

## Lean Healthcare Certificate Series

### What you can expect for your investment in this series:

Could you, your department or organization benefit from improved revenue performance?, Faster service delivery times? Shorter wait times for patients? Reduced inventory costs?

This series is designed with two main ways to help you achieve these kinds of results:

1. **Workshops:** Practical knowledge of the basic tools and principles of Lean for Healthcare and how to effectively apply them to improve processes under your control.
2. **Coached Projects:** Expert assistance to help your team achieve significant improvements in the performance of the processes you target for your A3 projects. There is more detail of past participant's projects in the following table, but for a small sample:
  - Billing team for a small 60 bed hospital expects to collect \$150,000 in additional revenue after improving its claims process.
  - Pharmacy team improved meds order process times from > 50 minutes to < 20 min.
  - Clinic team used 5S – Visual management tools to cut exam room resupply times by 80%, reordering times by 95% and medical supplies costs by 36%.
  - Radiology-Lab team reduced medical reconciliation forms from four down to one, reducing process time and increasing both staff and patient satisfaction.

NOTE: *(The A3 process is based on the familiar "Plan-Do-Check-Act" improvement cycle and has been refined by Toyota & other industries as a standardized approach to managing improvement projects).*

### Requirements for the Certificate Series:

- A project completed (or close to it) by the end of the workshop series.
  - You will get individual assistance with your A3 project, including templates and tools to identify an appropriate project target, charter, scope and establish a team.
  - You will get up to 15 hours or more of coaching assistance and customized training and tools recommendations depending on the scope and nature of your project.
  - You will need to budget time for your team to complete the A3 project. This is in addition to the 24 hours for the workshops. Most teams need 20-40 hours to complete a project.
- Attendance at each of the 5 scheduled workshops. Attendance at the Project Milestone Discussion a few weeks after the final workshop is optional, but highly recommended.
- Brief status reports of your A3 project at each workshop. These are 1-2 min. summaries.
- Formal presentation of your A3 project at the beginning of the final workshop. Templates, examples from past participants and assistance will be provided. Presentations to be 5-10 minutes. In the spirit of Continuous Improvement, presentations should include next step: either enhancements to your initial project or a brief description of your next project target.

### Some suggestions on project selection:

- Pick a project that you and/or your team have control to influence, can reasonably expect to complete by the end of the series, and will have a reasonable chance of success and satisfaction from those affected by any changes that are implemented.
- Generally, some good criteria for determining an appropriate project include:
  - Problem to be solved is linked to your organization's key strategies, key customer demands, other compelling areas such as risk, safety, costs, quality, or speed.
- We encourage you sign up in advance and can schedule an overview and coaching assistance session with the series instructor.
  - This should take place at your site to discuss project selection and get started with your A3 before the workshops begin.
  - If that is not possible, you will need to meet with the coach at the first workshop to help get your project started.

*Some example A3 project summaries from past participants*

Dept	A3 Project Target	Before Improvements	After Improvements
Medical Billing	A flawed Claim Edit Process resulted in missed and/or delayed claims	1. \$1,000,000 in claims held up because of cumbersome process.	1. Backlog reduced to \$72,000
		2. Missed charges due to errors.	2. \$150K expected in new rev. next yr
Radiology	The process of getting I-stat Creatinine results for CT Scan patients added delays negatively affecting patients & staff; as well as department capacity & profitability.	1. 2 - 3 times/week patients came in for test without a creatinine	1. 0 times in last 4 months - patients come for tests without a creatinine
		2. 1-2 hour wait time for I-stat Creatinine results	2. Wait time eliminated for I-stat Creatinine results
		3. Patients were moved 6 times if they were unprepared for the test	3. Patients are moved 4 times if they are unprepared for the test
Lab	Phlebotomy trays were not in a state of readiness, causing delays and errors.	Phlebotomy trays are all set up differently, sometimes contain expired material or have missing material which delays patient care	Phlebotomy trays have been 5S'd are now all standardized, and restocked at the end of each shift so they are ready to go for the next shift.
Pharmacy	Medications were not always found where they are needed within the pharmacy.	1. Steps to fill Pyxis: 500-1300	1. Reduced steps to fill orders >50%
		2. Time to fill Pyxis: 45-90 min.	2. Reduced time to fill orders by 50%
		3. Wasted inventory 1152 items (\$29,271) in 3 months	3. Reduced waste and expiring medications by 10%
Clinic	Supply ordering problems and inventory problems were interfering with patient care	1. >5 hrs to resupply exam rooms	1. 1-2 hours to resupply exam rooms
		2. >5 hrs/week to order supplies	2. 30 minutes/week to order supplies.
		3. Med supplies cost increasing	3. Med supplies cost declined 36%.
Surgery	It took too long to assemble patient charts for surgery, causing delays and confusion for patients and staff.	1. Average time to complete prep of 20 charts/day = 12 hours.	1. Average time to complete prep of 20 charts/day now = 4-8 hours.
		2. Cost of time to prepare charts for a year = \$186,800.	2. Estimated cost of time to prepare charts per year now = \$52,000.

## Course Descriptions:

### **Principles of Lean and A3 process for Project Management 8 hours: *Lean tools, Clinic Simulation rounds 1, 2 & 3 and A3 process training and application during the simulation rounds.***

This workshop introduces Lean as a systematic approach to eliminating waste in healthcare delivery processes. Learn how to eliminate the nine forms of waste, use the 5S approach to organization, reduce batch sizes, learn point of use storage & pull systems, implement cellular/flow, implement quality at the source and involve employees. Includes two, separate live simulations of a Primary Care clinic to provide direct experience of implementing Lean principles. The simulations show the business benefits of implementing Lean principles in terms of improved performance in: patient flow, inventory management, Quality, cycle time, throughput, costs, and profit. The A3 process provides a standardized approach to managing process improvement. (*The A3 process is based on the familiar "Plan-Do-Check-Act" improvement cycle and has been refined by Toyota & other industries as a standardized approach to managing improvement projects*).

### **A3 Project Management, SIPOC, Value Stream Mapping Overview, Root Cause Analysis (RCA). 4 hours: *Lean tools, process & value stream mapping, A3 process, measurement & RCA***

In order to change a process in a sound and sustainable manner, it is important to understand the current state of the process. Mapping, such as spaghetti diagrams, layout drawings, process maps or value stream maps help a team understand how the process really works. Applying appropriate baseline measures helps the team enhance that understanding and provides a foundation to set goals for the new process. This workshop covers these important foundational topics.

### **5S-Visual Management (4 hour)**

The principles of 5S are based on the idea that process improvements begin with a work area that is organized, clean, standardized, visual, and contains only what is required. This workshop will include 5S and related Lean tools with hands on simulations to provide an application experience. Learn how to employ 5S methods in your operations; & implement visual workplace techniques. Return to your organization with skills that will allow you to implement positive visible change.

### **Process Flow (4 hours)**

The workshop will focus on tools to visually depict material and information flow & will include Lean tools that enhance flow. The tools will be used in simulations to provide hands on experience. You will learn the basic principles of the Value Stream Mapping, evaluate a current state map, apply Lean concepts to develop an improved future state, & identify next steps for improvement.

### **Lean Culture and Change Management (4 hour)**

Implementing Lean with a project or two is fairly easy. Sustaining positive results and continuing to improve requires cultural changes in leaders and workers. In this workshop, you will learn tools and develop skills to support culture change, learn methods to develop leadership and discover employee involvement tools used to manage and preserve gains created by Lean. The first hour of this workshop will be formal reports on the A3 projects. Individual report prep will be provided.

### **Project Milestone Discussion (1-2 hours-Optional)**

Four to eight weeks after the final workshop we will host a follow-up session for all participants. We have found that the most profound series learnings have come from insights and observations shared by participants with each other. We will offer this optional session to all participants and guests. If one of the participating organizations or is willing to host and provide a tour of its facility and Lean applications, we will facilitate that type of interaction for this session.

**When:** Next series to be held September - December, 2011. Exact dates will be set soon.

**Where:** **Workshops:** Hosted by: UW Health Partners – Watertown Regional Med. Center. Location: The Center for Woman's Health Conf. Room, 128 Hospital Drive, Watertown WI, 53098  
**A3 Team Project Meetings:** On site at participant's organization.

**Investment:** \$2950/person including: workshops, materials, handbook, meals (continental breakfast for all workshops, lunch for Workshop 1 only), and onsite, A3 Project coaching.

### **Who will present the series?**

**Brian Fairbrother, MS-Business, BS-Education, Certified Lean Trainer, Orchid Group LLC**



**Brian Fairbrother** has been a consultant for fifteen years after twenty-five years in ownership, management, and technical positions with a variety of businesses. He has assisted over 100 firms to grow and sustain improvements resulting in a total impact of over \$200 million. These firms represent several sectors including: manufacturing, healthcare, publishing, finance, engineering, government, and education. Brian has a strong track record of helping organizations apply Lean approaches to simplify complex processes, grow, and improve. Brian has a BS in Education and an MS in Business from the University of Wisconsin – Madison. **Questions? Contact:** Brian @ 608-225-2908, [bfair@orchidgroupllc.com](mailto:bfair@orchidgroupllc.com), [www.orchidgroupllc.com](http://www.orchidgroupllc.com).

**Mike Strasser, MPA, Process Engineer, UW Health Partners – Watertown**



**Michael Strasser** holds two professional degrees, an MPA (Healthcare Emphasis), UW Oshkosh and a BA Psychology – Bethany College, Lindsborg Kansas. Mike has over 20 years of experience in Healthcare in a variety of positions including Quality Improvement Analyst, Hospital Case Management and Utilization Review, Hospital Education Resource Department Manager, completed the Lean Manufacturing Certificate training program with the Wisconsin Manufacturing Extension Partnership and MATC- Madison in 2007, and have worked as Process Engineer and Project Manager at UWHP Watertown Regional Medical Center for the past three years. **Questions? Contact:** Mike @ 920-262-4278, [mstrass@uwhpwatertown.com](mailto:mstrass@uwhpwatertown.com)