



Healthcare AI Quality Improvement Course

3 – 7 January 2027
Muscat

Healthcare AI Quality Improvement Course

Ref: 247_121527 **Date:** 3 – 7 January 2027 **Location:** Muscat **Fees:** 5700 Euro

Overview

Healthcare AI Quality Improvement Course is a five-day foundation course for healthcare quality managers, clinical governance teams, patient safety personnel, hospital operations leaders, healthcare data analysts, and quality improvement coordinators, who leave with a Healthcare AI Quality Improvement Plan. Participants connect quality measures and data readiness with variation signals, root cause support, workflow improvement, patient safety review, human oversight, quality dashboards, and escalation. Agile Leaders Training Center provides training in healthcare AI quality improvement.

Who Should Attend

- Healthcare quality personnel responsible for measures and improvement outcomes
- Clinical governance personnel responsible for oversight and accountable decisions
- Patient safety personnel responsible for event review and risk escalation
- Hospital operations personnel responsible for workflows and service performance
- Healthcare analytics personnel responsible for data quality and reporting
- Improvement personnel responsible for testing changes and sustaining controls

The course assumes participants contribute to healthcare quality, safety, governance, operations, or analytics and leaves out clinical diagnosis, medical imaging, cybersecurity, virtual assistants, and technical model development.

Departments and Industries

The course supports governed AI use in quality improvement across healthcare delivery and related services.

- Healthcare quality and clinical governance departments
- Patient safety and risk management functions
- Hospital operations and performance improvement teams
- Healthcare data and digital health functions
- Hospitals, clinics, and ambulatory care networks
- Health insurance and care management organizations

Learning Objectives

By the end of this course, participants will be able to:



- Build defined quality measures and traceable data registers
- Analyze performance variation and patient safety signals
- Use AI-assisted root cause analysis support with human review
- Apply workflow mapping and improvement-cycle methods
- Evaluate bias, explanations, monitoring, and escalation controls
- Build a Healthcare AI Quality Improvement Plan

Course Agenda

Day 1: Quality Measures and Data Readiness

- Quality Improvement Aim Charter
- Healthcare Quality Measure Definition Sheet
- Clinical and Operational Data Source Register
- Data Quality and Lineage Checklist
- Baseline Performance and Variation Chart

Day 2: Signals and Root Cause Support

- Quality Variation Signal Review Card
- Patient Safety Event Pattern Screen
- Risk Signal Confidence and Limitation Record
- AI-Assisted Root Cause Evidence Map
- Human Review and Escalation Flow

Day 3: Workflow and Improvement Cycles

- Care Process Workflow Map
- Bottleneck and Handoff Analysis
- Improvement Hypothesis Priority Matrix
- Plan-Do-Study-Act Cycle Design
- AI-Supported Change Test Plan

Day 4: Quality Governance and Dashboards

- Healthcare Quality Improvement Dashboard
- Bias and Equity Outcome Review
- AI Explanation and Evidence Record
- Third-Party Healthcare AI Review
- Monitoring Threshold and Change Register

Day 5: Healthcare Quality Improvement Practice

- Suggested Exercise: Define Measures and Validate Data
- Suggested Exercise: Review Variation and Safety Signals
- Suggested Exercise: Map Root Causes and Improve Workflows
- Suggested Exercise: Set Dashboard and Governance Controls
- Capstone Exercise: Healthcare AI Quality Improvement Plan

Practical Exercises

The course uses suggested activities that turn healthcare quality data and AI-supported signals into governed improvement decisions.

- Suggested activity: define quality measures, register data sources, and test data readiness
- Suggested activity: review variation, patient safety patterns, signal limits, and root cause evidence
- Suggested activity: map workflows, prioritize hypotheses, and design a Plan-Do-Study-Act cycle
- Suggested activity: assemble a healthcare quality improvement dashboard with bias, explanation, monitoring, and escalation controls

FAQs

Who suits healthcare AI quality improvement training, and what does it assume?

Healthcare AI quality improvement training suits personnel responsible for quality, clinical governance, patient safety, hospital operations, healthcare analytics, or improvement coordination. It assumes familiarity with healthcare processes or quality measures and requires no programming.

How does healthcare AI quality improvement differ from clinical AI training?

Healthcare AI quality improvement focuses on measures, process variation, safety signals, root cause support, workflows, dashboards, and governed improvement decisions, while clinical AI training may focus on diagnosis, treatment, imaging, or direct clinical decision support.

How should teams use AI-assisted root cause analysis support?

Teams should use AI-assisted root cause analysis support to organize evidence and surface patterns, then validate sources, test alternative explanations, include frontline knowledge, document uncertainty, and keep accountable people responsible for conclusions and actions.

What controls belong on a healthcare quality improvement dashboard?

A healthcare quality improvement dashboard should show measure definitions, baselines, trends, stratification, data limitations, alert thresholds, responsible owners, human review, improvement actions, and change history.



What belongs in a Healthcare AI Quality Improvement Plan?

The plan should include aims, measures, data sources, variation reviews, safety signals, root cause evidence, workflow maps, improvement cycles, bias checks, explanation records, dashboard measures, monitoring thresholds, escalation, owners, and review dates.

Conclusion

Participants take back a Healthcare AI Quality Improvement Plan connecting measures, data, signals, root cause evidence, workflows, improvement cycles, dashboards, human review, and escalation. It changes how teams select and govern AI-supported quality actions. The plan provides a basis for traceable evidence, visible limitations, accountable decisions, and monitored improvement.