

Training Plan Proposal for Staudt Clinic



Prepared by The Pentagon Corporation
Team Pentagon
Oscar Ocampo Tavera
Nora Braaten
Ryan Lapetina
Robert Rohrer
Nikkole Tellez

TR/HRD 360/560

Table of Contents

Introduction	5
Business Sector	5
Primary Product or Service	5
Amount of market share	5
Amount of revenue	5
Employees:	5
Management style	6
Mission Statement	6
Performance Problem and Anticipated Performance Improvement Results	7
Description	8
Goals	9
Course Outline Lean Six Sigma Greenbelt Training	10
Day 1	10
Day 2	10
Day 3	10
Day 4	10
Day 5	10
Day 6	10
Day 7	10
Day 8	10
Day 9	11
Day 10	11
Lesson Plan	12
Day 4-Seven types of Waste	12
Performance Objectives	12
Teaching Aids	12
Materials	12



References	12
Preparation	13
Presentation-The 7 Wastes	13
Application	16
Summary/Review	17
Evaluation	17
Presentation Spaghetti Charts	18
Time Schedule	20
Day 1 December 5, 2011	20
Day 2 December 6, 2011	20
Day 3 December 7, 2011	20
Day 4 December 8, 2011	21
Day 5 December 9, 2011	21
Day 6 December 12, 2011	21
Day 7 December 13, 2011	21
Day 8 December 14, 2011	21
Day 9 December 15, 2011	22
Day 10 December 16, 2011	22
Budget (Benefits verses Costs)	23
Training Benefits	23
Training Costs	23
Budget Summary	24
Capital Investment	24
Return on Investment	24
Materials and Facilities	25
Training Site	25
Training Instructors for classroom and simulation areas	25
Materials for training facility	25
Materials for Instructors	25
Facilities involved in Training Program	26





Introduction

Business Sector

Health Care-Family Practice

Primary Product or Service

The healthcare industry provides medical care in the form of diagnosis, treatments, and patient care.

Amount of market share

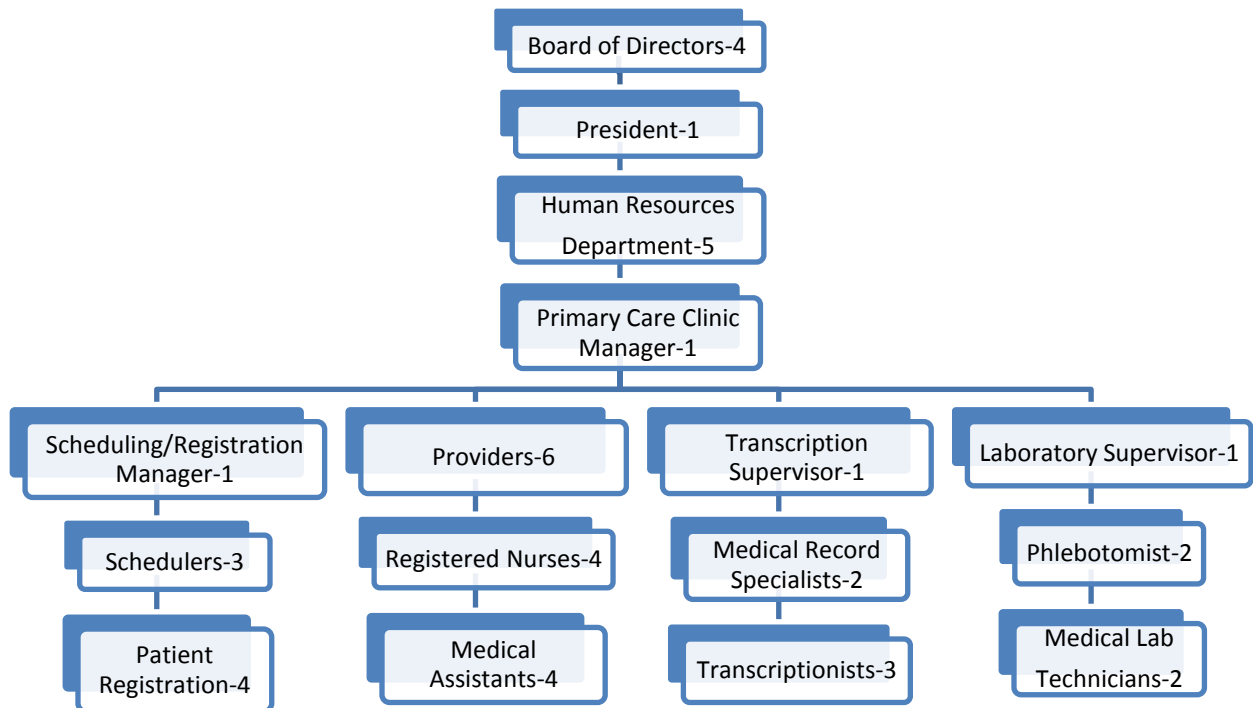
Staudt Clinic, a privately held corporation, located in Menomonie Wisconsin has a 28% market share of the health care industry in Menomonie Wisconsin, and its surrounding area.

Amount of revenue

\$6,468,000

Employees:

44 Employees



Management style

Paternalistic

Mission Statement

The mission statement of Staudt Clinic is to inspire hope, and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education, and research.



Performance Problem and Anticipated Performance Improvement Results

During the 2010 meeting of the Board of Directors of Staudt Clinic, Menomonie

Wisconsin approved the addition of two Physicians and support staff to address the issue of extended patient wait times at the clinic.

During the 2011 Board of Directors meeting, a review of the extended patient wait times issue was made, with the results indicating that no significant reduction in wait times was achieved. Additionally, the expected income increase per physician that was to be generated by the staff increases was also not achieved. As a result of these findings, the Board of Directors approved the hiring of The Pentagon Corporation, to determine the cause of extended patient wait times at the clinic, and the lack of additional funds generated by the addition of Physicians and staff to the clinic. The Pentagon Corporation is a company specializing in streamlining Health Care Facility work procedures through the implementation of Lean work procedures.

After a needs assessment of the extended wait times at Staudt Clinic was completed by The Pentagon Corporation, it was determined that the causes were a result of untimely lab results to the provider, poor registration procedures, and delays with transcription dictation. It is the goal of The Pentagon Corporation to provide a Lean Training Proposal that will streamline these processes among the Providers, Registered Nurses, Medical Assistants, Transcriptionists, Laboratory, Registration/Scheduling, and Medical Records. Participation in the training will be mandatory and will result in patient wait times to decrease thus increasing patient load, income, and patient satisfaction.



Description

The identified issues at Staudt Clinic, decreasing patient wait times, increasing profits per patient visits, and increasing patient satisfaction, will be addressed through the implementation of employee education using the Lean Six Sigma Greenbelt Training approach.

Training of Staudt Clinic employees will be provided by members of The Pentagon Corporation training squad, Team Pentagon, comprised of five members who will conduct classroom and hands on training sessions within the offices and facilities of Staudt Clinic.

Training will be mandatory for all employees of effected departments at Staudt Clinic, and will be performed over a two-week period, Monday through Friday, from 6:00 a.m. to 8:00 a.m. prior to the daily opening of the clinic.

Classroom training sessions will be conducted to introduce and educate the Staudt Clinic employees regarding the principles and procedures of Six Sigma Greenbelt philosophy, and how these specific philosophies can be applied to their individual work environments and departmental procedures.

Hands on training will be conducted using mock patients, simulated tests, and test results, to implement training procedures and patient process flow improvements developed during the classroom sessions.

The anticipated outcomes to be derived from these training sessions are as follows:

- Decreased patient wait times increasing patient satisfaction
- Improved coordination between interdepartmental procedures and patient information flow
- Increased clinic income derived from increased patient load



Goals

Our main goal for the Lean Six Sigma Greenbelt training program is to yield improvements in patient care and outcomes, as well as improve the financial performance of the organization. This will include decreasing the amount of time it takes to see a doctor and increasing patient satisfaction. For instance, when a patient arrives and checks in, the amount of time it takes to fill out unnecessary paperwork could be used to do different activities. Streamlining the check in process and pre-visit vital checkup (i.e. weighing, taking blood pressure, and testing reflexes) will benefit the patient in that they will be able to see their physician faster. Another part of this main goal is to give and to teach the caregivers the Lean Six Sigma structure to improve processes that directly relate to them and how to use new technology to help them give quicker, more accurate diagnoses. Understanding the Lean Six Sigma process will create an organized, cost-efficient workplace that has clear work procedures and standards.

The Lean Six Sigma Greenbelt training program will be given to all care giving employees (certified nursing assistants, nurses, doctors, pharmacists, pharmacy technicians, and medical students completing their residencies). At the end of the training program, each care-giving employee will be part of a new team that constantly seeks improvement while keeping the patient in mind.



Course Outline Lean Six Sigma Greenbelt Training

Day 1

- Lean Six Sigma Philosophy
- Lean Six Sigma Improvement Model

Day 2

- Project Management
- Process Mapping

Day 3

- Value Stream Mapping
- Lean Basics I & II

Day 4

- 7 Types of Waste
- Spaghetti Charts

Day 5

- Visual Workplace
- Workstation Layout

Day 6

- Video Process Analysis
- Basic Data Acquisition Techniques

Day 7

- Failure Modes and Effects Analysis (FMEA)
- Basic Analysis Tools.

Day 8

- Statistical Process Control
- Introduction to MBF.



- Capacity Analysis.

Day 9

- Work Balancing
- Standard Work

Day 10

- Product Delivery Systems
- Bottleneck Analysis
- Push vs. Pull Systems



Lesson Plan

Day 4-Seven types of Waste

Performance Objectives

Upon completion of this lesson, the student will:

- Be able to Identify the 7 Types of waste
- Identify and prevent waste in their roles
- Understand the effects and consequences of waste in the organization.

Therefore, this lesson is concerned with teaching the student to identify and reduce waste in the clinic. These also allow the student to perform more efficiently, reducing extra work, and understand the effect of waste in the clinic while improving service to patients.

Teaching Aids

- Visual aids: Power Point presentation and Graph handout.

Materials

- Nuts, washers, and bolts. (Activity: over production and inventory)
- Time observation Worksheet
- Stopwatch

References

- <http://www.systems2win.com/lk/lean/7wastes.htm>
- <http://www.sixsigmatrainingconsulting.com/six-sigma-tools/the-seven-types-of-waste-a-summary/>
- <http://www.beyondlean.com/7-wastes.html>
- <http://www.mimesolutions.com/Pages/Lean%20Six%20Sigma.htm>



Estimated Time to Complete the Lesson: 60 minutes

Preparation

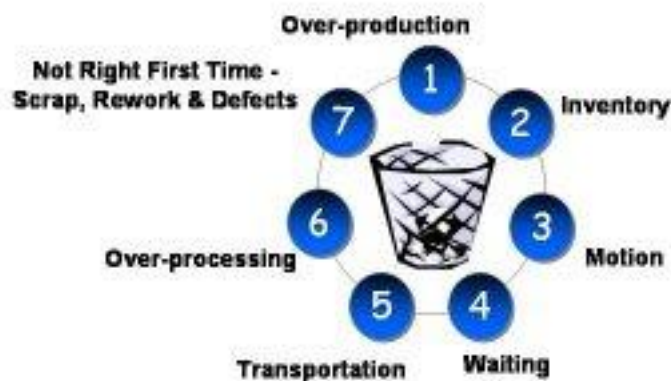
In our last lesson, we learned about Lean and how it has become an effectible methodology to improve performance. Additionally, we covered how it has become widely accepted not only in the manufacturing industry but also in health care.

To be able to improve performance we need to reduce waste. Waste is what we are going to learn about today.

I will present the different types of waste, we will associate them with your current roles, and then we will have an activity to illustrate some of the topics.

Presentation-The 7 Wastes

The 7 Wastes



<http://www.beyondlean.com/7-wastes.html>



1. *Overproduction*

Overproduction is producing too much of something without knowing that is going to be used completely. Overproduction can also be considered product made without a specific demand.

Examples: Making extra copies for a meeting, they will end up in the garbage.

Printing documents that might change or are not finished.

(Ask the class to relate this to their jobs and give you examples and what are the consequences of overproduction).

Clinic Examples: Patient education materials (vaccine information), medical supplies and medication this information and products expire and a place needed to store it. Also scheduling appointments that are not necessary. Patients scheduled with acute symptoms after 3 days usually are better by the time of the appointment or have been seeing somewhere else not needing the appointment anymore.

These types of appointments are usually a waste because if patients do not really need to come they will not show for their appointments creating two problems. One it is occupying the space on the schedule that could be use for someone that will actually show.

2. *Inventory*

Inventory not only refers to the supplies and materials in the clinic, it also refers to the resources that are not being used appropriately. If the providers have to wait for patients to be ready, or if patients have to wait to see the provider, this lost time, and resources are considered wastes.



3. Motion

Motion makes reference to the extra steps or movement that employees have to do to accomplish their tasks.

Ask the class to come up with some examples.

Examples: Printers located away from where the job is performed. Printers should be located strategically in the clinic.

Activity: use the Time observation sheet to calculate the time that is currently spent walking to the printer and back. How many times a day do you walk to the printer every day? Week? Year?

4. Waiting

“Time is Money”

If the patients or the providers have to wait, we are creating waste. The flow through the clinic should be seamless for the patient and for everyone. Registration, rooming patients, labs and provider’s visit, should be standardized processes that allow efficient transition and prevents wasted time. Technology will need to support this process.

5. Transportation

Transportation is the unnecessary movement of staff and patients during their visit at the clinic. The layout of the clinic must support this seamless flow. All departments have to be strategically placed to prevent unnecessary travel and waits. For example, the weight station should be located on the way to the patients’ rooms.



Ask the class if there are any other examples.

6. *Over-processing*

Having a process or step that does not add value. Trying to process beyond of what is required by the customer. We should always try to meet and exceed patient's expectations. At what point are we doing too much for the patient?

7. *Rework and Defects*

Waiting for feedback to correct or finish tasks, "do it right, do it once".

Providers should finish dictations, orders, and close encounters correctly after every visit.

Nurses must finish documenting all orders, immunizations, and notes after every visit.

Front Desk personnel are to schedule appointments correctly, collect correct insurance information demographics, and take complete messages.

If we complete these tasks appropriately from the beginning, it will save time and effort by not having to go back and try to reprocess or correct things later.

Application

Motion-Activity: use the Time observation sheet to calculate the time that is currently spent walking to the printer and back. How many times a day do you walk to the printer every day? Week? Year?

Inventory and Waiting-Activity (Nuts, washers, and bolts): using the stopwatch and the time observation sheet to time and keep track of the activity.

A volunteer will be timed while putting the 15 nuts, washers, and bolts together.



Trial A= putting a washer on each bolt first, then putting the nut onto each bolt afterwards to complete each set

Trial B= putt all three parts together on each set before continuing with the next set.

Trial B should be more efficient than trial A. How can this be associated with the clinic?

Summary/Review

This session covered the different types of waste associated with the clinic.

The seven types of waste covered were: Over-production, Inventory, Motion, Waiting, Transportation, Over-processing, and Rework and Defect.

Some of these topics were illustrated in the two activities and others in the examples given.

Evaluation

- How many types of Waste are there?
 - A. 8
 - B. 7
 - C. 6
 - D. 5
- Having to go to the other side of the clinic to pick up your printed items is an example of:
 - A. WASTE
 - B. MOVEMENT
 - C. TRANSPORTATION
 - D. RE-WORK



- Having the provider waiting to see patients is a wasted resource, what type of waste is this?
 - A. WAITING**
 - B. INVENTORY**
 - C. TIME**
 - D. OVERPRODUCTION**
- Having the scale on the way to the rooms is an example of:
 - A. MOVEMENT**
 - B. TRAVEL**
 - C. TRANSPORTATION**
 - D. OVERPRODUCTION**
- Printing too many materials without knowing if they are going to be used or if they are going to expire before they are used is an example of:
 - A. OVERPRODUCTION**
 - B. RE-WORK**
 - C. INVENTORY**
 - D. OVER-PROCESSING**

Presentation Spaghetti Charts

Now that we have identified the types of waste in the clinic, we will try to come up with solutions for some of them using spaghetti charts.

For this lesson, we will divide the group by their job roles:



- Schedulers and receptionists will be group A
- Nurses and Providers will be group B
- Ancillary services (Lab, radiology) will be Group C

Each group will use post-its, colored arrows, color markers, and an easel board.

Use these materials to lay out the existing processes and stations for the patient flow in your area.

Become the patient and show the patient's flow through the process.

The purpose of this exercise is to understand the current process. By understanding the process, we are able to see where processes can be improved or changed.

Your spaghetti chart should look something like this:



[sixsigmamoneybelt](#)

Once we have identified the flaws your team will share this with the other two teams and the class, as a whole will try to come up with a better solution or process.



Time Schedule

Dates and Times of Mandatory Training in Staudt Clinic Conference Room

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr
Dec.					6am-	6am-	6am-	6am-	6am-			6am-	6am-	6am-	6am-	6am-
2011					8am	8am	8am	8am	8am			8am	8am	8am	8am	8am

Day 1 December 5, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

Introduction to Training and Six Sigma Philosophy

- Lean Six Sigma Philosophy
- Lean Six Sigma Improvement Model

Day 2 December 6, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Project Management
- Process Mapping

Day 3 December 7, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Value Stream Mapping
- Lean Basics I & II



Day 4 December 8, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- 7 Types of Waste
- Spaghetti Charts

Day 5 December 9, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Visual Workplace
- Workstation Layout

Day 6 December 12, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic learned

- Video Process Analysis
- Basic Data Acquisition Techniques

Day 7 December 13, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Failure Modes and Effects Analysis (FMEA)
- Basic Analysis Tools.

Day 8 December 14, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Statistical Process



- Control Introduction to MBF.
- Capacity Analysis.

Day 9 December 15, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Work Balancing
- Standard Work

Day 10 December 16, 2011

1st Hour-Classroom Instruction

2nd Hour-Hands on/Discussion specific to Staudt Clinic

- Product Delivery Systems
- Bottleneck Analysis
- Push vs. Pull Systems



Budget (Benefits verses Costs)

Training Benefits

Based upon our analysis of the methods, procedures, and processes currently being used at

Staudt Clinic, The pentagon Corporation has identified the following areas that will be our initial focus of improvement attention:

- Interdepartmental communications
- Document transfer, storage, reliability, and access
- Workstation organization
- Support departmental procedures
- Caregiver procedures

The changes facilitated through the improvements generated by Six-Sigma Green Belt employee training at Staudt Clinic will present an initial annual revenue increase of approximately 9% or **\$582,120.00**. As employees, and their newly formed Lean Teams, examine their work environment, procedures and processes, additional annual income and savings will be realized. The initial income generated by the training provided by The Pentagon Corporation will show a training program **cost payback in less than two months**.

Training Costs

A. Personnel- (Figures are calculated for time and a half pay, multiplied by staff member(s), multiplied by 10 days of training.)

Position:	Computation	Cost
Doctors	(\$120 x 2hr/per day x 6 Doctors x 10)	\$14,400
Board of Directors	(\$90 x 2 hr/per day x 4 Directors x 10)	\$7,200
Human Resources	(\$37.50 x 2hr/per day x 5 HR x 10)	\$3,750
Registered Nurses	(\$37.50 x 2hr/per day x 4 RN's x 10)	\$3,000
Medical Assistants	(22.50 x 2hr/per day x 4 Med. Assist. x 10)	\$1,800



President	(\$82.50 x 2hr/per day x 1 President x 10)	\$1,650
Medical Record Specialist	(\$19.50 x 2hr/per day x 2 Medical Records x 10)	\$1,560
Patient Registration	(\$18.75 x 2hr/per day x 4 Reps x 10)	\$1,500
Transcriptionist	(\$24.75 x 2hr/per day x 3 Transcriptionist x 10)	\$1,485
Lab Technicians	(\$27 X 2hr/per day x 2 Lab Technicians x 10)	\$1080
Scheduler	(\$16.50 x 2hr/per day x 3 Schedulers x 10)	\$990
Clinic Manager	(\$34.50 x 2hr/per day x 1 Manager x 10)	\$690
Phlebotomist	(\$16.50 x 2hr/per day x 2 Phlebotomist x 10)	\$660
Transcription Supervisor	(\$30 x 2hr/per day x 1 Trans. Supervisor x 10)	\$600
Laboratory Supervisor	(\$30 x 2hr/per day x 1 Supervisor x 10)	\$600
Schedule Manager	(\$26.25 x 2hr/per day x 1 Manager x 10)	\$525
Total		<u>\$41,490</u>

B. Training/Supply Costs- (This section includes on-site training fees, training material costs, doughnuts, coffee, and supplies.)

Description	Computation	Cost
Six Sigma Training	(\$2,500 per day charge x 10 days)	\$25,000
Six Sigma Certification	(\$7,980 X 25 people + \$7,182 X 20)	\$15,162
Food	(\$4.99 per dozen x 6 dozen x 10 days)	\$299.40
Memo Pads	(\$7.99 per pack of paper x 6 packs)	\$47.94
Supplies (Pens)	(\$9.79 x 4 boxes)	\$39.18
Coffee	(\$10 Can of Folgers)	\$10
Total		<u>\$40,558.52</u>

C. Total Cost of Training- (Includes all section totals)

Description	Computation	Final Cost
Overall Cost	(\$41,490 Salary + \$40,558.52 Training/Supplies)	Total <u>\$82,048.52</u>

Budget Summary

Capital Investment

\$82,048.52

Return on Investment

\$582,120.00



Materials and Facilities

Training Site

Formal classroom setting/Classroom instruction

Simulation Areas

- Inside work area simulation
- Inside clinic area simulation

Training Instructors for classroom and simulation areas

- Classroom instructor(s) provided by The Pentagon Corp.
- Field Instructor(s) provided by The Pentagon Corp.

Materials for training facility

- Video monitor with DVD drive
- White board
- Computer projector and Computer
- Projector screen
- Tables and chairs
- Food and refreshments

Materials for Instructors

- Lean Six Sigma Greenbelt training program schedules (to hand out)
- Training videos (in DVD or file form)
- Graphs/Charts for visual aids
- Time Observation Worksheets (to hand out)
- Nuts, washers, bolts, and stopwatches for work area simulations
- Dry-erase markers, pencils, paper



- Mock patients for clinic area simulations
- Test sheets (to hand out)

Facilities involved in Training Program

Site 1

Staudt Clinic

1234 Blue Devil Dr.

Menomonie, WI 54751



Reference List

Bersbach Consulting website retrieved from:

<http://www.sixsigmatrainingconsulting.com/six-sigma-tools/the-seven-types-of-waste-a-summary/>

Beyond Lean.com website retrieved from:

<http://www.beyondlean.com/7-wastes.html>

Healthcare Consulting website retrieved from:

<http://www.healthcareconsulting.com/>

Mime Solutions Limited website retrieved from:

<http://www.mimesolutions.com/Pages/Lean%20Six%20Sigma.htm>

QualityAmerica.com website retrieved from:

<http://www.qualityamerica.com/>

Systems2win website retrieved from:

<http://www.systems2win.com/lk/lean/7wastes.htm>

YouTube website retrieved from:

[sixsigmamoneybelt](http://www.youtube.com/sixsigmamoneybelt)

Werner, Jon M. & DeSimone, Randy L. (2009). *Human Resource Development*. (5th Ed.) United States of America: Mason, Oh: South-Western Cengage Learning

