Lean Six Sigma Green Belt for Healthcare Excellence Training Course

26 - 30 Oct 2026

Sharm El-Sheikh

4100 € (Per Person)

Ref: #HOS3409_277252

Course Introduction / Overview:

This intensive training course is designed to equip healthcare professionals with the essential skills to lead impactful process improvement projects within clinical and administrative settings. The program demystifies the powerful combination of Lean and Six Sigma methodologies, translating industrial principles into practical applications for enhancing patient safety, optimizing patient flow, and reducing operational costs in hospitals and other healthcare facilities. As detailed by authors like Jay Arthur in his work "Lean Six Sigma for Hospitals", the application of these tools can lead to profound, sustainable improvements. Participants will delve into the structured DMAIC (Define, Measure, Analyze, Improve, Control) framework, learning to identify sources of waste, analyze process data, and implement data-driven solutions. BIG BEN Training Center has developed this curriculum to move beyond theory, focusing on real-world healthcare challenges, from reducing patient wait times to minimizing medication errors. This course provides a clear pathway for participants to become certified Green Belts, capable of driving a culture of continuous improvement and delivering measurable results that enhance both the patient experience and the organization's bottom line. It is a comprehensive journey toward operational and clinical excellence.

Target Audience / This training course is suitable for:

- Hospital Administrators and Managers.
- Clinical Department Heads and Supervisors.
- Quality Improvement and Patient Safety Officers.
- Senior Nurses and Nurse Managers.
- Physicians and Medical Staff involved in process improvement.
- Healthcare Project Managers.
- Hospital Operations and Support Staff.
- Laboratory and Pharmacy Managers.
- Healthcare consultants seeking practical skills.
- Anyone aspiring to lead improvement initiatives in a healthcare setting.

Target Sectors and Industries:

- Hospitals and Medical Centers.
- Outpatient Clinics and Ambulatory Care Centers.
- Long-term Care and Rehabilitation Facilities.
- Diagnostic Imaging and Laboratory Services.
- Pharmaceutical and Medical Device Manufacturing.
- Health Insurance and Payer Organizations.
- Home Healthcare Agencies.
- Governmental Health Agencies and Public Health Organizations.

Target Organizations Departments:

- Quality and Patient Safety Departments.
- Operations and Administration.
- Clinical Departments (e.g., Surgery, Emergency, Cardiology).
- Nursing Services.
- Patient Services and Registration.
- Finance and Medical Billing.
- Pharmacy and Laboratory Services.
- Information Technology (IT) and Health Informatics.
- Supply Chain and Materials Management.
- Human Resources and Training.

Course Offerings:

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

- Apply the DMAIC framework to solve complex healthcare problems.
- Utilize Lean tools like Value Stream Mapping to eliminate waste in clinical pathways.
- Employ core Six Sigma statistical tools to analyze healthcare data effectively.
- Lead small to medium-sized process improvement projects within a hospital environment.
- Develop robust control plans to sustain improvements in patient care and efficiency.
- Enhance patient satisfaction by reducing wait times and improving service quality.
- Identify and mitigate risks in clinical processes using Failure Modes and Effects Analysis (FMEA).
- Contribute significantly to a culture of continuous improvement and patient safety.
- Communicate project progress and results clearly to stakeholders and leadership.

Course Methodology:

The training methodology at BIG BEN Training Center is designed for deep learning and practical application, moving participants from passive listening to active problem-solving. This course is built on a foundation of experiential learning, where theoretical concepts are immediately reinforced through hands-on activities. The curriculum heavily features real-world healthcare case studies, allowing participants to analyze actual problems related to patient flow, medication administration, and surgical scheduling. Interactive workshops and group breakout sessions are central to the learning process, encouraging collaborative process mapping, root cause analysis, and solution brainstorming. Participants will engage in simulated data analysis exercises, applying statistical tools to healthcare-specific datasets. Our expert instructors facilitate a dynamic learning environment, providing personalized feedback and guiding discussions to connect the methodologies to the participants' own professional challenges. The emphasis is not just on learning the tools, but on mastering their application within the unique context and complexities of the healthcare industry, ensuring participants leave ready to drive meaningful change in their organizations.

Course Agenda (Course Units):

Unit One: Foundations of Lean Six Sigma in Healthcare

- Introduction to Lean and Six Sigma principles.
- The history and evolution of quality improvement in healthcare.
- Understanding waste (Muda, Mura, Muri) in a clinical context.
- The DMAIC methodology overview for healthcare projects.
- Roles and responsibilities in a Lean Six Sigma project.
- Defining a healthcare improvement project and creating a project charter.
- Identifying stakeholders and managing team dynamics.
- Capturing the Voice of the Customer (VOC) and Voice of the Patient (VOP).

Unit Two: Defining and Measuring Healthcare Processes

- Advanced project charter development and scope refinement.
- Process mapping techniques: SIPOC and Value Stream Mapping (VSM).
- Developing a data collection plan for clinical and operational metrics.
- Introduction to basic statistics and their application in healthcare.
- Understanding data types and appropriate measurement scales.
- Conducting a Measurement System Analysis (MSA) to ensure data integrity.
- Calculating process capability and baseline Sigma levels.
- Establishing key performance indicators for healthcare processes.

Unit three: Analyzing Root Causes in Clinical Pathways

- Exploring sources of variation in healthcare delivery.
- Graphical analysis tools: Histograms, Pareto charts, and scatter plots.
- Root Cause Analysis (RCA) techniques: Fishbone diagrams and the 5 Whys.
- Introduction to hypothesis testing to validate potential causes.
- Applying Failure Modes and Effects Analysis (FMEA) in a clinical setting.
- Analyzing patient flow and identifying system bottlenecks.
- Using data to move from correlation to causation in problem-solving.
- Workshop: Applying RCA techniques to a hospital case study.

Unit Four: Improving and Innovating Healthcare Services

- Brainstorming and generating effective solutions for identified root causes.
- Lean tools for improvement: Kaizen, 5S, and Poka-Yoke (mistake-proofing).
- Prioritizing solutions using an impact and effort matrix.
- Designing and conducting pilot studies to test proposed improvements.
- Planning and executing the implementation of improvement initiatives.
- Applying change management strategies for clinical staff and administration.
- Measuring the tangible impact of implemented solutions on key metrics.
- Case study on reducing patient wait times in an emergency department.

Unit Five: Controlling Processes and Sustaining Gains

- Developing a comprehensive process control plan to maintain improvements.
- Introduction to Statistical Process Control (SPC) using control charts.
- Standardizing new procedures and workflows for consistency.
- Documenting project results, financial impacts, and lessons learned.
- Creating performance dashboards for ongoing process monitoring.
- Techniques for effectively presenting project findings to leadership.
- Transitioning project ownership to the designated process owner.
- Final project review and outlining the next steps for Green Belt practitioners.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond reducing wait times and errors, how can Lean Six Sigma principles be applied to fundamentally redesign patient care pathways for a more holistic and empathetic healthcare experience?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by its unwavering focus on the specific nuances of the healthcare environment, rejecting a one-size-fits-all approach. While many programs teach Lean Six Sigma using manufacturing examples, this curriculum is built entirely around clinical and hospital-based scenarios, ensuring immediate relevance and applicability for participants. The core philosophy is to move beyond mere tool-based training to cultivate a deeper analytical mindset focused on patient safety and clinical outcomes. We emphasize the human element of process improvement in healthcare, integrating modules on change management and stakeholder communication tailored to physicians, nurses, and administrators. The course prioritizes practical insight over abstract theory, using case studies that address complex issues like reducing hospital-acquired infections, improving surgical turnover times, and enhancing the patient discharge process. Participants will not just learn what a control chart is; they will learn how to use it to monitor critical clinical indicators and prevent patient harm, making this a truly transformative learning experience for dedicated healthcare professionals.