



2008  
HEALTHCARE QUALITY MANAGEMENT TRAINING PROGRAM  
**By**  
**Quality Associates Inc.**

*All the courses offered during this program  
Have been approved by the National Association for Healthcare Quality for CPHQ CE credit*

## Quality 103

### Information Management for Quality Healthcare

*This activity has been approved by the National Association for Healthcare Quality for CPHQ CE credit*

This Six day course is designed for healthcare professionals who are planning to play a key role in implementing and maintaining quality initiatives in their healthcare organizations. It builds the participant's capacity to understand and utilize basic statistics, epidemiology and data management to achieve Quality Healthcare. The course will cover Design and Data Collection, Analysis and interpretation, The Electronic Medical Records, Statistical and Epidemiologic Methods, Improvement tools, Communications and Quality Reporting. During the course, participants will be given the opportunity to use computers to produce graphs and utilize performance improvement tools. Teaching methods will enhance the analytical skills of participants as well as their ability to draw conclusions based on sound data interpretation to support decision making.

#### **Learning Objectives:**

At the conclusion of this course, participants will acquire knowledge and skills on how to:

#### **A. Design and Data Collection:**

1. Maintain confidentiality of performance improvement activities, records and reports
2. Organize information for committee meetings (e.g., agendas, reports, minutes)
3. Assess customer needs/expectations using surveys
4. Perform or coordinate data inventory listing activities (i.e., what is available from which sources?)
5. Perform or coordinate data definition activities
6. Assess customer needs/expectations using focus groups
7. Perform or coordinate data collection methodology
8. Assist with the evaluation of computer software applications
9. Evaluate computerized systems for data collection and analysis
10. Implement computerized systems for data collection and analysis
11. Use epidemiological theory in data collection and analysis
12. Collect qualitative and quantitative data
13. Aggregate/summarize data for analysis
14. Use Electronic Medical Records to capture patient information
15. Use computerized systems for data collection and quality improvement

**B. Measurement:**

1. Use or coordinate the use of process analysis tools to display data (e.g., fishbone, Pareto chart, run chart, scatter diagram , control chart)
2. Use basic statistical techniques to describe data (e.g., mean, standard deviation)
3. Use or coordinate the use of statistical process control components (e.g., common and special cause variation, random variation, trend analysis)
4. Use the results of statistical techniques to evaluate data (e.g., t-test, regression analysis)

**C. Analysis:**

1. Use comparative data to measure or analyze performance
2. Interpret benchmarking data
3. Interpret incident/occurrence reports
4. Interpret outcome data
5. Interpret data to support decision making

**D. Communication:**

1. Interact with medical staff and support personnel regarding individual patient management issues
2. Promote organizational values and commitment among staff
3. Compile and write performance improvement reports
4. Integrate quality concepts within the organization
5. Coordinate the dissemination of performance improvement information within the organization
6. Ensure accuracy in public reporting activities (e.g. organizational transparency, website content)
7. Facilitate communication with accrediting and regulatory bodies

**Application:**

Participants will apply the knowledge and acquired skills during the exercises that follow the session and through the small group work. They will use computers and generic applications to produce graphs required for quality monitoring and trending. They will be able to apply Performance Improvement tools in live examples from their work places.

**Methodology:**

This training course will incorporate different training strategies to achieve course objectives. Mastery learning approach is emphasized and interactive training methods are utilized including illustrated lectures, group discussion, small group activities and presentations.

**Participant's selection criteria:**

- Participants should have the basic knowledge in healthcare quality
- Active Staff who will be involved in the implementation of the quality program
- Ability to use Microsoft Office and preferably SPSS package
- Full time participation

**Participant's evaluation:**

- Pre and Post test
- Observed interaction and participation
- Delivered projects

**Reference:**

3. Chapter V. in the Healthcare Quality Handbook  
Janet A. Brown R.N., C.P.H.Q.  
Twenty First Annual Edition
4. Q SOLUTIONS: Essential Resources for the Healthcare Quality Professional  
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## Course Schedule

Day/Time	First Session 9:00 – 10:30	Second Session 11:00 – 12: 30	Third Session 1:00 – 2:30	Fourth Session 3:00 – 4:30
<b>First Day</b>	<p><b>Introduction</b></p> <p><b>Ice braking exercises</b></p> <p><b>Pre- Test</b></p>	<p><b>Information Management</b></p> <ul style="list-style-type: none"> <li>▪ Goal &amp; Basic Principles</li> <li>▪ Release of Information</li> <li>▪ Development of a Quality Information System, Interpretation &amp; Utilization</li> </ul> <p><b>Legal Aspects</b></p> <ul style="list-style-type: none"> <li>• Confidentiality</li> <li>• Patient Access</li> <li>• Standards/HIPAA</li> <li>• Security of Information</li> <li>• Conflict of Interest</li> <li>• Informed Consent</li> <li>• Ethics</li> </ul> <p><b>Application:</b> Organize information for committee meetings (e.g., agendas, reports, minutes)</p>	<p><b>Health Information System Theory</b></p> <ul style="list-style-type: none"> <li>▪ History</li> <li>▪ Components</li> <li>▪ Uses</li> <li>▪ Services/Applications</li> <li>▪ Characteristics</li> <li>▪ Development</li> </ul> <p><b>Use of Computerized Information Systems</b></p> <ul style="list-style-type: none"> <li>• Assist with the evaluation of computer software applications</li> <li>• Evaluate computerized systems for data collection and analysis</li> <li>• Implement computerized systems for data collection and analysis</li> <li>• Interpretation and use computer-generated information</li> </ul>	<p><b>Quality Measurement</b></p> <ul style="list-style-type: none"> <li>▪ Why measuring?</li> <li>▪ What are we measuring?</li> <li>▪ Measurement Tools</li> <li>▪ Indicator Development</li> <li>▪ Indicator Selection</li> </ul> <p><b>Application</b></p> <ul style="list-style-type: none"> <li>▪ Review existing Indicator databases</li> <li>• Select the indicators relevant to your organization</li> <li>• Perform or coordinate data definition activities</li> </ul>
<b>Second Day</b>	<p><b>Data Collection</b></p> <ul style="list-style-type: none"> <li>• Collecting qualitative data</li> <li>• Collecting quantitative data</li> <li>• Data Collection Methods</li> <li>• Sources of Data(Identify data sources in your organization)</li> </ul> <p><b>Application</b></p> <ul style="list-style-type: none"> <li>• Use of Data collection Sheets</li> <li>• Use of Brain storming and affinity diagram in generating and organizing ideas</li> <li>• Multi Voting method</li> <li>• Prioritization matrix</li> <li>• Understanding the process through flow charting.</li> </ul>	<p><b>Listening to the customer's voice</b></p> <ul style="list-style-type: none"> <li>▪ Assess customer needs/expectations using surveys</li> <li>▪ Assess customer needs/expectations using focus groups</li> </ul>	<p><b>The Electronic Medical Record</b></p> <ul style="list-style-type: none"> <li>▪ Diagnosis</li> <li>▪ Allergies</li> <li>▪ Orders</li> <li>▪ Consultations</li> <li>▪ Progress Notes</li> <li>▪ Templates Reports</li> <li>• Images</li> <li>• Film less &amp; Paperless EMR</li> </ul>	<p><b>Hands on Training</b> "How to use the EMR as a tool for Quality in Healthcare"</p>

<b>Third Day</b>	<b>Basic Statistics (1)</b> <ul style="list-style-type: none"> <li>▪ Definitions</li> <li>▪ Types of Data</li> <li>▪ Statistical Process Control</li> <li>▪ Statistical Handling of Numbers</li> <li>• Analysis</li> <li>• Evaluation</li> <li>• Comparisons</li> <li>• Interpretation</li> </ul>	<b>Basic Statistics (2)</b> <ul style="list-style-type: none"> <li>• Use basic statistical techniques to describe data (e.g., mean, standard deviation)</li> <li>• Use or coordinate the use of statistical process control components (e.g., common and special cause variation, random variation, trend analysis)</li> <li>• Use the results of statistical techniques to evaluate data (e.g., t-test, regression analysis)</li> </ul>	<b>Epidemiologic Methods (1)</b> <ul style="list-style-type: none"> <li>• Risk Factors</li> <li>• Causality</li> <li>• Numerator and Denominator</li> <li>• Frequency Comparisons</li> <li>• Morbidity &amp; Mortality</li> <li>• Population &amp; Sampling</li> </ul>	<b>Analysis and Interpretation</b> <ul style="list-style-type: none"> <li>▪ Analysis Process</li> <li>▪ Pattern/Trend Analysis</li> <li>▪ Group Analysis Techniques</li> </ul>
<b>Fourth Day</b>	<b>Introduction to Excel Application</b> How to use SPSS in performance Analysis	<b>Data Processing</b> <ul style="list-style-type: none"> <li>• Use or coordinate the use of process analysis tools to display data</li> </ul> <b>Application:</b> <ul style="list-style-type: none"> <li>• Fishbone,</li> <li>• Histograms</li> <li>• Pareto Chart</li> </ul>	<b>Data Processing</b> <ul style="list-style-type: none"> <li>• Use or coordinate the use of process analysis tools to display data</li> </ul> <b>Application:</b> scatter Diagram	<b>Data Processing</b> <ul style="list-style-type: none"> <li>• Use or coordinate the use of process analysis tools to display data</li> </ul> <b>Application:</b> Run chart, Control chart
<b>Fifth Day</b>	<b>Analysis</b> <ul style="list-style-type: none"> <li>▪ Use of comparative data to measure or analyze performance</li> </ul>	<b>Hands on Training</b> <ul style="list-style-type: none"> <li>▪ Interpret benchmarking data</li> </ul>	<b>Hands on Training</b> <ul style="list-style-type: none"> <li>▪ Interpret incident/occurrence reports</li> </ul>	<b>Hands on Training</b> <ul style="list-style-type: none"> <li>▪ Interpret outcome data</li> <li>▪ Interpret data to support decision making</li> </ul>
Sixth Day	<b>Communication</b> Interaction with medical staff and support personnel regarding individual patient management issues  Promotion of organizational values and commitment among staff	<b>Reporting</b> Compilation and write performance improvement reports  Integration of quality concepts within the organization  Coordination of the dissemination of performance improvement information within the organization	<b>Public Reporting and communication with Regulatory bodies</b> Ensure accuracy in public reporting activities (e.g. organizational transparency, website content)  Facilitate communication with accrediting and regulatory bodies	<b>Study Questions</b> <ul style="list-style-type: none"> <li>▪ Exam Guidelines</li> <li>▪ Q&amp; A session with the different types of questions, model answers and common mistakes</li> </ul> <b>Post Test</b>  <b>Wrap Up</b>  <b>Closing Ceremony</b>