

Quality Management in Health Care



IMPROVING PATIENT SAFETY

Topics Covered in This Lecture

- ▣ Patient safety measurement, assessment and improvement
- ▣ Four components of an effective patient safety initiative



Today, patient safety improvement is a high priority for all stakeholders: providers, purchasers and consumers. Although some believe that purchasers and consumers are having the greatest influence on patient safety improvement activities, a recent study found that the Joint Commission has been the primary driver of hospitals' patient-safety initiatives. Professional and market initiatives have also facilitated improvement, but hospitals report that these have had less impact to date.

Patient safety improvement involves the familiar quality management building blocks:

- Performance measurement;
- Performance assessment; and
- Performance improvement.

In this lecture you are introduced to some concepts that are unique to patient safety improvement and some of the tools that are being used to improve safety. However, it is important to remember that these same tools can also be used for process improvement initiatives that are not explicitly labeled as "patient safety" projects.

Root Cause: Underlying System Problem that Contributed to Event

A man with a known asthmatic condition is seen in the emergency department because of breathing difficulties. He also suffers from diabetes. For three hours caregivers focus on his breathing problems and his diabetic ketoacidosis remains undiagnosed. After diagnosis of the ketoacidosis, proper treatment is then delayed for several more hours.

Root causes:

- The procedures for defining necessary levels of training for physicians in the emergency department are inadequate.
- Emergency department work procedures concerning exchange of information are inappropriate.

The purpose of a root cause analysis is to obtain information about how the system lost control so that preventive actions can be taken to improve the future safety and reliability of the system. Here is a “near miss” event involving patient care in the emergency department (have them read the event)

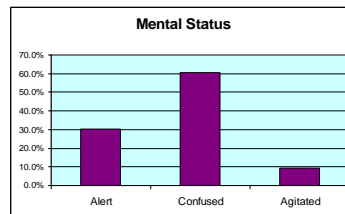
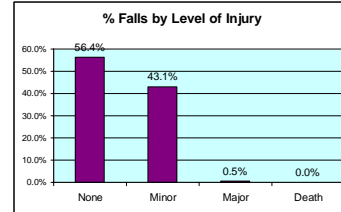
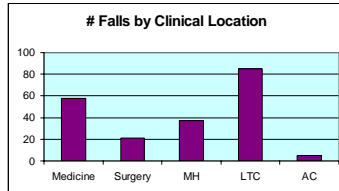
After investigation of what happened, two primary root causes were identified:

- Inadequate process for ensuring that physicians working in the ED have adequate training
- Poor communication among caregivers in the emergency department and with other departments

Although the physicians and nurses care for this patient may have made mistakes, the purpose of a root cause analysis is NOT to identify and fix individual competence problems. The actions and decisions of the individuals involved will be evaluated in a different forum – through the peer review process. A root cause analysis is not done for peer review purposes. The purpose of a root cause analysis is to identify what is wrong in the systems or processes of patient care so that these problems can be fixed.

During the last step in the root cause analysis, the RCA team will determine what needs to be done to fix these root causes so that similar types of events don't continue to happen.

Aggregate Incident Data



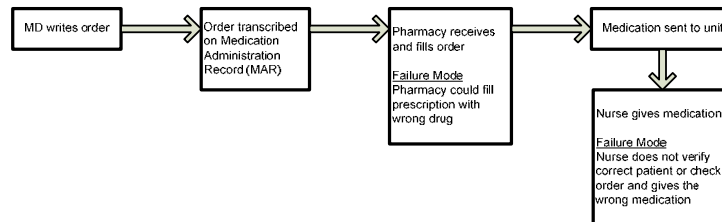
Shown on this slide are examples of the types of aggregate data that would be reported about patient incidents. These are reports on patient falls. One bar graph shows the number of patient falls in each clinical location for a given time period (MH= mental health; LTC = long term care; AC = ambulatory care). Based on this information, in what locations should this health care organization focus its patient fall reduction efforts?

The 2nd bar graph shows the level of injury – in other words, the severity of the injuries that were incurred by the patients that fall. Often patient falls result in no injury or very minor injuries and this report substantiates that finding.

The last bar graph shows one of the factors that may have contributed to patient falls – the patient's mental status. A large percentage of patients were confused prior to their fall. By sharing this type of information with the nursing staff, they can more carefully watch confused patients and initiate fall precautions for those patients. The real value of aggregate incident reporting is what can be learned to help reduce future incidents.

FMEA of a Patient Care Process

- Identify in advance all the ways the process can fail and then make process changes to minimize the risk of failure



Essentially, a FMEA project looks at each step in a patient care process that can fail and identifies, in advance, all the different ways it can fail.

An FMEA project works like this: A facility assembles a team whose mission is to map out the problem, brainstorm possible “failure modes” at each step of the process, prioritize opportunities for improvement, design changes in the process to reduce the “failure mode” from occurring, select measures that will determine whether planned changes have been successfully implemented, and implement the change and re-measure the outcome.

For instance, administering oral medications in a long term care facility is a process that involves many components:

- The physician orders the medication.
- The order is transcribed and written on the resident’s medication administration record (MAR).
- The pharmacy receives the order and fills the prescription.
- The medication is sent to the nursing unit.
- The nurse checks the medication with the MAR and verifies the resident’s identity using an armband.
- The nurse gives the proper medication.

If an error occurs at any one of these steps, the resident could receive the wrong medication and potentially suffer serious side effects or even death.