

HIM-2320: QUALITY IMPROVEMENT & STATISTICS IN HEALTHCARE

Cuyahoga Community College

Viewing: HIM-2320 : Quality Improvement & Statistics in Healthcare

Board of Trustees:

January 2024

Academic Term:

Fall 2024

Subject Code

HIM - Health Information Management

Course Number:

2320

Title:

Quality Improvement & Statistics in Healthcare

Catalog Description:

Introduction to the components of quality assessment and improvement programs in healthcare facilities. Focus on the issues inherent in the management of quality and performance improvement programs. Introduction to the use, collection, calculation, presentation, and verification of healthcare statistical data.

Credit Hour(s):

3

Lecture Hour(s):

2

Lab Hour(s):

2

Requisites

Prerequisite and Corequisite

HIM-1301 Introduction to Health Information Management, and departmental approval.

Outcomes

Course Outcome(s):

Describe a performance improvement model / process in a healthcare organization.

Objective(s):

1. Describe the evolution of quality assessment and improvement in healthcare.
2. Compare the various philosophies of performance/quality improvement developed by quality management masters.
3. Explain the concept of quality and its importance in healthcare.
4. Identify and explain performance improvement principles.
5. Describe terminology and standards common to performance improvement activities.
6. Identify the processes healthcare organizations use to select performance improvement activities.
7. Identify the effective use of teams in performance improvement activities.

Course Outcome(s):

Use tools to assist with data analysis & data presentation to facilitate decision making.

Objective(s):

1. Identify common healthcare data collection tools.
2. Differentiate between internal and external benchmark comparisons.
3. Recognize the key elements in a performance improvement presentation.
4. Interpret and discuss the various performance improvement tools and techniques that can be used to facilitate communication, identify root causes and collect and analyze data.
5. Describe various types of data.
6. Apply graphical tools for data presentations.
7. Report health care data through graphical representations.
8. Utilize data-driven performance improvement techniques for decision making.
9. Calculate statistics for healthcare operations.

Course Outcome(s):

Compare organizational / governmental standards and regulations related to quality management and performance improvement.

Objective(s):

1. Explain the performance improvement perspectives of accreditation, certification, and licensure organizations.
2. Analyze policies and procedures to ensure organizational compliance with regulations and standards.
3. Identify approaches that lead to success in the survey process.
4. Determine compliance of health record content within the health organization.
5. Identify the impact of policy on health care.

Course Outcome(s):

Outline the safety monitoring process.

Objective(s):

1. Define the key elements in a risk management plan.
2. Describe a risk assessment and a hazard vulnerability analysis.
3. Describe the importance of managing risk exposure in today's healthcare organizations.

Course Outcome(s):

Analyze the various areas in a healthcare organization and their role in performance improvement, quality assessment and utilization management.

Objective(s):

1. Describe patient safety issues and the legal consequences associated with medication errors and adverse drug events.
2. Discuss the steps in the case management function.
3. Describe the use of severity-of-illness/intensity-of-service screening criteria.
4. Differentiate the terms clinical quality assessment, infection control, utilization management, and risk management and differentiate among them.
5. Select the appropriate elements of a quality assessment program.
6. Explain the various approaches that healthcare organizations take to manage the occurrence of infection.
7. Illustrate the basic procedures in the utilization review process.
8. Identify processes of workforce training for healthcare organizations.

Methods of Evaluation:

1. Class participation
2. Quizzes
3. Assignments/case studies

4. Midterm and/or final examination
5. Project and presentation

Course Content Outline:

1. Introduction and history of performance improvement (PI)
 - a. Early quality and performance improvement in healthcare
 - b. Quality, performance improvement, and modern healthcare
 - c. Evolution of quality in healthcare
 - d. Reasons to care about quality and PI
2. Defining a performance improvement model
 - a. PI as a cyclical process
 - b. Systems thinking
 - c. Performance improvement frameworks
 - i. Six Sigma
 - ii. Lean
3. Identifying improvement opportunities based on performance measurement
 - a. Continuous improvement builds on continuous monitoring
 - b. Brainstorming
 - c. Affinity diagram
 - d. Nominal group technique
4. Using teamwork in performance improvement
 - a. Effective teams and team composition
 - b. Team roles
 - c. Mission, vision, and values statements
 - d. Problem-solving techniques, listening, and questioning
 - e. Agendas
5. Aggregating and analyzing performance improvement data
 - a. Data collection tools
 - b. Analysis of data
 - c. Creating and interpreting charts/graphs
 - i. Bar graphs
 - ii. Histograms
 - iii. Pareto charts
 - iv. Pie charts
 - v. Pivot tables
 - vi. Line charts
 - vii. Control charts
 - d. Statistics for healthcare operations
 - i. Administrative and clinical statistical data
 1. Census days
 2. Length of stay
 3. Percent of occupancy
 4. Autopsy
 5. Birth rates
 - ii. Public health statistics
 - iii. Various ways statistics are used in healthcare
6. Communicating performance improvement activities and recommendations
 - a. Meeting agendas and minutes
 - b. Quarterly reports
 - c. Storytelling and storyboards
 - d. Report cards
7. Measuring customer satisfaction
 - a. Monitoring and improving customer satisfaction
 - b. Survey design
 - c. Interview design
8. Refining the continuum of care
 - a. Healthcare in the US
 - b. Shift to paying for value

- i. Medicare value-based programs
 - c. Indicators
- 9. Improving the provision of care, treatment, and services
 - a. The patient care process cycle
 - b. Optimizing patient care
 - c. On-going developments
 - i. National Patient Safety Goals (NPSG)
 - ii. National standardizations of care processes
- 10. Preventing and controlling infectious disease
 - a. Managing infectious disease
 - b. Flowcharts
- 11. Decreasing risk exposure
 - a. Patient rights
 - b. Risk
 - c. Cause-and-effect diagram
 - d. Root-cause analysis
- 12. Building a safe medication management system
 - a. Failure mode and effects analysis
- 13. Managing the environment of care
 - a. Safety management, security management, Hazardous Material & Waste Management, emergency operations, life safety, medical equipment, and utility management programs
 - b. Criteria for an annual evaluation
 - c. Post-program assessment
- 14. Developing staff
 - a. Medical staff
 - i. Credentials and privileges
- 15. Organizing and evaluating performance improvement
 - a. Leading PI activities
 - b. Strategic planning
 - c. PI plan design
 - d. Implementing the PI plan
 - e. Standing committees of the medical staff
 - f. PI education
- 16. Navigating the accreditation, certification, or licensure process
 - a. Healthcare accreditation, certification, and licensure standards
 - i. The Joint Commission (TJC)
 - 1. Survey readiness guide
 - 2. Standards: information management, records of care, treatment & services
 - ii. CMS conditions of participation
- 17. Implementing effective information management tools for performance improvement
 - a. Information governance
 - b. Data repositories
 - c. Information warehouses

Resources

Shaw, Patricia and Darcy Carter. (2019) *Quality Performance and Improvement in Healthcare*, Chicago, IL : American Health Information Management Association.

Sayles, Nanette and Leslie Gordon. (2020) *Health Information Management Technology: An Applied Approach*, Chicago: American Health Information Management Association.

Dianna Foley. *Health Information Management Case Studies*. Third. Chicago: AHIMA, 2023.

Resources Other

1. Journal of AHIMA
2. AHIMA HIM Body of Knowledge - <https://bok.ahima.org/>
3. National Center for Health Statistics - <https://www.cdc.gov/nchs/>
4. Agency for Healthcare Research and Quality - <https://www.ahrq.gov/>

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