Patient-Safety-Healthcare

by Sophia Tutorial

WHAT'S COVERED

In this lesson, you will learn about patient safety in healthcare. Specifically, this lesson will cover:

1. QSEN Guidelines
2. Reflect
3. Innovation

1. QSEN Guidelines

Through all phases of QSEN, the overall goal has been to address the challenge of preparing nurses with the knowledge, skills, and attitudes (KSAs) necessary to continuously improve the quality and safety of the healthcare systems in which they work (QSEN, 2018).

During Phase I of the project, six competencies were defined (Chenot & Christopher, 2019):

- Patient-centered care
- Teamwork and collaboration
- Evidence-based practice
- Quality improvement
- Informatics
- Safety

In addition to these competencies, sets of knowledge, skills, and attitudes (KSA) for each of the competencies were created. The intent was for these competencies as well as the KSAs to be used in nursing pre-licensure programs (Chenot & Christopher, 2019).

Phase II consisted of a set of pilot schools integrating the six competencies and KSAs in their curriculum and the launching of the QSEN website to share teaching strategies and resources (QSEN, 2018).
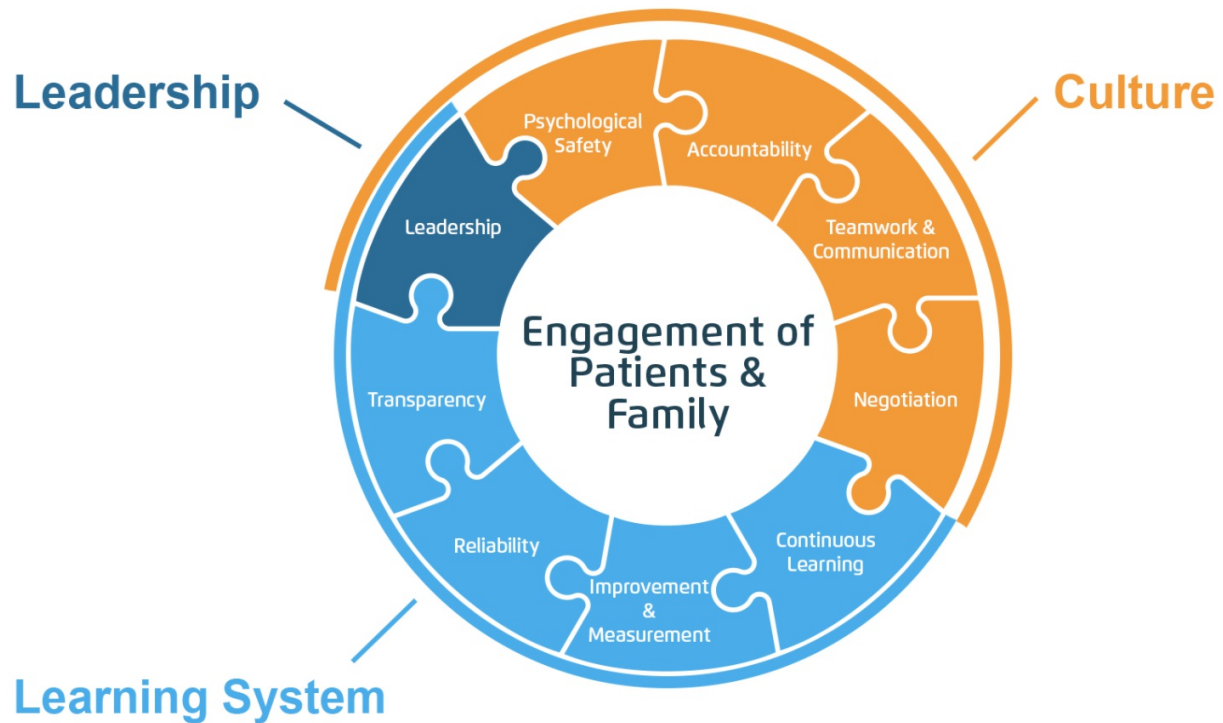
Phase III included the development of a collaboration between QSEN and the American Association of Colleges of Nursing (AACN) to:

- Develop the faculty expertise necessary for nursing schools to teach the competencies
- Focus on including the competencies in textbooks, licensing, accreditation and certification standards
- Promote continued innovation in teaching the competencies (QSEN, 2018)

Review the following diagram for reliable safe care. Is this your organization?

Framework for Safe & Reliable Care

Leadership

Culture

Psychological Safety

Accountability

Leadership

Teamwork & Communication

Transparency

Engagement of Patients & Family

Negotiation

Reliability

Continuous Learning

Improvement & Measurement

Learning System

Framework for Safe & Reliable Care
Source: HealthCatalyst, 2019, www.healthcatalyst.com/insights/high-reliability-organizations-in-healthcare-framework

Video Transcription

Julian is a nurse manager of the medical surgical unit at a mid-sized metropolitan hospital. In the past quarter, there have been 38 reports of patient falls compared to the 30 incidents in the quarter before that. Many of these incidents happened in hospital-based facilities. Julian has been assigned to review the incident reports in order to decide whether a root cause analysis is needed and then to follow up to find solutions.

Root cause analysis is a structured method used to analyze adverse events where patient harm or undesired outcomes occurred. The goal is to look beyond human error to identify and address the root causes and contributing factors.

Based on the findings, an actionable plan can be developed to prevent the event from happening again. In other words, root cause analysis focuses on finding out what happened, why it happened, and how to prevent it from recurring rather than who did it.

The process of root cause analysis typically consists of nine steps. For step one, departments should encourage honest reporting of incidents by the frontline personnel. Incidents should then be reviewed in

order to determine whether a root cause analysis is required.

Step two is assigning the incident to a team of individuals who have fundamental knowledge of the specific area of interest and are not directly involved with the case. Step three is developing an initial flow diagram that describes the processes leading to the event.

Step four is creating an event story map that covers the significant details of the events. This can be done by interviewing everyone involved in the incident and using triggering questions to guide further investigation.

Step five is to develop a cause and effect diagram. This includes a problem statement as well as the actions and conditions that caused it. Step six is identifying the root cause contributing factors. These describe how a cause led to an effect and increase the likelihood of an adverse event.

Step seven is developing corrective actions that prevent the event from recurring. Step eight is measuring the outcome to ensure these actions are implemented correctly. And finally, step nine is communicating the results of root cause analysis to the staff.

So coming back to Julian, he carefully reviewed the reports of patient falls in the past three months and initiated a root cause analysis. Following the nine steps, he identified and analyzed the problem, which is the increased number of patient falls. He then defined the root causes including educational issues, organizational factors, and reduced supervision.

Finally, he implemented preventative measures like education of the nursing staff in order to identify high-risk patients, performing frequent safety rounds, and providing safety companions.

2. Reflect

The healthcare system is located in a small to moderate populated city located in the southeastern section of the country. The hospital is a level one trauma center along with high-risk women's centers and outpatient centers. The incidents occurred in an outpatient setting. A patient came into the outpatient setting for a CT scan ordered by her doctor. This was considered non-emergent. The patient filled out the questionnaire prior to the procedure, which asks if there are any known allergies. Intravenous contrast used in radiological procedures may cause moderate reactions, including severe vomiting, hives, and swelling, which occur in 1% of patients receiving contrast media and frequently require treatment. Individuals who have an allergy to seafood (shellfish) may show an allergy to contrast media as well, due to the presence of iodine in both. Treatment may include injectable epinephrine and antihistamines, as well as the use of IV fluids for low blood pressure and shock. The treatment of an acute reaction to contrast media is no different from any other anaphylactic reaction.

The patient has an order for a CT of the chest to rule out persistent pneumonia, weight loss and abnormal lung sounds on a physical exam. The patient registered then proceeded to be called by the radiology nursing staff. The nurse called the patient to come back, provided a gown, asked the patient to change clothing, placed an IV in the right forehand and started IV fluids for the contrast medium. The patient was then taken into the CT scan area by the technician and proceeded to lay down on the table. The nurse administered the

contrast and the technician began the procedure. As the procedure began, the patient noticed itching, and difficulty breathing. The technician stopped the scan and called for the nurse. The nurse brought an emergency box and proceeded to administer epinephrine and antihistamines. The radiology ARNP was in the unit immediately went down to examine the patient. As the ARNP arrived, the patient was having a hard time breathing, so she proceeded to give orders to administer antihistamine 0.5 mg IV. The nurse stated she gave the epinephrine. The patient was becoming pale and oxygen was applied. The pulse oximetry read 82 and vital signs were dropping. The nurse gave another dose of diphenhydramine, for a total of 50 mg. The BP was falling and the patient went into cardiac arrest. The patient was cardioverted stabilized and taken to ICU. The patient suffered a myocardial infarction secondary to the epinephrine dose. The patient recovered and several days later was discharged. As the root cause analysis was conducted, it was discovered the nurse did not have an order to administer the epinephrine, the patient was not triaged with the signs she was experiencing and the route was wrongly administered as it was to be an IM, not IV. The emergency boxes within the radiology unit were not monitored by pharmacy since it was an outpatient area. The ARNP did not give a verbal order, rather told the nurse to go give the meds. The family and the patient settled out of court, however, the trust between the community and the hospital was altered due to incorrect decisions and inability to follow protocols.

⍰ REFLECT

- **What do you think happened, and what elements need to change to improve?**

  As we discussed safety and quality, several things occurred which caused a trifecta of mishaps, or Swiss cheese effect in this scenario. Patient safety incorporates a multidisciplinary approach as it is not just one individual or one service to care for patients.

- **Thinking about how technology has changed healthcare, what do you think the role of informatics plays in healthcare?**

  Let us look at the systematic approach to informatics and how it can be leveraged for and improve healthcare.}}

3. Innovation

Systems thinking helps nurses more effectively implement change and act more in tune with the larger processes of organizational change. This type of thinking adds to the effective prevention of errors in practice, improvements in delegation and priority setting, and enhanced problem solving and quality improvement initiatives. Informatics leverages technology to mitigate inefficiency for the clinical environment.

Consider the improvement of technology within an organization. Nurses working in nursing informatics are thriving in healthcare. Two major roles seem to have emerged in the arena—the clinician who utilizes health information technology and the specialist who creates, facilitates, tests and implements new information technology. Both are essential roles (Brent, 2019).

According to the American Nursing Association (ANA), some of the major functional areas for specialists in nursing informatics include:

- Implementing Electronic Health Record (EHR)
- Designing and training others in the use of EHRs
- Serving as consultants
- Developing policies within their respective institutions
- Analyzing and managing outcomes

These roles can be seen in many healthcare settings, including acute care, long-term care and in physician and APRN offices. One of the greatest contributions made to patient safety by these nurses is in the documentation of the care in the EHR. Electronic documentation allows nurse informatics clinicians to access information quickly and to utilize that information to improve patient safety (Brent, 2019).

When considering the role informatics plays within an organization, it can successfully improve patient care. However, if the system is ill-fitted and outdated, as well as non-efficient then technology improvement is a moot point and a waste of resources. Technology can be a modality that improves the process, albeit the system must be in sync with the changes. The upgrades must be unilateral within the organization in order to achieve optimal quality and patient outcomes. Leadership within the organization is the focal point to recognize how to accurately leverage technology and understanding the metrics that provide insight to the health of the organization. Outcome metrics are what matters. All organizations must evaluate and consider a measurement strategy as a whole. Leadership determines and considers what types of data are needed, how to collect and analyze it. All of the process improvement underpins a just culture of safety and civility.

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Support

If you are struggling with a concept or terminology in the course, you may contact **NurseLeaderSupport@capella.edu** for assistance.

If you are having technical issues, please contact **learningcoach@sophia.org**.