



MEDICAL QUALITY MANAGEMENT: THEORY AND PRACTICE

Previously titled: Core Curriculum for Medical Quality Management

CHAPTER OUTLINES

Note: All chapters open with an introduction, learning objectives and history, include case studies, and close with a section on future trends.

1. Basics of Quality Improvement

- a. Healthcare quality management (QM) movement
 - i. Codman
 - ii. Donabedian
 - iii. Shewhart
 - iv. Deming
 - v. TQM
 - vi. Overuse, underuse and misuse
 - vii. Institute of Medicine
- b. Purpose and philosophy of QM
 - i. Accountability
 - ii. Continuous improvement of services
 - iii. Outcomes improvement
- c. Implementing a quality improvement (QI) project
- d. Tools for QI
 - i. Process management
 - ii. Charts and diagrams
 - iii. Cause-and-effect
 - iv. Brainstorming
- e. Methods for QI
 - i. PDSA methodology
 - ii. Nolan's three-question model
 - iii. Six Sigma
 - iv. Six Sigma Lean
- f. Commonly used QI strategies
 - i. Patient centered care
 - ii. Academic detailing
 - iii. Opinion leaders
 - iv. Audit and feedback
 - v. Reminder systems
 - vi. Patient education

- vii. Case management
- viii. Re-engineering
- ix. Incentives
- g. QI research
- h. Challenges and barriers to successful QI
 - i. Technology
 - ii. Structure
 - iii. Psychological climate
 - iv. Leadership
 - v. Culture
 - vi. Legal issues

2. Quality Measurement

- a. Types of quality measurement
 - i. Structural
 - ii. Process
 - iii. Outcome
- b. Constructing a measure
 - i. Baseline
 - ii. Trending, run charts
 - iii. Process variation
 - iv. Benchmarking
- c. Desirable characteristics of quality measures
 - i. Relevant
 - ii. Meaningful or applicable
 - iii. Health improvement
 - iv. Evidence-based
 - v. Reliable or reproducible
 - vi. Valid
 - vii. Feasible
- d. Interpreting quality measures
- e. Program evaluation

3. Patient Safety

- a. Medical errors as a systems issue
 - i. Active failures
 - ii. Latent conditions
 - iii. Human factors
- b. High factors and common patient safety risks
 - i. Fatigue
 - ii. Medication errors
 - Prescribing
 - Transcribing
 - Dispensing
 - Administration
 - Monitoring
 - Measurement
 - Prevention strategies
 - iii. Invasive procedures
 - Correct patient
 - Correct site
 - Antibiotic administration

- Retained surgical equipment
 - Transfusion risks
 - Oversedation
 - iv. Infections
 - v. Patient falls
 - vi. Decubitus ulcers
- c. Patient safety tools
 - i. Tools for data acquisition (reporting and surveys)
 - ii. Analytic tools (event analysis and process improvement)
- d. Disclosure of errors
- e. Prevention of errors
 - i. System approach
 - ii. Operation interventions
- f. High reliability organizations
 - i. Preoccupation with failure
 - ii. Reluctance to simplify
 - iii. Sensitivity to operations
 - iv. Reference to expertise
 - v. Resilience

4. Medical Informatics

- a. Evolution of medical informatics in the U.S.
- b. Purpose of an informatics infrastructure
- c. Essential components of an informatics infrastructure
 - i. Data sources
 - ii. Data definitions
 - iii. Coding classification systems
 - iv. Data transmission
 - v. Health information exchange
 - vi. Data storage
 - vii. Data analysis
 - viii. Electronic medical record (EMR)
 - ix. Computer physician order entry (CPOE)
 - x. EMR and its impact on quality and safety
- d. Evaluating an information infrastructure
- e. Barriers to development of an information infrastructure
- f. Health information technology and return on investment
- g. Glossary

5. Utilization Management

- a. Utilization management (UM) systems
 - i. Critical components
 - ii. UM processes
- b. The nine essential tasks of utilization management
 - i. Determine priorities
 - ii. Identify needed information and stakeholders
 - iii. Establish benchmarks
 - iv. Design data collection and management
 - v. Implement data collection and management
 - vi. Evaluate the data
 - vii. Develop guidelines, policies and procedures
 - viii. Implement guidelines, policies and procedures

- ix. Continuously review the task list
- c. Processes, procedures and timing of UM
- d. Concurrent review and discharge planning
- e. Retrospective review
- f. Inter-rater reliability
- g. Effectiveness of UM programs
- h. Risk management and safety
- i. Organizational design of UM
- j. Functions of a UM committee
- k. Disease management
- l. Case management
- m. Care plans
- n. Demand management
- o. Peer review
- p. Credentialing
- q. Physician profiles
- r. Accreditation and regulatory oversight
- s. Models of care
 - i. Chronic care model
 - ii. Evidence-based medicine and management models
 - iii. Patient centered medical home model

6. External QI: Accreditation, QI Education and Certification

- a. Accreditation
 - i. National Committee for Quality Assurance (NCQA)
 - ii. Utilization Review Accreditation Commission (URAC)
 - iii. The Joint Commission (formerly JCAHO)
 - iv. Leapfrog
 - v. International Organization for Standardization (ISO)
- b. Profiling
- c. HEDIS
- d. Baldrige
- e. Public reporting
- f. Benchmarking
- g. Certification, licensure, credentialing
- h. Teaching quality management and quality improvement
 - i. Undergraduate medical education
 - ii. Graduate medical education
 - iii. Continuing medical education

7. The Interfaces Between QI, Law and Medical Ethics

- a. Role of the government
- b. Specific regulations, laws and acts that pertain to QI
- c. Regulation and public law to ensure quality
- d. HCQIA and peer review protections
- e. National Practitioner Databank
- f. HIPAA
- g. Medical errors and transparency
- h. Basics of malpractice
- i. Facility or organizational risk management issues
- j. Anti-trust in medicine

- k. Alternate dispute resolution, mediation, arbitration
- l. Medical ethics
 - i. Respect for autonomy
 - ii. Beneficence and non-maleficence
 - iii. Justice
 - iv. Institutional review boards

8. Financial management and QI

- a. Basic concepts in business and economics
 - i. Economics
 - ii. Accounting
 - Types of financial reporting tools
 - Types of accounting systems
 - Accounting skills needed by medical managers
 - iii. Finance
 - Costs of capital
 - Discounted cash flow analyses
 - Budgeting
 - iv. Other general business principles
 - Organizational planning and the planning process
 - Project management
 - Creation of business plans
 - Preparation of pro forma financial statements
 - Performance of sensitivity analyses
 - An understanding of organizational psychology
- b. Making the business case for quality
 - i. Outcomes categories
 - Financial
 - Clinical
 - Intangible/social
 - Productivity
 - Operational
- c. Pay for performance (P4P) and quality

9. Organization Design and Leadership

- a. Organizational systems thinking and theories
- b. Responsibilities and necessary competencies for a leader in QI
 - i. Internal advocacy and spokespersonship
 - ii. Policy, planning and vision
 - iii. Delivery system decision support
 - iv. Analysis and control of quality
 - v. External liaison and representation
- c. Roles, power and structure in quality leadership
- d. Conflict resolution
- e. Planning in a quality program
 - i. Behavioral benefits of quality planning
 - ii. Hoshin planning
- f. Strategies to effect change
- g. Strategy formulation and implementation for an organization
- h. Building learning organizations