



The Lean Management System in Healthcare

Continuing Professional Education Credits (CPE): **5 Hours**

Course Duration: **6 Weeks**

Materials and access requirements:

- Reading materials are included electronically as part of the course
- Microsoft Word, Excel, and PowerPoint
- Computer with Internet access
- Basic computer skills
- Most recent version of Java
- Flash Player

Who should participate?

The experienced environmental services professional and other related healthcare professionals such as infection preventionists who share a vested interest in developing a culture of continuous improvement to achieve quality patient care.

This is a 6-week self-directed course for independent learners. Self-directed learning is learning initiated and directed by the learner, and places the responsibility for learning directly on the learner. Learners who take the initiative in learning and are proactive, learn more and better than passive learners. The independent learner is one who is more involved and active within the learning process.

Course Description:

Ever-increasing healthcare costs are a critical financial concern for healthcare facilities and the nation. How are today's leading facilities managing costs effectively? What seems to be their secret to success? Certainly, lean management techniques have proven to be a critical factor in the success of many organizations.

What can Lean do for you and your organization? This self-directed online course will examine the Lean concept. Learn how to use Lean to eliminate waste in Environmental Services processes and to drive continuous quality improvement and employee job satisfaction. This interactive course will use case studies and exercises to lay the foundation for creating a Lean Healthcare organization through the application of Lean tools and concepts such as value stream mapping, 5S, A3, and more. When properly implemented, the Lean system will bring tangible results for Environmental Services, the facility, the staff, and ultimately patients.

Course Objectives:

This course will provide the information and tools needed to guide your department, staff, and clinical teams to increase the quality of patient care and eliminating waste from your organization. Environmental services professionals, infection preventionists, and clinical staff should use the information obtained in this course to:

- Discuss and implement the five lean principles within their organization
- Incorporate various Lean and Kaizen concepts and tools needed to develop a continuous improvement organization
- Implement brainstorming concepts to effectively lead team activities

Course Requirements:

- Each lesson's assignments must be completed in order for learners to pass the course. Learners who do not complete the minimum required assignments by their due dates will not receive continued professional education (CPE) credits.
- The readings must be completed on time in order to prepare learners to participate fully and contribute to online discussions.

Lesson 1 – Becoming Lean

Lesson one will discuss the framework of Lean Management, lean principles, tools, and lean methods used to develop a culture of continuous improvement.

Lesson Objectives:

- Discuss the five principles of lean; value, value stream, flow, pull, and perfection
- Review the eight types of waste

Required Assignments:

- Navigate and become familiar with the AHE Learner Community site.
- Read "A Brief Learning Guide to the Online Community"
- Post introduction – Introduce yourself to your fellow learners
- View Interactive Presentation: "Lesson 1 – Becoming Lean"
 - View Lesson One Media Portfolio: *by Ron Crabtree* [Mini Webinar – Lean History]
 - Media Tour "Lean Six Sigma Overview for Environmental Services Directors, Leaders, and Supervisors in Healthcare"
- View "8 Types of Waste"
- Read Chapter "Proven Solutions for Success in Health Care: From the Eyes of an Operational Manager" *by Sheree Lavelle* [Chapter Six]
- Post Your answer to the "Lesson One Quiz" question

DUE DATE: Lesson 1 Assignments: Sunday, November 12, 2017

Lesson 2 – Value Stream Mapping

This lesson will provide simple and effective techniques to gather data and create value stream maps used to identify and quantify wastes and opportunities for improvement. The lesson will continue the discussion with spaghetti diagrams as a graphical problem-solving tool used to identify opportunities that optimize the flow of products, information, and resources through processes. And finally, there is a brief discussion about time and motion studies used in lean to identify wasted movement and motion.

Lesson Objectives:

- Apply the lean principles to value stream mapping principles
- Determine the current state map and diagram a short process to identify waste within processes
- Use spaghetti diagrams/maps as a tool to visualize wasted movement and motion

Required Assignments:

- View Interactive Presentation: “Lesson 2 – Value Stream Mapping”
 - View Lesson Two Media Portfolio: (complete BOTH of the following)
 - View Lean Components Mini Webinar, *by Ron Crabtree* “Components of Lean Six Sigma”
 - Listen to Podcast - “Value Stream Mapping and Time & Motion Study”
 - View YouTube video “Lean Value Stream Mapping Case Study - Patient Scheduling”
- Read Chapter “Value Stream Mapping: Learning to See Transactional Processes” *by Pamela D. Gladwell* [Chapter Seventeen]
- Review symbols used in value stream mapping
- Post Your answer to the “Lesson Two Quiz” question

DUE DATE: Lesson 2 Assignments: Sunday, November 19, 2017

Lesson 3 – Problem-Solving Tools

This lesson teaches the critical skills related to problem solving and analysis that the team leader- facilitator must integrate before and during the Lean process to drive maximum results.

Lesson Objectives:

Use the following problem solving tools to identify root causes

- Pareto Diagramming
- 5 Whys
- Fishbone diagramming

Required Assignments:

- View Interactive Presentation: “Lesson 3 – Problem-Solving Tools”
 - View Lesson Three Media Portfolio: (complete BOTH of the following)
 - View “The Four Phases of Kaizen”, *by Ron Crabtree*
 - Listen to Podcast - “Pareto Principle”

- [View](#) YouTube video “Root Cause Analysis (RCA) – Fishbone Diagram”
- [Review](#) and complete Pareto Chart and Fishbone Diagram in conjunction with the ‘Hand Hygiene Scenario’ that is discussed in the Lesson 3 Problem Solving Tools Interactive Presentation
- [Read](#) Chapter “DMAIC: A Common Sense Approach to Healthcare” by Karen Young [Chapter Thirteen]
- [Post](#) Your answers to the “Lesson Three Quiz” questions

DUE DATE: Lesson 3 Assignments: Sunday, November 26, 2017

Lesson 4 – Visual Workplace, 5S, and Kanban

Learn about visual workplace, why 5S is a valuable tool for eliminating waste; the use of Kanban for managing inventory; and how to use mistake proofing for preventing errors.

Lesson Objectives:

- Identify and evaluate the 5S process, which provides stability and assists with the elimination of waste in the lean process.
- Discover and analyze how incorporating mistake proofing prevents errors.
- Define Kanban and apply this method to managing materials and inventory.

Required Assignments:

- [View](#) Interactive Presentation: “Lesson 4 – Visual Workplace, 5S, and Kanban”
 - [View](#) Lesson 4 Media Portfolio: (complete BOTH of the following)
 - [View](#) Lesson 4 Mini Webinar “Case Study-Transportation Productivity Improvement”
 - [Listen to](#) Podcast - “Lesson 4 Podcast-Kanban” [Pull System]
- [Read](#) “Lean ES - Process improvement for environmental services leaders”, by Lea Beach, CHESP
- [Post](#) Your answers to the “Lesson Four Quiz” questions

Supplement Resources: (Optional) Located in the Resources area of this lesson

- The following tools are mentioned in the Lesson 4 – Visual Workplace, 5S, and Kanban presentation. [View/Download](#):
 - 5S Audit History Sheet & 5S Audit Sheet (Excel Sheets)
 - 5S_Standards Sheet & 5S_Action_Items (Word Docs)

DUE DATE: Lesson 4 Assignments: Sunday, December 3, 2017

Lesson 5 – A3 and Balanced Scorecard

In this lesson, we will discuss how A3 thinking and a balanced scorecard can help you pinpoint key performance indicators. And as you may have discovered, at some point in time you will either facilitate or participate in a brainstorming exercise to solve a problem. This lesson will discuss strategies for successful brainstorming and as well, as keys to sustainable change.

Lesson 5 Objectives:

- Discuss the balanced scorecard and A3 approach for problem solving
- Review the process for generating key performance indicator measures
- Explore the phases of brainstorming including ground rules, generating creative ideas and having full group engagement.
- Identify and evaluate the classic methods to effective change management.

Required Assignments:

- View Interactive Presentation: “Lesson 5 – A3 and Balanced Scorecard”
 - View Lesson 5 Media Portfolio: (complete ALL of the following)
 - View Lesson 5 Mini Webinar-Change Management “The Importance of Change Management and Culture”
 - Listen to Lesson 5 Podcasts [All 3]
 - “Brainstorming”
 - “Hoshin Kanri/Policy Deployment”
 - “Sustainable Change”
 - View YouTube Videos
 - “How NOT to Brainstorm”
 - “Skills for Quality Improvement 2 Brainstorming”
- Post Your answers to the “Lesson Five Quiz” questions
- Complete Course Evaluation Survey

DUE DATE: Lesson 5 Assignments: Sunday, December 10, 2017

When all Lesson Activities are complete, along with the Course Evaluation Survey, your Certificate of Completion will ‘unlock’, and will then be available to **Claim** and **Print**.

Please note that the **FINAL DAY** to submit ALL of your required assignments is

Sunday, December 17, 2017.