



Keeping Patients Safe

Six Sigma Green Belt Certification

A 5-Day Educational Program Leading to Green Belt Certification

Six Sigma is a customer-focused, data-driven, process improvement method. Six Sigma stresses breakthrough improvement to achieve results. The Six Sigma Green Belt operates in support of and under the supervision of a Six Sigma Black Belt, and analyzes and solves quality problems as part of quality improvement projects. A Green Belt is an individual who has demonstrated knowledge of the Six Sigma Tools and processes by initiating a management approved Green Belt Project, submitting a Project Charter, and successfully completing a certification exam.

This education program prepares participants for Lean Hospitals' Six Sigma Green Belt Certification. Participants will develop a sound technical foundation in Six Sigma tools, and will learn and apply the DMAIC (Define, Measure, Analyze, Improve and Control) improvement method. Each participant will develop an improvement project that demonstrates understanding of the Six Sigma Tools. Participants will complete the coursework, project, and exam necessary for Green Belt Certification.

Requirements: Participants must bring a laptop computer with a Microsoft operating system and Microsoft Office to the program. Minitab must also be available on the laptop. If your organization does not own Minitab, a 30-day trial version is available on the web (<http://www.minitab.com/products/minitab/14/demo/>). Be sure to download the trial version NOT MORE than one week prior to the program dates.

Learning Objectives

- Provide a sound technical foundation in six sigma statistical tools
- Discuss the six sigma philosophy, goal and methodology
- Explain MiniTab and how to use the different functions to analyze data
- Apply the DMAIC improvement methodology
- Describe the different six sigma roles

Agenda

Day 1

- Introduction to Six Sigma
- Introduction to DMAIC
- Introduction to Minitab
- The Define Phase of DMAIC
 - SIPOC (Supplier, Input, Process, Output, Customer), COPQ (Cost of Poor Quality), VOC (Voice of the Customer), CTQ (Critical to Quality)
 - Project Selection
 - Project Charter

Day 2

- Introduction to Statistical Process Control
- The Measure Phase of DMAIC
 - Process Mapping
 - Spread and Centeredness of Process, Rolled Throughput Yield
 - Measurement System Analysis
 - Control Charts
- Project Presentations

Day 3

- The Analyze Phase of DMAIC
 - PGA (Practical, Graphical, Analytical) Analysis
 - Interquartile Range
 - Pareto Charts
 - Histograms
 - Scatter Diagrams
 - Other Tools
- Project Presentations

Day 4

- The Improve Phase of DMAIC
 - Design of Experiment
 - 2k Full Factorial experiment
 - Main Effect and Interactions

Day 5

- The Control Phase of DMAIC
 - Control Charts
- Review
- Final Questions and Answers
- Comprehensive Examination

Criteria for Lean Hospitals Associates Green Belt Certification:

- Attendance at all five training sessions
- Establishment of a management approved Six Sigma improvement project, demonstrating implementation of the tools associated with the Define Phase of DMAIC
- Successfully complete comprehensive examination offered on the final program day

Faculty

Tom Zidel is a consultant, speaker, author, and facilitator of lean transformation in healthcare. Tom comes out of a successful 20-year career in the manufacturing and aerospace industries and has spent nine years successfully implementing Lean principles in healthcare. Tom is the President of Lean Hospitals, a consulting company that specializes in lean implementation in healthcare. In addition, Tom is the primary healthcare consultant for Moffitt Associates, a leader in lean implementation in manufacturing. Tom holds a Bachelor's degree in engineering from the University of Hartford, an MBA from Western New England College, and is a Juran Institute Certified Six Sigma Black Belt. He is the author of the book *A Lean Guide to Transforming Healthcare: How to Implement Lean Principles in Hospitals, Medical Offices, Clinics, and Other Healthcare Organizations*, published in 2006, and *Lean Healthcare Reform: Saving Billions in Healthcare Costs*, published in early 2010.



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*Please note change to registration policy:
Effective July 1, 2010 Six Sigma Green Belt and Lean classes have a registration fee for all participants.*

Six Sigma Green Belt Certification **Registration Form**

Registration 8:30 AM, Program 9:00 AM – 4:00 PM

Monday-Friday, November 14-November 18, 2011 (751019/1704)

MHEI Offices, Elkridge, MD

Your registration is not complete until you receive a confirmation by email from the Program Coordinator.

PLEASE PRINT OR TYPE

Organization Name: _____

1. Name: _____ **Degree(s):** _____

Title: _____ **Direct Phone #:** _____

Email Address (used for confirmation): _____

2. Name: _____ **Degree(s):** _____

Title: _____ **Direct Phone #:** _____

Email Address (used for confirmation): _____

***EARLY BIRD SPECIAL FEES: (first come first serve-register by July 1, 2011)**
Maryland health care professionals and Beebe Medical Center - \$1200 (after 7/1-\$1250)
Non-Maryland health care professionals - \$1600 (after 7/1-\$1750)

Payment: Check enclosed VISA MasterCard American Express

Card # _____ Exp. Date _____

Name on Card _____ CSC Code _____

Return Registration Form to:
Maryland Patient Safety Center (attn: Education)
6820 Deerpath Road, Elkridge, MD 21075
FAX: 410.796.6239

Online registration available at <http://www.mhei.org/Programs/programs.php>