NMNEC Concept: **Safety**

Mega Concept: Professional Nursing

Concept Category: Care Competencies

Concept Name: Safety

Concept Definition:
A process of ongoing risk assessment in the delivery of health care to minimize risk of harm to patients and providers.

Scope/Categories/Types:

- **Scope:**
  The scope of safety in health care ranges from the safe execution of specific procedures and tasks to health care system variables that impact the occurrence of errors in health care.

- **Categories:**
  There are four categories of errors that impact patient safety:
  - **Diagnostic errors**: Result from delay in diagnosis, failure to employ indicated tests, use of outmoded tests, or failure to act on results of monitoring and testing.
  - **Treatment errors**: Occur in the performance of an operation, procedure, or test; in the administration of a treatment; in the dose or method of administering a drug; or in avoidable delay in treatment or in responding to an abnormal test result.
  - **Preventive errors**: Occur when there are failures to provide any of the following: prophylactic treatment, adequate monitoring, or follow-up treatment.
  - **Communication errors**: Occur from failure of communication.

- **Types:**
  These four types of errors impact patient safety by causing one of the following:
  - **Adverse event***:* An event that results in unintended harm to the patient by an act of commission or omission rather than by the underlying disease or condition of the

patient (Institute of Medicine [IOM], 2004).

- **Near miss**: An error, commission, or omission that could have harmed the patient, but serious harm did not occur as a result of chance (e.g., the patient received a contraindicated drug but did not experience an adverse drug reaction), prevention (e.g., a potentially lethal overdose was prescribed, but a nurse identified the error before administering the medication), or mitigation (e.g., a lethal overdose was administered but discovered early and countered with an antidote; IOM, 2004).
- **Sentinel event**: "A sentinel event is an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase 'or the risk thereof' includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome. Such events are called 'sentinel' because they signal the need for immediate investigation and response" (Joint Commission, 2011, para 2).
  - Some sentinel events are considered "never events" which are considered particularly shocking medical errors (such as wrong-site surgery) that should never occur (Agency for Healthcare Research and Quality, 2017).

When an adverse event, near miss, or sentinel event occurs, health care teams should focus on what went wrong rather than just blaming the individual clinician who executed the error. Health care organizations are working to create a culture of safety, which is defined by the Agency for Healthcare Research and Quality as:

> The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures. (Health and Safety Commission, 1993)

Attributes and Criteria:

Just Culture: Refers to an organization's explicit value of reporting errors without punishment. A just culture seeks to balance the need to learn from mistakes and the need to implement disciplinary action. A just culture is essential to creating a culture of safety in health care organizations.

Transparency in Health Care: Recommended by the IOM (2004), transparency in health care

should make information available to patients and families that allow them to make informed decisions about where and from whom to receive their care. This information should include systems performance on safety, evidence-based practice, and patient satisfaction. Transparency is also defined as open communication and information to patients and their families about their care, including adverse and sentinel events. Timely, open, and honest communication with patients and families about adverse events helps restore trust.

Nursing as a profession contributes to the safety culture by looking at patient outcomes that are determined to improve if the quantity or quality of nursing care is improved (**Nursing-Sensitive Indicators**). The National Database of Nursing Quality Indicators collects data and identifies nursing-sensitive indicators that contribute to the four types of errors that impact patient safety. Examples of some common nursing-sensitive indicators are pressure ulcers, falls, restraint use, and intravenous infiltrations.

Theoretical Links:

Human Factors: Adapted from engineering and expanded to address processes in health care, human factors research focuses on the ability or inability to perform exacting tasks while attending to multiple things at once. In applying a human factors framework to health care, the emphasis is on both supporting health care professionals' performance and also eliminating hazards. Because the work that nurses do is complex, with inherent risk in nearly every point in the process, applying a human factors framework around processes that lead to error is invaluable.

Crew Resource Management: Crew resource management was developed in the aviation industry to standardize procedures, standardize communication, decrease errors, and increase efficiency. It emphasizes the role of human factors in high-stress, high-risk work environments. Health care environments are high-stress, are complex, and require highly functioning teams as well accurate communication among all members of the health care team and with patients and families of patients. There are six critical components of crew resource management:

1. Situational awareness by the health care team members sharing a mental model.
2. Problem identification through the use of voluntary, active, and open communication to identify concerns.
3. Decision making through generation of alternative acceptable solutions.
4. Appropriate workload distribution so that no team member is overloaded.
5. Time management through appropriate use of resources to solve time-critical problems.

6. Conflict resolution by gaining consensus through active listening, focus on issues, and mutual respect.

High-Reliability Organizations: Manage work that involves hazardous environments (e.g., nuclear power plants, air traffic control agencies) where the consequences of errors are high, but the occurrence of error is low. In health care organizations focused on patient safety, nurses are often the most informed bedside clinician about an emerging error and are obliged to share critical information.

Within the Context of Nursing/Health Care

Knowledge: Being knowledgeable in the safe delivery of care utilizing the safety measures that are in place.

Nurses need to be able to:

- Safely execute nursing interventions.
- Describe the benefits and limitations of selected safety-enhancing technologies (e.g., bar codes, alerts/alarms, medication pumps).
- Utilize effective strategies to reduce reliance on memory (e.g., checklists).
- Recognize factors that create a risk for errors in the diagnostic, preventive, treatment, and communication categories.
- Describe factors that create a culture of safety (e.g., open communication strategies, organizational error reporting systems).
- Identify the processes used in understanding the causes of errors and allocation of responsibility and accountability (e.g., root cause analysis, failure mode effects analysis [FMEA]).

Skills: Ability to utilize tools that contribute to safer systems and delivery of care Nurses need to be able to:

- Maintain responsibility for patient safety in their own individual practice while contributing to the development of safer systems.
- Effectively use technology and standardized practices that support safety and quality.
- Effectively use strategies that reduce the risk of harm to self or others
- Communicate observations of concerns related to hazards and errors to patients, families, and the health care team.
- Utilize organizational error reporting systems for near-miss and error reporting.
- Participate in analyzing errors and designing system improvements.

Attitudes: Nurses' personal and professional attitudes are instrumental in shaping their nursing practice. Nurses need to be able to:

- Value their own role in preventing errors.
- Realize the difference that one person can make in prevention, even for one patient and family.
- Develop an attitude of collaboration to work across the health care team to ensure safe coordination of care.

Interrelated Concepts:

- Communication – Almost all errors in health care that result in significant patient harm involve a failure in communication.
- Collaboration – Collaboration is necessary to create a culture of safety.
- Health Care Quality – An important measure of health care quality is the prevention of health care errors.
- Technology and Informatics – Technology and informatics can prevent some errors while placing patients at risk for other errors.
- Care Coordination –The facilitation of care and services by the health care team, including the patient, in order to optimize patient health outcomes.

Exemplars:

New Mexico Nursing Education Consortium (NMNEC) Required Exemplars:

- National Patient Safety Goals (NPSG)
- QSEN (Quality and Safety Education for Nurses) Safety Competency

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Institute for Healthcare Improvement: http://ihp.org/

Institute for Safe Medication Practices: http://ismp.org/

Joint Commission Patient Safety: https://www.jointcommission.org/topics/patient_safety.aspx

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Quality and Safety Education for Nurses (QSEN): http://qsen.org/competencies/pre-licensure-ksas/#safety

National Patient Safety Foundation: http://www.npsf.org/