HQS-Healthcare Quality & Safety

HQS 600. Introduction to Clinical Quality Improvement. 4 Hours.
Clinical quality improvement theory; classes of outcomes; process management; management tools and modeling techniques for improvement of clinical processes and decision-making.

HQS 610. Quantitative Methods, Measurement, and Tools for Quality Improvement. 4 Hours.
Statistical process control techniques applied to clinical and patient service processes, including Lean and Six Sigma methodologies; data system design concepts applied to clinical and financial data for managing health care business processes.

HQS 612. Health Data Management and Analytics for Enterprise Performance Improvement. 4 Hours.
Managing health data across the information lifecycle; assuring data quality and integrity; data visualization and analytics techniques; health information governance.
Prerequisites: HQS 600 [Min Grade: C] and HQS 610 [Min Grade: C] and HQS 625 [Min Grade: C] and HQS 630 [Min Grade: C]

HQS 613. Advanced Data Use in Quality Improvement and Patient Safety. 3 Hours.
Applying quantitative techniques to clinical and administrative data to inform and improve healthcare quality and patient safety outcomes.
Prerequisites: HQS 610 [Min Grade: C]

HQS 615. Collaborative Analytics for Quality and Safety Improvement. 3 Hours.
Survey of analytics used by HCO improvement project teams; emphasis on conceptual understanding of analytics approaches to investigate and resolve organizational quality and safety issues.
Prerequisites: HQS 610 [Min Grade: C] and HQS 612 [Min Grade: C]

HQS 625. Fundamentals of Patient Safety. 4 Hours.
Nature and science of medical error; strategies for design of safety-critical systems; hazard analysis and risk assessment in health care organizations; design elements of safety programs and high reliability systems.

HQS 630. Leadership of High Reliability Healthcare Organizations. 3 Hours.
Applying concepts of high reliability organizations to create an organizational culture that supports strong, functional, and safe patient care environments resulting in quality clinical care and patient satisfaction.

HQS 635. Healthcare Policy and Regulation. 3 Hours.
External drivers for quality and safety improvement in healthcare organizations, particularly policies and regulations affecting reimbursement. Discussion and analysis of key federal legislation and regulations promulgated by the Centers for Medicare and Medicaid Services (CMS) and The Joint Commission.
Prerequisites: HQS 600 [Min Grade: C] and HQS 630 [Min Grade: C] and HQS 610 [Min Grade: C] and HQS 625 [Min Grade: C]

HQS 655. Population Health for Healthcare Quality Leaders. 3 Hours.
Foundational skills needed to work in teams to effectively collaborate in the development and implementation of population health programs aimed at improving health outcomes. Special emphasis will be on evidence-based care and patient and community engagement.

HQS 675. Evaluating and Designing Quality Improvement Models. 3 Hours.
Application of analytical and decision tools to determine appropriate enterprise models for quality improvement, including problem identification, selection of metrics, analytical approaches, prioritization criteria, and post-implementation evaluation.
Prerequisites: HQS 612 [Min Grade: C] and HQS 635 [Min Grade: C]

HQS 678. Special Topics in Healthcare Quality and Safety. 1-4 Hour.
Exploration of current issues in Healthcare Quality and Safety.

HQS 690. Lean Six Sigma Black Belt in Healthcare Part 1. 4 Hours.
First of a two-course sequence in Lean Six Sigma Black Belt training for healthcare application. Students learn advanced tools for process evaluation, statistical analysis, and project design while initiating an individual applied improvement project that continues in HQS 691.

HQS 691. Lean Six Sigma Black Belt in Healthcare Part 2. 4 Hours.
Second of a two-course sequence in Lean Six Sigma Black Belt training for healthcare application. Students advance into the Analyze, Improve, and Control phases of the DMAIC framework, applying advanced methods for solution design, process control, and sustainability. The course culminates in the professional presentation of an individual applied improvement project.

HQS 698. Integrative Capstone Experience/Non-Thesis Project. 3-6 Hours.
Investigation of a process or safety improvement opportunity in a healthcare organization to propose a solution; application of the concepts and tools presented in the program courses. A written project report is required.
Prerequisites: HQS 615 [Min Grade: C] and HQS 635 [Min Grade: C] and HQS 675 [Min Grade: C] and HA 650 [Min Grade: C]