perform double checks to ensure data integrity.



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Identify the role of technology in enhancing patient safety

Technology in enhancing patient safety

Computerized Order Entry (CPOE)

Bar Code Medical Administration (BCMA)

Electronic Medical Record

Abduction/ Elopement Security System



Computerized Order Entry (CPOE)

- Eliminates handwriting issues
- Manage medication selection choices of providers
- Uses embedded decision support tools to prevent error and ineffective treatment (i.e. dosage suggestions, drug to drug interaction warnings).



Bar Code Medical Administration (BCMA)

 Eliminates the delivery of the wrong medication to the patient by ensuring that the medication and patient scanned match with the order.



Electronic Medical Record

 Keeps information about care of patient in one accessible place for the use of interdisciplinary teams.



Abduction/Elopement Security System

Serves as a deterrent and warning system, utilizing different alarms for security.



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Integrate Safety Activities throughout the Organization

How is a patient safety program built?

What is a Patient Safety Program?

- ACTIONS
- SAFETY EDUCATION
- DATA COLLECTION AND ANALYSIS



Actions

- Strategic plan, quality management, and infection control
- Proactive risk reduction
- Identifies high-risk processes
- Identifies, manages, and reports sentinel events, never events, and other significant events defined by practice setting and state law



Safety Education

- Staff
- Practitioners
- Leaders
- Patients and family at admission and as needed



DATA COLLECTION AND ANALYSIS

- Incident reporting
- Medical error reporting
- Infection surveillance
- Facility safety surveillance
- Staff, practitioners, patient and family perceptions of patient safety
- Staff willingness to report errors



Patient Safety Reporting





Near Miss/Close Call

A "near miss" is an event or situation that could have resulted in an accident, injury or illness, but did not, either by chance or through timely intervention. It is also referred to as near miss incident.

- Example 1: A surgical procedure was almost performed on the wrong patient due to a lapse in verification of patient identification. However, it was caught at the last minute when the patient was addressed by name and clarified who he was, with no harm done to the patient.
- Example 2: A pharmacy technician discovered that an emergency cart had an extra medication box. They checked the rest of the carts on the floor and found that one cart was missing the medication box. If the cart without the medication box had been used in an emergency, the patient could have been harmed.
- Example 3: A medical assistant in a busy office practice notices that a patient seen earlier in the day has new results back from urgent blood work. She notes that no one has called the patient yet with these results and alerts the physician. The physician notes that the patient should be seen in the emergency room for urgent treatment.



Patient Safety Actions

- The following are all actions that can improve patient safety.
 - Simplify work processes and standardize procedures
 - Reduce reliance on memory and vigilance
 - Use checklists and trigger tools
 - Use forcing functions
 - Eliminate look-alike/sound-alike names
 - Provide education on work processes/procedures/improvements
 - Adjust work schedules
 - Increase feedback and direct communication
 - Emphasize teamwork and crew resource management
 - Drive out fear of reporting
 - Solidify commitment to safety culture
 - Provide training programs
 - Make environmental adjustments



National Patient Safety Goals (NPSGs)

 National Patient Safety Goals (NPSGs) are developed by the Joint Commission to help accredited organizations address specific areas of concern about patient safety. These NPSGs have become a critical method by which the Joint Commission promotes and enforces major changes in patient safety.



NPSGs are set for these types of organizations:

EXAMPLE

- Ambulatory care
- Assisted living
- Behavioral healthcare
- Critical access hospitals
- Disease-specific care
- Home care
- Hospitals
- Laboratories
- Long-term care
- Network programs
- Office-based surgery



Patient Safety Organizations (PSOs)

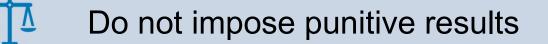
Aggregate data to identify risk patterns



Assure providers safety work will not be used against them

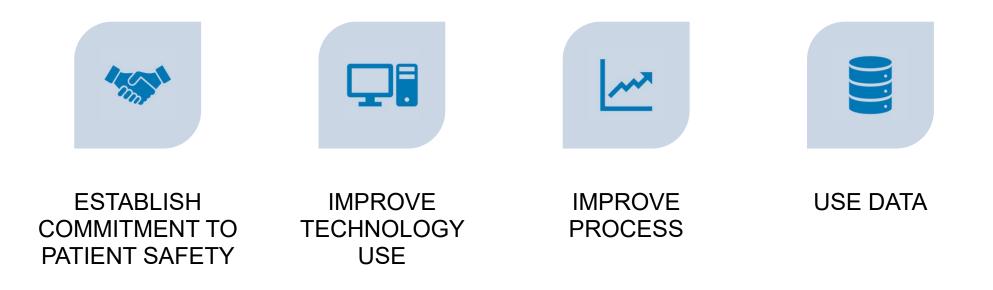


Allow providers to work together





Creating Safety Culture



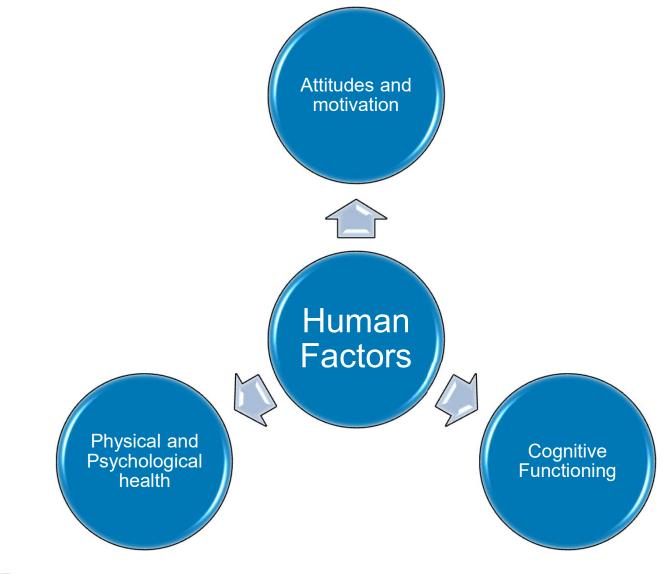


Creating Safety Culture

- Establish commitment to patient safety
 - Allocate resources, such as staff, equipment, and time
- Improve process
 - Analyze processes with failures and risks driving change
- Improve technology use
 - Communicate and implement any changes
- Use data
 - Support non-punitive error reporting



Human Factors





What does your organization do?

- What does your organization do to address employee attitudes and physical and psychological health?
 - Sick leave, paid time off
 - Healthcare coverage supports exercise, addressing smoking, alcohol use, mental healthcare
 - Non-punitive system for employee complaints suggestions
 - Staffing models



Promoting Patient Safety

- Improvement efforts should be focused on patient safety.
- Patient safety is promoted by:
 - Taking action against immediate danger
 - Reporting all potential and actual safety issues
 - Working with others
 - Receiving regular training



Creating a Safety Culture

- Support error reporting
- Allocate resources
- Take Action
- Analyze processes



Creating a Safety Culture

- Allocate resources
 - Allocate resources, such as staff, equipment, and time.
- Analyze processes
 - Analyze processes with failures and risks driving change.
- Take Action
 - Communicate and implement any changes.
- Support error reporting
 - Support non-punitive error reporting.



Just Culture

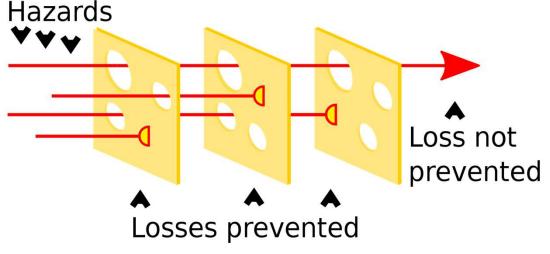
- A Just Culture means that everyone is a safety advocate, no matter your role.
 - Everyone makes mistakes and implements workarounds.
 - Improperly designed systems can create errors.
 - Importance of learning from mistakes and near misses.
 - Individuals are accountable and the framework must be implemented consistently.
 - Focus on the process, not the person.
 - The greatest error is not to report.



Promoting Patient Safety

The six tenants of Just Culture:

- Just and fair treatment
- Human Behavior + system = outcome
- Humans make mistakes
- Competent staff drift into improper behavior People don't come to work to do a bad job
- Learning culture encouraged by balancing system and individual accountability





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Analyze the use of human factors engineering. high reliability and systems thinking in Safety activities

How do you create an effective safety culture?

Human Factors

- Considers strengths and limitations
 - Considers human strengths and limitations in design of interactive systems.
- Focus on actual practice
 - Focuses on how systems work in actual practice with real human beings; attempts to design systems to optimize safety.
- Examines activity
 - Examines activity includes component tasks; assessing aspects of work environment, and device design.



Human factors engineering

- Human factors engineering is:
 - Application of physical/psychological characteristics to design
 - Practice of design that takes proper account of interactions between design and people



High Reliability Organizations

PREOCCUPATION WITH FAILURE

HROS are preoccupied with failure; even if they haven't had an accident for many months or years.

RELUCTANCE TO SIMPLIFY

Threats to safety can be complex and present themselves in many forms.

SENSITIVITY TO OPERATIONS

 HROS recognize that the earliest indicators of threats to organizational performance typically appear in small changes.

COMMITMENT TO RESILIENCE

- HROS take great pains to recognize that despite best efforts and past successes, errors will occur, and safety will be threatened.
- DEFERENCE TO EXPERTISE
 - HROS have mechanisms in place to identify the individuals with the greatest expertise relevant to managing the new situation.



High Reliability

- High Reliability organizations:
 - Succeed in avoiding catastrophes in high hazard environments
 - Adapt and apply lessons of high reliability
 - Are an environment of collective mindfulness

Statement from AHRQ and PSNet.



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Participate in Safety and Risk Management Assessment Activities, including incident reporting, sentinel event review, root cause analysis, and failure mode and effect analysis

How do I approach Patient Safety?

Examples of Patient Safety Events

- These are examples of events that require analysis:
 - Suicide
 - Infant abduction or discharge to wrong family
 - Rape
 - Hemolytic transfusion reaction
 - Wrong-site surgery
 - Falls
 - Medication errors
 - Adverse drug events
 - Missing patients
 - Major loss of function
 - Death



Safety Events

Medical Error

 Failure of planned action to be completed as intended or use of a wrong action plan.

Adverse Event

 Injury caused by something that happened in delivery of care (rather than underlying disease or patient condition).

Note that these definitions are not mutually exclusive and can be used interchangeably in practice.



Adverse Events

- Preventable
 - Occurred due to error, failure, or system design flaws.
- Ameliorable
 - Unpreventable events that could have been less harmful if care had been different.
- Due to Negligence
 - Occurred due to care that falls below standards.



Sentinel Events

Sentinel events are defined as patient safety events that reach the patient and result in death, permanent harm, or severe temporary harm. Sentinel events also signal the need for immediate investigation and response. There are three versions:

1. Adverse Outcome: involves death or serious physical/ psychological injury

2. Patient Safety Event: reaches a patient and results in death, permanent harm, severe temporary harm, and/or intervention

3. Unanticipated Event: results in death or serious physical, or psychological injury; not related to the natural course of patient illness



Examples of Sentinel Events

These are examples of sentinel events:

- Anesthesia-related
- Criminal Event
- Delay in Treatment
- Dialysis-related
- Drug Overdose
- Elopement
- Fall
- Fire
- Infant Abduction
- Infection-related
- Maternal Death

- Medical Equipment related
- Medication Error
- Operative/Post- Operative
 Complication
- Perinatal Death/Injury
- Radiation Overdose
- Restraint-related
- Suicide
- Transfer-related
- Transfusion error
- Ventilator Death
- Wrong Patient Procedure

Quality's Role in Patient Safety

INCIDENT REPORT REVIEW

Review of the records of the facility's unusual occurrences events.

SENTINEL EVENT REVIEW

 Review done as a result of an unexpected death or serious injury or risk of these types of outcomes.

PATIENT SAFETY GOALS

- Review to measure adherence to accreditation and regulatory body standards and own internal goals.
- PATIENT SAFETY IMPROVEMENT TEAM
 - A multi-disciplinary group to analyze safety issues and recommend improvements.



Types of Quality Issues

- UNDERUSE OF CARE
- OVERUSE
- MISUSE



Types of Quality Issues

Underuse of Care

- Patients do not receive beneficial services
- Example: Myocardial infarction patients who fail to receive beta blockers; flu shots not given
- Overuse
 - Patients receive treatment without benefit
 - Examples: Medications given without justification such as antibiotics for a common cold; failing to follow effective options that cost less/have fewer side effects

Misuse

- Patients receive appropriate but poorly provided service, exposing them to added risk of preventable complications
- Example: Prescribing a medication when the patient is allergic to it



Improving Patient Safety

- How do you improve patient safety?
 - Improve medication practices
 - Improve emergency services
 - Improve workplace safety
 - Reduce Hospital Acquired Conditions (HACs)
 - Involve the patient and their family
 - Safe environments
 - Work with others
 - Change processes
 - Thorough analysis



Anexas Europe: CPHQ Training

Failure Mode and Effects Analysis (FMEA) vs. Root Cause Analysis (RCA)

FMEA

- Systematic and proactive method
- Used for new systems/processes, redesign, and existing systems/ processes
- Analysis completed for each failure identified

RCA

- Systematic reactive process
- Aimed at finding the basic problem (root cause) and
- Taking action to correct the problem after it has occurred



FMEA STEPS

- Define topic/process
- Convene Interdisciplinary team/experts
- Develop flow diagram
- List all possible failure modes
- Determine action
- Identify outcome measures



FMEA STEPS

- Define topic/process
 - Define topic and process to be studied
- Convene Interdisciplinary team/experts
 - Convene interdisciplinary team with content and process experts
- Develop flow diagram
 - Develop flow diagram of process and sub-processes
- List all possible failure modes
 - List all possible failure modes of each sub-process including severity and probability of failure mode
- Determine action
 - After analyzing the failure modes, determine action for each failure mode, to eliminate, control, or accept
- Identify outcome measures
 - Identify corresponding outcome measures to test the redesigned process



Root Cause Analysis (RCA)

- Systematic process
- After action has occurred
- Seeks to reduce variation
- Requirement of regulatory bodies



RCA Steps

- Identify causes
 - Identify potential causes of variation
- Verify potential causes
 - Verify potential causes by collecting data about the process
- Analyze data utilizing tools
 - Analyze data utilizing tools to determine actual/most probable causes
- Develop and implement action plan
 - Develop and implement action plan to eliminate/ minimize root cause of variation



Risk Management

- Risk Management is key in helping us understand the risks to the organization.
 - Organized effort to identify, assess, and reduce risks
 - Reaction to increasing litigation
 - As litigation continued to rise, risk management assumed a more proactive role
 - Risk management and quality improvement are closely related
 - Goal of risk management is to protect organizations from financial loss



Risk Management Functions

- Maintenance and Monitoring
- Claims management
- Education



Risk Management

Risk Managers

- Make decisions about:
 - Professional liability
 - General liability
 - Worker's compensation
- Should have knowledge of:
 - Healthcare law
 - Legal system
 - Insurance industry



Types of Professional Liability

Corporate liability

Based on recognition that the organization owes a duty to the patients it serves.

Vicarious liability

• Indirect responsibility for the acts of another person; respondent superior, which holds the employer responsible for the wrongful acts of its employees.

Ostensible agency

 Generally, an organization is not liable for injuries sustained by patients because of the actions of an independent contractor. However, the extension of respondent superior to the doctrine of the ostensible agency may extend liability exposure to the organization for actions of non-employed, independent contractor clinicians or staff where no employer-employee relationship exists.

Res ipsa loquitur

• Allows a patient to prove his or her case without needing to establish the standard of care in which there is clear and obvious negligence



Integrating Risk Management

- How do you integrate risk management into your organizations?
- Enterprise risk management
- Comprehensive business decision-making process
- Recognize synergistic effect of risks
- Reduce uncertainty and process variability



Risk Management Process

- Identify exposure
- Examine risk management techniques
- Select best technique
- Implement technique/ action plan
- Monitor Effectiveness



Risk Management Process

- Identify exposure
 - Identify exposure to accidental loss
- Examine risk management techniques
 - Examine risk management techniques to reduce or eliminate exposure
- Select best technique
 - Select best technique
- Implement technique/ action plan
 - Implement technique and action plan
- Monitor Effectiveness
 - Monitor effectiveness



XYZ Skilled Nursing and Rehabilitation

SUMMARY BRIEF

- XYZ Skilled Nursing and Rehabilitation is in a small community. Recently their medical director retired, and they are having difficulty hiring a replacement. In addition, their professional nursing staff numbers are lower than required by the state. They have decided to contract with an agency for all positions.
- THE COMPANY
 - The facility has had 100% employed staff in the past, including the medical director, all nursing staff and physical/occupational therapy staff.
- THE PEOPLE
 - The facility leadership includes the administrator, director and assistant director of nursing, physical therapist director of rehabilitation, human resources director and a medical director.
- THE CHALLENGES
 - By law the facility must have a designated number of RNs per patient population on each shift. A medical director is required to oversee the care. Recent challenges to hire for the vacated position are a result of the draw of a larger urban hospital with better wages and benefits than this facility can provide.
- THE GOALS
 - The HR director notes the potential liability of the use of agency staff due to ostensible agency. The leadership team completes an FMEA and notes a deficiency in their insurance coverage of agency staff. They work with their insurance agent to modify their coverage so that it covers agency staff in the event of an error.



Complaints

- Complaints
 - Must attempt to address while patient receives care if the organization becomes aware of it while the patient is receiving care.
 - If the complaint is not resolved within established time frames, it becomes a grievance
 - Does not include complaint about billing
- Example: A patient is concerned that they haven't been gotten out of bed today. They voice their concern to their frontline nurse. The nurse listens and addresses the concern to the patient's satisfaction. This complaint is considered resolved. In another situation, consider that the patient was not satisfied by the response of the frontline nurse. The patient calls the patient advocacy department, this complaint has now become a grievance.



Grievance Process

Grievance Process

- Grievances can be filed by patients/family members/patient's agent
- Risk management must address issues related to potential litigation
- The board appoints the grievance committee, delegates authority for managing grievances
- May be addressed by Patient Experience or Quality Department (Varies)
- Formal process is identified by specific regulators/ payors/ accreditors



Patient Safety Recap

- You analyzed the types of technology involved in patient safety and potential risks they pose.
- You identified the role of safety activities in your organization.
- You analyzed the role of Human Factors Engineering, high reliability, and systems design in organizations.
- You reflected on the role of FMEA and RCAS within organizations.

