Hospital Quality Management Fundamentals

KERRY INHOFE, RN, BSN, MPH
What is Quality?

- The Institute of Medicine (IOM) defines healthcare quality as “the degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

- The Joint Commission defines quality as “the degree to which patient care services increase the probability of desired outcomes and reduce the probability of undesired outcomes given the current state of knowledge.”

- The Agency for Healthcare Research and Quality (AHRQ) defines quality health care as “doing the right thing for the right patient, at the right time, in the right way to achieve the best possible results.”
**Adverse Event**: Any untoward incident, therapeutic misadventure, iatrogenic injury, or other adverse occurrence directly associated with care or services provided within the jurisdiction of a medical facility, outpatient clinic, or other facility.

**Close Call** (near miss): An event or situation that could have resulted in an adverse event, but did not, either by chance or through timely intervention.

**Sentinel Event**: A patient safety event (not related to the natural course of the patient’s illness or underlying condition) that reaches a patient and results in death, permanent harm, or severe temporary harm.
Who is responsible for Quality?

- Tip: “Quality” is not a department
- "Your organization will only make meaningful and sustainable quality improvements when people at every level feel a shared desire to make processes and outcomes better every day, in bold and even imperceptible ways." Robert Lloyd, Executive Director of Performance Improvement at the Institute for Healthcare Improvement (www.ihi.org)
- Quality Director
- Every Employee
- Executive
Putting a Man on the Moon

- Who is this guy?
- What is he known for?
- How did he get there?
How Do We Get There?

- IHI’s Model for Improvement
  - 1. **Aim**: What are we trying to accomplish?
    - Specific, measurable
    - How good? By when? For whom?
  - 2. **Measures**: How will we know that a change is an improvement?
    - Outcome Measures
    - Process Measures
    - Balancing Measures
Model for Improvement (continued)

3. Changes: What changes can we make that will result in improvement?

- Try these: critical thinking, benchmarking, using technology, creative thinking, change concepts
Model for Improvement Fundamentals

- Forming the Team
- Setting Aims
- Establishing Measures
- Selecting Changes
- Testing Changes (PDSA)
- Implementing Changes
- Spreading Changes
Aims for Improvement

- Safe: Avoid injuries to patients from the care that is intended to help them
- Effective: Match care to science; avoid overuse of ineffective care and underuse of effective care
- Patient-Center: Honor the individual and respect choice
- Timely: Reduce waiting for both patients and those who give care
- Efficiency: Reduce waste
- Equitable: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status
- Example Aim Statement: Reduce adverse drug events in critical care by 75 percent within 1 year.
Three Types of Measures

- **Outcome Measures**
  - How does the system impact the values of patients, their health and wellbeing? What are impacts on other stakeholders such as payers, employees, or the community?

- **Process Measures**
  - Are the parts/steps in the system performing as planned? Are we on track in our efforts to improve the system?

- **Balancing Measures**
  - Are changes designed to improve one part of the system causing new problems in other parts of the system?
Selecting Changes

- Eliminate Waste
- Improve Work Flow
- Optimize Inventory
- Change the Work Environment
- Producer/Customer Interface
- Manage Time
- Focus on Variation
- Error Proofing
- Focus on the Product or Service
PDSA Cycle(s): Plan-Do-Study-Act

- **Plan**: Plan the test or observation
  - Don’t forget to include a plan for collecting data!
- **Do**: Try out the test on a small scale
- **Study**: Set aside time to analyze the data and study the results
- **Act**: Refine the change, based on what was learned from the test
Diabetes: Planned visits for blood sugar management.

Plan: Ask one patient if he or she would like more information on how to manage his or her blood sugar.

Do: Dr. J. asked his first patient with diabetes on Tuesday.

Study: Patient was interested; Dr. J. was pleased at the positive response.

Act: Dr. J. will continue with the next five patients and set up a planned visit for those who say yes.
Implementing Change

Example

- *Testing a change:* Three nurses on different shifts use a new medication reconciliation process.

- *Implementing a change:* All 30 nurses on the pilot unit begin using the new medication reconciliation process.
Spreading Changes

- Spread is the process of taking a successful implementation process from a pilot unit or pilot population and replicating that change or package of changes in other parts of the organization.

Example

- If all 30 nurses on a pilot unit successfully implement a new medication reconciliation process, then spread would be replicating this change in all nursing units in the organization and assisting the units in adopting or adapting the change.
IHI's Quality Improvement Essentials Toolkit:
http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx

- Cause & Effect Diagram
- Failure Modes and Effects Analysis
- Run Charts and Control Charts
- PDSA Worksheet (fillable)
Promoting a Culture of Safety

- Conduct Patient Safety Leadership Rounds
- Create a reporting system
- Designate a Patient Safety Officer
- Reenact real adverse events from your hospital
- Involve patients in safety initiatives
- Relay safety reports at shift change
- Appoint a safety champion for every unit
- Simulate possible adverse events
- Conduct safety briefings
Human Factors Engineering

Focuses on how systems work in actual practice, with real – and fallible – human beings at the controls, and attempts to design systems that optimize safety and minimize the risk of error in complex environments.
Plotting data over time using a run chart is a simple and effective way to determine whether the changes you are making are leading to improvement.

- Annotate the chart/graph to show the changes you have made.
  - Make graphics self-explanatory
  - Provide self-explanatory symbols
  - Limit the size of tables
  - Avoid abbreviations and jargon
### Keeping Track of Data

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<th>Goal</th>
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- Determine what you want to measure
- Who is going to measure
- How often are we going to measure
- Sampling
- Plotting data over time
Highlight Data, Select "Insert" tab at top of Excel page.

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Select type of chart you want to use.
Reducing Delays for Patients Admitted to the Emergency Department

Avg ED Stay (in minutes)

Goal

Bed Board

Individual responsible for bed control

Quick look x-ray
References

- Institute for Healthcare Improvement:  www.ihi.org
- Patient Safety Network:  https://psnet.ahrq.gov
- Agency for Healthcare Research and Quality:  https://www.ahrq.gov