Implementation of a 5'S Pilot Program in the Veteran Administration Hospital in San Juan, Puerto Rico

Gladys V. Terc Echevarría
Master in Manufacturing Competitiveness
Rafael Nieves Castro, Pharm D
Industrial Engineering Department
Polytechnic University of Puerto Rico

Abstract - *In the recent years, the restructuring of health system has taken an approach to quality control in order to reduce cost and provide better services to patient. However it is a process that requires much work and research. The main objective of a quality program should be integration of systems to facilitate the administrator's work and reduce operational costs. 5'S Pilot Program, or the five pillars of the visual workplace, is a systematic process of workplace organization. This tool helps an organization to identify non value adding activities in a current process and the opportunities for improvement. This Pilot Project was applied to Send Out Room/ Main Laboratory of Veteran's Hospital in San Juan, Puerto Rico. The main aim was to apply 5'S tool to clean and organize the working area to be more efficient to complete daily workload and improve as well as internal customer satisfaction by January 2014.*

Key Terms — *Health Systems, Lean Thinking, Total Quality Management, 5'S Philosophy.*

INTRODUCTION

In order to create an organizational culture of continuous improvement of clean, pleasant and safe for patients and employees of the Veterans Administration (VA) Hospital of San Juan, Puerto Rico, the Quality Management System (QMS), attempts to pursue a new method for the improvement of the existing one. The VA problematic stems from the lack of quality culture and discipline, and this has affected the quality of customer services. The VA Hospital has a great demand nationally and requires a change of mindset focused on maximization of the concepts of quality like a way to present itself as a competitive hospital.

The "5S Methodology," also known as "SEIRI, SEITON, SEISO, SEIKETSU and SHITSHKE", by Japanese origin, are a set of principles of conduct intended to establish or maintain any improvements organization. [1] Implementing this methodology in health systems help to standardize many processes because it has the capacity to change the human behavior principles. Statistical studies in companies around the world that have implemented this system show that using only the first 3 S, obtained a reduction of 40% of your maintenance costs and a reduction of 70% in the number of accidents.

RESEARCH DESCRIPTION

The service offered by the VA Hospital San Juan has some very high quality standards, compared to most public and private hospitals in Puerto Rico. However, the equipment inventory management and organization of the offices have a deficiency which is reflected in the reduction of space, increasing time and costs (waste). The scope of the project will include a Send Out Room in the Main Laboratory of the VA Hospital, which has lots of patient's demand. VA Hospital Send Out area is generally a small operations staffed by a variety of employees ranging from technicians and phlebotomists to laboratory supervisors. The VA Main Laboratory staff members are concentrating on testing Hospital and outreach patients in a timely manner. VA Hospital segregates Send Out Room specimens outside the normal laboratory workflow. However, Send Out testing is an extremely complex operation, where quality lapses are common and patient care can be seriously impacted. This requires that it maintains a robust quality management program to cope with a test menu of thousands of different tests, the unique

specimen requirements for each of those tests, and the various shipping and information handling processes expected by reference laboratories. The 5'S program was applied to the Send Out Room within 3 months continuously from November 2013 to January 2014.

RESEARCH OBJECTIVES

The study is designed to ensure that all employees review their working areas and identify all items for sort, strengthening administrative processes at the Puerto Rico Veteran's Hospital. On the other hand, facilitate the acceptance and adoption of a culture aimed at the preservation of order, cleaning and safety of the physical environment in all areas of the institution, generating commitment and a sense of belonging people. Finally, promote a comfortable and easily accessible working area, reducing employee stress which will be reflected in commitment and quality. This is Pilot Program of what will later be a more comprehensive study.

RESEARCH CONTRIBUTIONS

The method of 5S is one way to engage people and contribute to culture change. 5S is a visually-oriented system of cleanliness, organization, and arrangement designed to facilitate greater productivity, safety, and quality. It engages all employees and is a foundation for more self-discipline on the job for better work and better products. The teamwork and the discipline built through 5S improve worker-to-worker and worker-to-manager relationships. This eliminates wasteful practices (waste of time and money). This is perhaps the greatest benefit of 5S.

LITERATURE REVIEW

According the book: *To Err Is Human: Building a Safer Health System*, written by Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson, Editors; Committee on Quality of Health Care in America, Institute of Medicine, presents two large studies, and one conducted in Colorado and Utah and the other in New York, found that adverse events occurred in 2.9 and 3.7 percent of hospitalizations, respectively. In Colorado and Utah hospitals, 6.6 percent of adverse events led to death, as compared with 13.6 percent in New York hospitals. In both of these studies, over half of these adverse events resulted from medical errors and could have been prevented. More people die in a given year as a result of medical errors than from motor vehicle accidents (43,458), breast cancer (42,297), or AIDS (16,516) [2]. Millions of people every year put their trust in hospitals and health professionals to give them the care they need.

Thanks to the Alma-Ata Conference, convened in 1978 by the World Health Organization (OMS) [3], health systems worldwide have been undergoing a series of positive changes focused on achieving quality improvement services to patients at a lower price, and making use of new technologies for the benefit of individuals and as a means to reduce costs and time investment.

This global event was a call that was quickly adapted by various governments, given their political, social, cultural and economic conditions. Specifically, in our hemisphere, with the arrival of the new Health Care Act, signed by President Barack Obama on March 23, 2010, health care systems have been experiencing great changes, all aimed at improving the quality of services. The new health law basically summarized in the following sentence: "Better health, better care, lower costs." It is all a comprehensive strategy to reduce long-term costs through prevention, using the method of short-term incentives to motivate these changes.

The long-term goal is to assure better services for the patients, to reward quality and innovation, and to stimulate the adoption of technology to improve care while aligning payment incentives to reward providers working to improve care.

With this background information, the analysis of the quality tools that could be applied to different areas of the Puerto Rico Veterans Hospital was

initiated, based on analysis using the two concepts of Total Quality Management and Lean Thinking.

TOTAL QUALITY MANAGEMENT

Perhaps no American industry could benefit more from the adoption of Total Quality Management (TQM) techniques than health care. Experts maintain that a huge portion of the nation's annual healthcare expenditures can be attributed to waste and inefficiency. Spending on health care nationwide last year hit a record $838.5 billion, equivalent to 14 percent of the nation's total economic output, according to the Commerce Department [4]. Total Quality Management (TQM) or Total Quality Management is the integration of all functions and processes of an organization, in order to achieve continuous improvement in the quality of goods and services supplied by a company or organization so that it can ensure optimal services and appropriate for customers. Basically, Total Quality Management is a total approach to all continued processes to ensure that the final product or service is one of highest excellence and quality. Among the fundamental principles of Total Quality Management (TQM) are: of full and constant customer satisfaction, both in their needs and in their expectations; developing a continuous improvement process of the activities or processes performed in the company, always seeking innovative methods of action for quality and benefits. It requires a total commitment of the directors or managers and active leadership, creative and entrepreneurial team managers or project managers Total Quality. On the other hand it required the participation of the teamwork to identify any barriers or limitation of quality management teams, especially in the area of communication with the various departments that make up the hospital's integration of all teams or departments. Undoubtedly, TQM is a comprehensive work, complete, and extremely thorough which ensures total quality pursued.

5'S PHILOSOPHY (LEAN THINKING)

Between 1995 and 1999, the VA health care system was reengineered, focusing especially on management accountability, care coordination, quality improvement, resource allocation, and information management. Numerous systemic changes were implemented, producing dramatically improved quality, service, and operational efficiency. VA health care is now considered among the best in America, and the VA transformation is viewed as a model for health care reform [5]. Under pressure to reduce costs and improve quality, many hospitals and health systems are adopting approaches to improve processes. Some strategies, such as Lean and Six Sigma, aim to streamline processes by eliminating waste in the system. Improving the efficiency of processes also depends on eliminating waste in the environment in which the processes occur. The 5S philosophy is focused on effective workplace organization and standardized work procedures. A robust 5S program will reduce waste and improve your efficiency while improving quality and employee safety. 5S is based on Japanese words that begin with the letter 'S'. The term "5S" references the five elements of this system: Sort, Set in Order, Shine, Standardize and Sustain. Provides a structured approach and easy to understand methodology (steps) for departmental organization, order, and cleanliness.

In the same way that the concept of TQM or Total Quality Management is an effective tool to determine success in the management of quality, 5'S philosophy can be used as a tool to maintain a safe and clean environment in hospitals. The total quality management ensures constant monitoring and continuous effort in improving the services provided to members. It is a pattern which marks the passage of a plan or agency determined to achieve the desired rating. This constant monitoring should implement the use of technology, which not only reinforces with hard data from members about their expectations and needs, but also provides a means of mutual

communication. Communication is the basis for guidance on the services they can enjoy and as a means to keep them always aware of how to prevent disease. This is the case of several hospitals in the State of New Jersey (Connecting Old Hook Medical Associates in Emerson, NJ, Hackensack University Medical Center in Hackensack, NJ, and Atlantic Care in Egg Harbor Township, NJ [6]), which have adopted use technology to keep in touch with their patients, maintain a readily accessible and properly labeled items to guide them in all matters relating to the health, including ways to prevent diseases of all kinds. In any case, the success of the 5'S and its perpetuity requires total commitment of caregivers, administrative and management team to induce a change in mood, attitude and behavior in the institution, ensuring the process the implementation of this strategy.

METHODOLOGY

This chapter presents the methodology that will be used to complete this project. It is organized in three main steps of phases, which will be initiated with the Developing 5S Plan, followed by the Training Plan and completed by the Execution. The pilot project will be tested with the aim of implement the projects to all areas of the Veteran's Hospital of San Juan. This project material will last for three months with an approximate cost of $ 931.00.

Phase I: Develop 5's Plan

This phase consists in the distribution of flyers to call all the Green Belts of VA Hospital in order to implement the 5'S in the work area. After that, it will be present to the Director's office and get the approval by the Director.

Phase II: Training Plan

Each team must have a 5'S Cart Supply. During this phase the System Redesigned Department train the Executive Team, Middle Management, Green Belts, Supervisors and Frontline.

Phase III: Execution- 5'S Implementation Plan

To start the execution of the project, it will evaluate the selected area by mapping to obtain the layout. The second step is to label each section and then photographed the work area (using area map) to take photos of cabinets, desks and medical equipment.

Sort

The Team and or staff member define the staging area create a Sort Inspection Sheet for items not essential to the area and identify items that are not necessary in the area and red tag them. Locate items to a staging area to determine disposition of tagged items.

Set in Order

For this stage the supervisor sets the location where items belong, by either labeling or visual marking. The team and/or staff member would follow these steps: mark off common areas, label drawers, and identify everything within the area. The staff creates a criteria checklist for set-in-order, to assist the team in arranging items and designs a standard for the target area; something to refer to if an item is out of place or not returned. Finally, the area is monitored to ensure this S is being competed.

Shine

It conducts a "spring cleaning activity, create the 5S Cleaning Plan for the area, which may be done daily, weekly, etc. The team posts the 5S visual circle in a common area and place a seal on the 3rd S.

Standardize

To achieve this step the team members would follow different steps. Identify the target areas to decide what the specific tasks are and where they should happen in terms of location. List them on a sheet of paper and choose the team member that will perform the tasks. Decide frequency and supplies required. Prepare a list in a column to post it in the target area. Fill the five minute 5S

Checklist and post appropriate forms in the target area. Finally post the 5S visual circle in a common area and place a seal on the 4th S.

Sustain

To sustain the gains the team must fill the 5S training matrix, training items are specific topics that require training (e.g., understand the need, conducting audits, ordering supplies, etc.) and conduct a frequently 5'S Area Audit. Set the 5th S in the designated area.

RESULTS AND DISCUSSION

This section discusses all the implementation activities for the pilot program using the 5'S Philosophy.

Phase I: Develop 5'S Plan

The Project Charter was presented to Green Belts Supervisor's office and gets the approval by the Director. Refer to Table 1.

Phase II: Training Plan

The System Redesigned Department trains the 5'S project team and facilitates the 5'S Cart Supplies. Refer to Table 2.

Phase III: Execution Plan

This phase carried out the implementation of the 5'S pilot program at SOR.

Sort

The Main Laboratory Committee met at Send Out Room (SOR) Figure 1, A-116-A on November 13, 13 at 8:00 am. The Attendees were: Jessica Soto, MT; Marisdel Laureano, MT; Josué Rosario, MT; Julia Fonseca, MT; Maritere Rodriguez, MT; Gladys V. Terc, volunteer student, and Carlos Tirado, System Redesign Coordinator. The Red Tagging was completed and all equipment/supplies, books, etc. where sent to staging area, and was used to mark the binders that should be sort by date and priority Figure 2 As the same time, the drawers were reviewed to determine the excess Figure 3, and Figure 4. On the other hand, the equipment

was tagged to relocate it Figure 5. The supervisors and leaders determine disposition of tagged items and made a list of Action Items log conducting Table 3 a Use and Lose Auction. In this step there were no items for surplus.

Table 1
Project Charter

Project Name: 5'S Send Out Room P&LMS		
Date Chartered	Start Date:	Target Date:
10/29/2013	11/13/2013	12/15/2013
Project Team	Phone	Title
Y. Melendez, Chief MT		Event Champion
J Soto, MT		Lead Practitioner
M Laureano, MT		
J Fonseca, MT		
M Rodríguez, MT		
J Rosario, MT	11114	Team Member
GV Terc, BS	532-1661	Volunteer
Process Owner	Phone	Title
Dr. D Conde	11114	Process Owner
Problem Statement		
The flow of Send Out sample processing and reporting have shown continuous interruption on Monday to Friday due to an increase in workload, re-do of work with existing process, waste on transportation, motion, over processing and underutilization of staff. This is causing internal customer dissatisfaction and delayed on patient reports.		
AIM Statement		
Apply 5S tool to the send out department to clean and organize the working area to be more efficient to complete daily workload and improve Turn Around Time (TAT) by 30% as well as internal customer satisfaction by January 2014.		
Project Scope		
Process Start step: Send Out Room Process Stop step: Send Out Room Out of Scope: Others areas of Main Lab		
Deliverables		
1. New SOP 2. Layout redesign		

Figure 1
SORT Red Tagging - A

Table 2
5'S Cart Supplies List

5S Cart Supplies							
Item	Description	Purpose	Qty per Cart	Cost per item	Total Cost	Item #	Vendor
Mobile Folding Cart with Lid	Black or Blue	To storage 5S material	1	$ 24.99	$ 24.99	987304	Office Depot
Store and More Apron	on the go essentials	To organize 5S material	1	$ 21.99	$ 21.99	#KARSM	Trainers Warehouse
Office Depot Vinyl Storage Pouch	3 hole, assorted colors	to hold marker/tape/post its	1	$ 2.08	$ 2.08	434357	Office Depot
Scoth Tape, Professional Quality Electrical Tape	1/2 " x 240" Pack of 5, Assorted Color		1	$ 8.79	$ 8.79	867319	Office Depot
Scoth Decorative Masking Tape, 1" x 20 yd	Yellow		1	$ 2.84	$ 2.84	280393	Office Depot
Scoth Decorative Masking Tape, 1" x 20 yd	Orange		1	$ 2.84	$ 2.84	280366	Office Depot
Scoth Decorative Masking Tape, 1" x 20 yd	Red		1	$ 2.84	$ 2.84	280402	Office Depot
Index Paper, red, 8.5 x 11"	Red paper for Tags, 8.5x11", 500		1	$ 22.00	$ 22.00		American Paper
Scotch Tape transparent, 1" Core, 3/4 x 1,000	Clear, Pack of 3		1	$ 8.49	$ 8.49	986872	Office Depot
Portable P-Touch or DYMO	Portable		1	$ 34.99	$ 34.99		Office Depot
P-Touch Label Tape, 1/2"	Various colors		1	$ 34.99	$ 34.99		Office Depot
P-Touch Label Tape, 1"	Various colors		1	$ 34.99	$ 34.99		Office Depot
Color Kraft Paper	24" x 720 ft. Red | Yellow| Blue | Black	For mapping layout mounting	1	$ 70.00	$ 70.00		Uline Catalog
SDHC Card	16 GB	to store camera pictures	1	$ 35.00	$ 35.00		B&H Photo Video
Chisel Point Markers	Assorted, Pack of 12		1	$ 7.99	$ 7.99		Office Depot
Post it Notes Cube	Assorted Color, 400 sheets, 3 x 3"		1	$ 3.82	$ 3.82		Office Depot
Post it Line Notes Cube	Assorted Color, 400 sheets, 3 x 5"		1	$ 9.79	$ 9.79		Office Depot
Scotch Color Duct Tape, 1 7/8" x 20 Yds	Yellow	Floor Tape	1	$ 4.99	$ 4.99	840399	Office Depot
Scotch Color Duct Tape, 1 7/8" x 20 Yds	Aqua	Floor Tape	1	$ 4.99	$ 4.99	840219	Office Depot
Scotch Color Duct Tape, 1 7/8" x 20 Yds	Blue	Floor Tape	1	$ 4.99	$ 4.99	894274	Office Depot
Scotch Color Duct Tape, 1 7/8" x 20 Yds	White	Floor Tape	1	$ 4.99	$ 4.99	883618	Office Depot
Masking Tape 2 in	Floor Mark Striped Tape Yellow/Black	could be Red/White	2	$ 29.30	$ 58.60		5SSupply.com
Portable Clipboard	Strorage box, Letter Size		6	$ 14.24	$ 85.44		Office Depot
Scissors, 8"	Stainless Steel		1	$ 8.54	$ 8.54		Office Depot
Ruler	12 inch		2	$ 1.49	$ 2.98		Office Depot
Tape Measure	30 ft		1	$ 25.47	$ 25.47		Home Depot
Pen, Black Ink	Pack of 4		1	$ 3.99	$ 3.99		Office Depot
Mechanical Pencil	.7 mm, Pack of 4		1	$ 5.69	$ 5.69		Office Depot
Pencil Refill	.7mm, tube of 12		1	$ 2.99	$ 2.99		Office Depot
Pentel Eraser	White, pack of 4		1	$ 2.30	$ 2.30		Office Depot
Docu Pockets	Backing tape, 11 x 17", 5 pk	Staging Area Signs	1	$ 33.50	$ 33.50		Market Place
Docu Pockets	Backing tape, 8.5 x 11", 5 pk	Process flow description	2	$ 38.50	$ 77.00		Market Place
Energizer Batteries,	AAA, Pack of 8	for label machine	6	$ 6.38	$ 38.28		Office Depot
Peel and Stick Vinyl Labels	1", Round, red		1	$ 16.00	$ 16.00		Uline Catalog
Peel and Stick Vinyl Labels	1", round, yellow		1	$ 16.00	$ 16.00		Uline Catalog
Peel and Stick Vinyl Labels	1", round, green		1	$ 16.00	$ 16.00		Uline Catalog
Peel and Stick Vinyl Labels	2", round, red		1	$ 16.00	$ 16.00		Uline Catalog
Peel and Stick Vinyl Labels	2", round, lt. blue		1	$ 16.00	$ 16.00		Uline Catalog
Peel and Stick Vinyl Labels	2", round, green		1	$ 16.00	$ 16.00		Uline Catalog
Foam Board for tools and other things	kit set of 10		1	$136.00	$ 136.00		5SSupply.com
Plastic Storage Box, set of 2	3 liters, Assorted Color	To storage materail	2	$ 2.93	$ 5.86		Office Depot
		Total Cost			$ 931.03		

Figure 2
SORT Red Tagging - A

Figure 3
SORT Red Tagging – B

Figure 4
SORT Red Tagging - C

Figure 5
SORT Red Tagging - D

Table 3
5S Action Item Log

Action Item	Furniture Yes No		Assigned To:	Estimated Completion date	Completed
Supply paper holder feature		√	**Assigned to clerks**	11/18/2013	YES
Paper copy holder		√	**Assigned to clerks**	11/18/2013	YES
US Robotic Modem		√	**Sent back to IRM office**	11/18/2013	YES
MS Wireless Keyboard		√	**Sent back to IRM office**	11/18/2013	YES
Keyboard Model SK-1688		√	**Sent back to IRM office**	11/18/2013	YES
Timer		√	**Sent to Chemistry Department**	11/18/2013	YES
Thermo Scientific CL10 Centrifuge		√	**2237 for Turn In. Sent to Fort Buchannan**	11/18/2013	YES
Foot Rest stand		√	**Assigned to Hematology-Microscope area.**	11/18/2013	YES
Filter paper cover		√	**Sent to Chemistry Department**	11/18/2013	YES
Keyboard KB-0316HB		√	**Sent back to IRM office**	11/18/2013	YES
Roll of Labels		√	**Assigned to POCT**	11/18/2013	YES
10 Used Binders		√	**Distributed among supervisors**	11/18/2013	YES
Pluggo Decapper		√	**Assigned to Chemistry Department**	11/18/2013	YES

Specimen Collection devices		√	**Assigned to Phlebotomy department**	11/18/2013	YES
2 Electrical Cords		√	**Sent back to IRM office**	11/18/2013	YES
Screw and Knots		√	**Assigned to Biomedical**	11/18/2013	YES
Acrylic Stand		√	**Assigned to Chemistry Department**	11/18/2013	YES
7 locks		√	**Authorization requested to Police Chief and FMS to get a combination lock, instead of having 7 individual locks.**	11/19/2013	No

Set in Order

The new items order was determined. The Desktops and drawers were organized, labeling and taped areas, Figure 1. A new inventory in drawers was organized and levels were established, Figure 9. Then the equipment was more accessible and easy to identify, Figure 7, Figure 8. Finally the binders were duly identified and accessible, Figure 10.
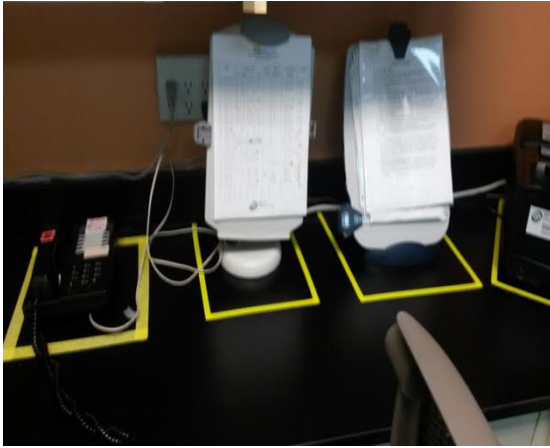

Figure 6
Set in Order in SOR

Figure 7
Set in Order in SOR

Figure-8
Set in Order in SOR

Figure-9
Set in Order

Figure 10
Set in Order

Shine

Shine involves identify and eliminate sources of dirt, difficult places to clean, and repair deteriorated or damaged parts, for what the team establish and implement a daily cleaning plan, Table 4. The idea is to act in a preventive approach.

Table 4
5S Cleaning Plan

5S Cleaning Plan				
Department	Send Out Room/ Main Lab		Date	11/30/2013
Location	5S Task	Name	Frequency	Materials
A-116	Clean With Cavi Wipes	Staff assigned to Send Out	2 times per day	Cavi-Wipes
A-116	Check Supplies/ Tranfer tubs	Staff assigned to Send Out	Daily	Request to Quest Diagnostics when needed
A-116	Check gauze disposible pipets	Staff assigned to Send Out	Daily	Request to Quest Diagnostics when needed
Visual Inspection Room	Change Biohazard Container	Staff assigned to Send Out	As needed	Specimen Bags
Visual Inspection Room	Organize all items / designated area	Staff assigned to Send Out	Daily	None

Standardize

Maximal and minimal quantities were established, facilitating visual management. The staff was train on SOR standards and posted appropriates form in target areas. The standardize

Form is used to determinate how to make the clean procedure to assist the workspace team to complete assigned duties on time Table 5.

Table 5
Standardize Form

5S AREA AUDIT				
Auditor (s)		5 or more problems, enter 4		
Work Area	Send Out Room	3 or 4 problems, enter 3		
		2 problems, enter 2		
		1 problem, enter 1		
		0 problems, enter 0		
Category	Activity	Date	Date	Date
SORT	1. Unneeded Equipment (chairs, desktops)			
	2. Unneeded reference materials, etc.			
	3. Items present in aisles, hallways, etc.			
	4. Safety concerns			
SET-IN-ORDER	5. Correct places for items			
	6. Items are not put away			
	7. Work areas properly defined			
	8. Office equipment locations defined			
SHINE	9. Desk surfaces and cabinets free of dust			
	10. computer terminal screens clean			
	11. Cleaning materials easily accessible			
	12. Common areas looking gleam			
	13. Labels, signs, etc. are clear to see			
STANDARDIZE	14. Work information is visible.			
	15. 5S standards are posted			
	16. Everyone trained to standards			
	17. Checklist exist for all areas			
	18. Items in areas can be located quickly			
SUSTAIN	19. An audit sheet has been created			
	20. Audits are conducted regularly			
	21. Improvement ideas for 5S are used			

Sustain

Upon the completion of this report, the project staff had not completed the internal audit in SOR area. Some recommendations are to evaluate the area daily in terms of cleaning and organization. On the other hand, conduct a SOR internal audit every two months. The 5S Patrol performs audits every three months to verify that the established order is maintained. The 5'S Area Audit is the document that the 5'S Patrol uses to identify problems in the SOR, Example 4.3.5 (Table 6).

It is important to analyse the SOR process flow for understanding the impact that a 5'S project could have. The objectives were to clean and organize the working area to be more efficient to complete daily workload and improve TAT by 30%, as well as internal customer satisfaction. To determine a reduction of the layout time, the staff should conduct a detailed study of the timing of each step and compare the effect of the 5'S in time decease. In this project the time was not considered as a parameter.

Table 6
Example 4.3.5 5'S Area Audit

| Five Minute 5S Checklist	
Team Members:	Jessica Soto, MT, Marisdel Laureano, MT, Josué Rosario, MT, Julia Fonseca, MT, Maritere Rodriguez, MT, Gladys V. Terc volunteer student
Purpose:	To assist the workspace team to complete assigned duties on time.
Target Area: Send Out Room **Date:** 12/3/2013	
	Standard Time to Perform for: Staff designated to Send Out
SORT	1. Staff from Send Out Room will put away extra supplies (1 min- 5 min) 2. Sort fax documents (5 min)
SET IN ORDER	1. Staff from Send Out Room will verify cabinets are stocked properly at start of day. (1 min- 5 min) 2. Refill suplies for the next workshieft (fax paper, test tubes, etc)
SHINE	1. Staff from Send Out Room will clean surface area with Cavi Wipes (every day) 2. Replace sharp containers (as needed) 3. Visual inspection of area
STANDARDIZE	1. Cleaning with Cavi Wipe (1min) 2.Organize binders by date (as needed) 3. Reprint labels from worklist (1min) 4. Establish the frecuency of required supplies (monthly) 5.Setting place for each item and labeled properly (monthly)
SUSTAIN	1. Send Out Room Staff will sign off on completing the Five Minute 5S Checklist. (weekley) 2.Understand the needs, conducting internal audits. (every two months) 3.Regularly the 5'S Patrol conduct the Area Audit. (every three months)

Lab Process Flow
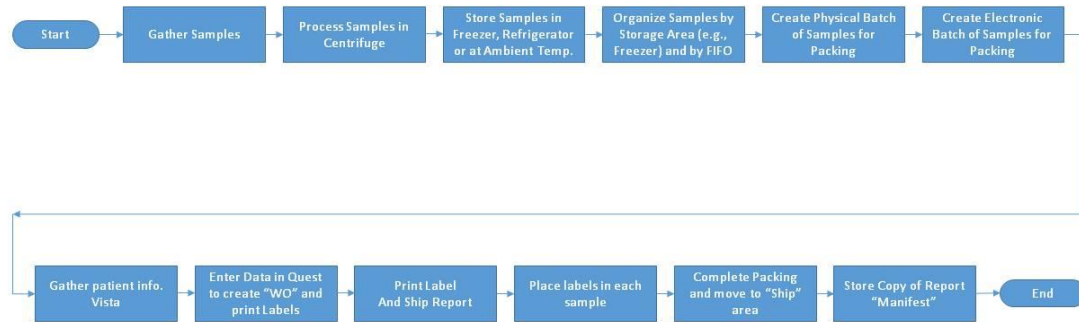
Figure 11
Lab Process Flow

CONCLUSION

The 5'S philosophy is a valuable planning tool and can be used for developing and implementing lean improvement projects, focusing on effective workplace organization and standardized work procedures. A robust 5'S program will reduce waste and improve the efficiency while improving quality and employee safety. This project can be used as a visual communications tool to explain how Lean techniques add value. Sorting the unnecessary items becomes the first step towards shortened lead times, fast identification of waste and achievement of continuous flow. This project had a direct impact on the organization of the Send Out Room, because all the items were labeled and organized in their respective area. Therefore, it becomes easier handling and it significantly minimizes the lead time. The outcome that we were looking for was one that wasn't quantitative. Our goal was to enhance the performance by improving the motivation of the employees within their work area.

Finally, the most important thing from our perspective is the involvement of all employees of an organization to achieve that ideal project plan that will fulfill the patient care needs. Year after year, allowing a better allocation of resources, an improved management of projects and a good baseline for any employee interested in his/her process development within the VA Hospital. Based on these results, we can say the 5'S Program will contribute significantly in the progress of health care industry.

REFERENCES

[1] Evans, J.R. and W. Lindsay (2002), Management and Control of Quality, International Thompson Publisher.

[2] Kohn, Linda T., Corrigan, Janet M. and Donaldson, Molla S. (1999), To Err Is Human Building a Safer Health System, from http://wps.pearsoneducation.nl/: http://wps.pearsoneducation.nl/wps/media/objects/13902/14236351/H%2007_To%20Err%20Is%20Human.pdf.

[3] Benachi, N (2000), "Validación de la versión en español del cuestionario PCAS para evaluar la atención primaria de salud", Revista Panamericana de Salud Pública, Vol. No. # 31, Enero 2012, pp.32.s.

[4] Zablocki, E. (1993). Quality management targets health care. Nation's Business, 81(2), 40.

[5] Kizer, K. W., & Dudley, R. (2009). Extreme Makeover: Transformation of the Veterans Health Care System. Annual Review of Public Health, 30(1), 313-339. doi:10.1146/annurev.publheakh.29.020907.090940.

[6] Evans, M. (2/20/2012), "Getting up to speed", Modern Healthcare, Vol. 42, pp. 6-8.

[7] Peterson & Smith, The 5'S Pocket Guide 1998.