T|P|M|G Consulting

Syllabus

Lean Six Sigma Green Belt Certification - Healthcare

In this 40 - 60 hour course, candidates apply the concepts of performance management and continuous improvement to create and sustain a more productive, cost effective and responsive healthcare service delivery organization. Through 10 units & 60 lessons, candidates learn the principles which help implement a culture of continuous improvement and apply methods such as lean management, and practices like the Toyota Production System.

Units		Topics	Case Studies	Key Exercises
Unit 1	**The Roots of Lean Six Sigma**	• The origin of lean • Productivity • The nature of quality and its effect on productivity • The costs of poor healthcare quality • Systems thinking • The value proposition of lean management	• Above and Beyond	Structured discussion: • Productivity • Cost of poor healthcare quality • The role of leadership • The value proposition of lean management to healthcare
Unit 2	**Lean Management Teams**	• Establishing, supporting and facilitating lean management teams • Team roles and responsibilities • Project team meetings • The stages of team evolution	• Team Meetings	• Strengths profile • Team visioning exercise
Unit 3	**Process Development**	• Properties of a well-designed process management system • Process owners vs. process stake holders • Traditional flowcharting • The SIPOC process map • Functionally vs. process focused organizations	• Flowcharting	• Process flowcharting • SIPOC scope charting
Unit 4	**Analysis of Performance**	• Performance analysis • Common cause vs. special cause variation • Measures of central tendency • Measuring performance	• Parable of the Red Beads • Analyzing Operational Performance	• Analyzing clinical data with run charts • Interpreting data with run charts and drawing conclusions

Lean Six Sigma Green Belt Certification - Healthcare

Units		Topics	Case Studies	Key Exercises
Unit 5	**The Voice of the Patient**	• Voice of the patient defined • Properties of a well-designed patient loyalty model • How to assess the voice of the patient	• Focus Group: Stew Leonard's Dairy • David Feinberg: UCLA Medical Center & The Patient Experience • Assessing the Voice of the Patient - Importance and Satisfaction – An Analysis	Structured discussion: • How to engage customers • How to engage patients • How to engage staff • Identifying mechanisms, systems and processes to improve
Unit 6	**Part 1: Lean tools for continuous improvement**	• Data sheets • Histograms • Cause and effect analysis • Scatter diagrams • Correlation and simple linear regression analysis • Pareto analysis	• Histograms: time of first lightening strikes. • Cause and Effect Analysis • Scatter Diagrams – saving the manatees	• Creating and analyzing histograms • Cause and effect analysis • Creating and analyzing scatter diagrams • Correlation analysis • Regression analysis • Pareto analysis
Unit 6	**Part 2: Statistical Process Control**	• The Purpose of Statistical Process Control • Rational sub-grouping and sampling • Using baseline control charts for performance metrics • Measuring performance capability • Measurement systems analysis • Data collection	• Control Charts • Data Collection Planning • Data Collection Methods	• Control chart selection • Control chart construction • Control chart analysis • Performance capability analysis
Unit 7	**Management by Fact**	• Defining lean & six sigma • PDCA – Deming approach to improvement • DMAIC – lean six sigma approach to improvement	• Prescription medicine buying time	Structured discussion: • Root cause analysis

Lean Six Sigma Green Belt Certification - Healthcare

Units		Topics	Case Studies	Key Exercises
Unit 8	**Team Dynamics: Working with and through others**	• Team dynamics • Brain storming • Understanding Group Think • Understanding and Managing Change	• Consensus • Groupthink	• Consensus building: lost at sea • Structured discussion: groupthink
Unit 9	**Establishing a Performance Excellence System**	• Attributes of an effective performance excellence system • Focus on core processes • Integrating measurements • Addressing nonvalue added tasks • Establishing performance target	• Pyxis: A Culture of Continuous Improvement	Structured discussion: • Involvement of senior leaders in cultural transformation • How to engage employees to adopt a performance excellence system • The role of communication to facilitate transformation
Unit 10	**Lean Management in Healthcare**	• Lean thinking • Value defined: value creation and value added • Muda (無駄): waste, waste, waste • Value stream mapping • Theory of constraints, work balancing, takt time, theoretical maximum performance • 5S – getting your service house in order	• Applying the Toyota Production System to Medicine • Calculating Takt Time – Patient Wait times	Structured discussion: • Takt time analysis – patient wait time.