



Lean Lab

CapRock Global Solutions
Health Care Consulting
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The goals of a Lean laboratory are to ultimately use fewer resources, effort, and reduce time to test incoming specimens and still deliver accurate and timely results. Deploying lean principals in your lab can result in significant productivity improvements and reductions in lead times. There are six steps to creating a Lean lab through education and the implementation of Lean tools.

Step 1

Identify a lean facilitator and educate your lab team about lean principals and tools.

A one day Lean Health Care 101 workshop will provide your lab team with the essentials to understand the lean concepts. This workshop will not only provide information, but also

provide hands-on exercises are the most effective.

Multiple hands-on exercises will help to really drive home the concepts in an interesting, fun and interactive way.

When identifying a lean facilitator, be sure that he/she has experience with lean implementation in labs.



In some cases an organization may have a lean facilitator on staff, but most often this is not the situation.

The recommendation is to seek help from an experienced consultant that has broad experience in industrial engineering and lean lab projects. The savings will generally pay the cost for the consultant in the first year by 2 or 3 times over.

Step 2

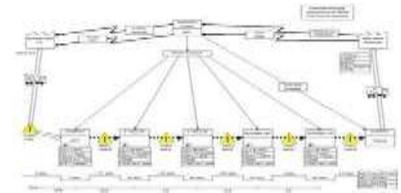
Identify the value stream and map it.

To identify the value stream, first pinpoint what is the value (product or service) your clients are willing to pay for? Second, what are the actions needed to deliver the product or service to the clients?

The next step is to walk through the value stream step by step with the lean facilitator, starting with the order and ending with the delivery to the client. During this process each action should be identified as either value added or

There are more details regarding value stream mapping process.

To be effective with your team's time and company resources, mapping the value stream is best done by a trained lean practitioner.



Step 3

Develop the future state.

With the current state mapped, non-value added actions are listed and those that may be eliminated are identified; you are ready to start mapping the future state.

A lean practitioner will facilitate this process with the help of key associates and managers that understand the lab, the value it provides to its clients and are empowered to make decisions to propose to management.

This process may take several iterations to gain agreement with the team and ultimately management, but when the team is done a future state map should be the result.

This map will ultimately be a living document that will be utilized on your journey in creating a lean lab.

6 Steps to a Lean Lab

non-value added.

In looking further, note which non-value added actions that may be eliminated.

Document the opportunities to remove non value added actions will be important in developing the future map.

The cycle time of each action is captured, lead times, change over time, communication and information flow are all documented.



Step 4

Identify the opportunities / gaps to achieve the future state.

With both the current state and future state maps completed, the next step is to prioritize the gaps or opportunities between the two maps.

While prioritizing, identify the actions that are most important to delivering value to your client.

Also, look for the “low hanging fruit.” The actions that when changed or eliminated can deliver a quick win and drive the momentum of the project in the forward direction.

Build a schedule and plan.

In some cases it can take six months or up to a year to make the changes identified to achieve the future state.



Step 5

Prioritize actions and develop a Kaizen plan. Review the gap list and make sure the priorities are in line with the organizations and clients goals and needs.

With key associates, managers and lean practitioner, develop a scoring tool based on client and business needs and use this tool to rank the gap list. In many cases it will be obvious which items on the gap list are more important.

The scoring tools could include impacts to improve turnaround time, lower cost, improve scheduling flexibility, reduce waste such as waiting – travel-rework -increasing capacity to support client’s needs, etc.

Weight each item on our gap list using the scoring tool according to importance. For example most important could be scored as a 5 and least important scored as a 1.

One other important factor to include in a separate section of the scoring sheet is the estimated time and resource required to perform the Kaizen event and implement changes. Since you have not performed the Kaizen event yet, you will need to make a high level estimate. This will be based on time, cost and resources needed.

Total the scores to rank the priority of the Kaizen event and then look at the second section to understand the cost, time and resources required.

With this information you can build the Kaizen plan with a schedule.

Step 6

Perform Kaizen events, make rapid changes, track performance and follow up to ensure sustainability. Kaizen events generally take three – to- five-days

Planning and readiness is important, be sure to use checklists

Team leader along with the lean facilitator will hold a kick-off meeting and discuss the problems identified, start with the first on the priority list.

Make sure you have the area prepared for the event (materials, equipment, etc.)

The team will need to decide performance measurements, how to track progress, implementation dates and end date target.

The team will sort out the way to make the changes, best ways to communicate the changes; meetings, written communication, and verbally in the work area focused on.

The next step is for the team to perform the Kaizen and implements the changes.

The empowered team lead and lean facilitator will breakdown any obstacles

Performance is tracked and communicated, fine tuning is made as needed.

Follow-up to ensure that actions needed are successfully completed

Measuring the results, document and quantify the results and benefits

A lean lab is a learning lab that recognizes this is a continuous process of improvement through:

Encouraging the lab team to identify further improvement opportunities

Plan a schedule to re-evaluate the future state value stream map and Kaizen plan to start continue the lean improvement cycle.

CapRock Global Solutions has over 25 years of industry experience and is a premier provider of industrial engineering and productivity solutions.

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