Fundamentals of Health Workflow Process Analysis and Redesign

Unit 10.8a
Quality Improvement
Methods

Unit Objectives

Upon successful completion of this Component the student is able to:

- Describe Strategies for Quality Improvement
- Describe the role of Leadership in Quality Improvement
- Describe the local clinic improvement capabilities
- Describe and recommend tools for quality improvement
- Compare and contrast the quality improvement methodologies and tools and their appropriate uses in the health care setting
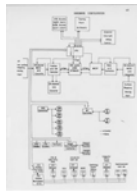

Topics – Unit 10.8

- Foundations of Quality Improvement
- Methods for Quality Improvement
- Tools for performing quality improvement
- A culture of Quality Improvement
- Mistakes in Quality Improvement

Quality Improvement in the Health Care Setting

- **Quality improvement** – an approach to improvement of service systems and processes through the routine use of health and program data to meet patient and program needs

- Examples of **Quality Improvement Projects**
  - Redesigning a Clinical Office
  - Reducing the time for patient intake
  - Redesigning the information flow in a laboratory

Putting Quality Into Practice

- The "Putting Quality Into Practice" video series demonstrates the effects of workflow, resource and systems reviews, electronic medical records (EMRs) implementation and other quality improvement efforts on a practice.
- This series is an 8 part series that plays in a loop. There is approximately 60 minutes of video. The series was produced by the ABIM Foundation, a non-profit foundation.
- http://www.abimfoundation.org/en/Online%20Community/Video/PQIP.aspx

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Three Major Concepts

1. Quality is a Measurable Phenomenon
- • Six dimensions (safe, effective, timely, patient-centered, efficient, equitable)

2. Safety
- • Errors are definable and measurable
- • The right plan is defined on the basis of professional standards
- • To avoid errors, you must decide on the best plan in the context of professional standards, and the plan must be executed

3. Accountability
- • Measurable performance with consequences
- • Currently lies primarily with physicians
- • Physicians will increasingly be held accountable for performance at the microsystem level

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"Knowing is not enough;
we must apply.

"Willing is not enough;
we must do."

- Goethe

Focus

- • You have been introduced to concepts and practices that will enable you to:
  - – Identify and document the processes in a health care setting
  - – Collect and analyze information about processes in the health care setting
  - – Redesign the workflow processes and streamline this redesign
- • Quality Improvement methods and tools enable you to:
  - – collect and compile information on an ongoing basis,
  - – analyze the information for root causes,
  - – make decisions on how to eliminate these problems (process improvement),
  - – change processes based on this analysis, and
  - – redesign (strategic change), and set timetable for these steps.

Quality Improvement in Health Care Settings

- In 2004 Stephen Shortell likened the U.S. healthcare system to a "shoddily constructed building located in the pathway of an impending natural disaster"

- Quality can be improved in the Health Care Setting by understanding the Foundations and Methods Quality Improvement.
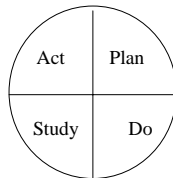

Foundations of Quality Improvement

- Walter Shewhart
- Deming
- Juran

The PDSA cycle

Four steps: Plan, Do, Study, Act

As known as:
- Shewhart cycle
- Deming cycle
- Learning and improvement cycle

Act	Plan
Study	Do

This concludes the first of two lectures for the Quality Improvement Methods unit.

You may go on to the second lecture or stop and return to the second lecture at a later time.

References

1. Chang, Richard Y., Continuous Process Improvement, Richard Chang Associates, Irvine, CA, 1994.
2. Califf, Robert M., Translating Clinical Trials into Practice, (Keynote). Texas Heart Institute Journal vol 33, no 2 (2006) 192196.
3. www.**iso**.org
4. https://www.**dchi.duke**.edu/
5. Ransom, Scott B., Joshi, Maulik S., and Nash, David B. ed., The Healthcare Quality Book: Vision, Strategy, and Tools, Health Administration Press, Chicago, Illinois, AUPHA Press, Washington, D.C., 2005.