

# Improving Practice Performance the Lean Six Sigma Way

## Deborah A. Stone, MBA, PhD, CVPM

### Objective

This workshop will provide attendees with an understanding of Lean Six Sigma basic components. It will demonstrate how the Lean Six Sigma methodology can improve systems and processes by implementing collaborative team effort and utilizing the DMAIC toolkit.

### Introduction

Veterinary practice leadership consistently searches for ways to improve efficiency, patient care, client service, and overall practice health. The veterinary profession is more open to accept improvement processes that come from outside industries and Six Sigma is one example. What is Six Sigma and then going one step further, what is Lean Six Sigma?

**Six Sigma:** Initially developed for the *manufacturing* industry, Six Sigma has garnered interest from other sectors, including human healthcare. Six Sigma is a structured process, implemented and managed by Six Sigma-trained leaders, that assesses organizational systems and maintains a key focus to reduce error rates as much as possible. It is a visual tool used to help clarify and quantify problems by deconstructing current processes and identifying nonvalue processes that may lead to bottlenecks and costly inefficiencies. The goal of Six Sigma is to eliminate *defects* and minimize variability.

**Lean Six Sigma:** This was developed to be used for the *service* industry. It is the systematic approach for identifying and eliminating *waste* and improving flow of a process while engaging employees.

This document includes definitions of terms that will be used during our workshop.

### Definition of Terms

**Bottlenecking:** The stage in a process stream that is the constraining step for overall flow.

**Brainstorming:** A technique used to generate a high volume of ideas with team members' full participation that is free of criticism and judgment.

**Cause and Effect Diagram** (or Fishbone): A graphical display of all the possible causes of a problem.

**DMAIC**



**Five Whys:** The method of continuing to ask why to reach a root cause(s) for an error or problem.

**FUN:** Whatever you want that to be!

**Kaizen:** Japanese word meaning “continuous improvement” or “small changes for the good”.

**Pareto Principle:** Refers to 20% of the sources causing 80% of the problems.

**SMART:** an acronym related to goal setting that stands for S= Specific, M= Measurable, A= Assigned, R= Realistic, and T= Time-bounded.

### The Dirty Dozen

1. Overproduction
2. Inventory
3. Waiting
4. Motion
5. Transport
6. Defects or errors
7. Over-processing
8. Skills and knowledge
9. Unevenness
10. Overburden
11. Environmental resources
12. Social responsibility

### **What Does This Mean to the Veterinary Practice?**

Lean Six Sigma may serve as a helpful tool for practice leadership to follow processes from beginning to end to eliminate unnecessary steps (waste) and develop more effective solutions.

Example, a practice may choose to evaluate client flow because client complaints have increased. The process would evaluate the process from the client's call through follow-up communication. Practice leadership would then review the entire process to determine the components that either demonstrated value or quantifiably hindered the communication process, which negatively impacts the client-patient experience.