Champions of Change Workshop:

Case Study: Hospital A: Laboratory Testing Process
Description of the organization

Hospital A is a university-based health care system. They provide a comprehensive suite of services including burn/shock trauma, cardiac center, and transplantation center services. Hospital A also has a state of the art laboratory that offers an extensive menu of specialized clinical tests.

The mission and goals of Hospital A had long been to provide excellence in patient care. Along with this broad objective Hospital A also had the following objectives:

- Provide education to healthcare professionals
- Promote ethical behavior in practicing medicine and conducting scientific research
- Become the preferred healthcare provider in their locality
- Become a valuable business partner to payors
- Build a steady stream of loyal patients

The goals of Hospital A for the current fiscal year were to maintain quality standards, decrease costs, and increase the overall contribution margin.

As a result, Hospital A sought how they could make improvements in areas where they thought the opportunity existed to cut costs by doing work better, faster and cheaper.

Description of the problem

Hospital A looked at its laboratory facility. They had an extensive test menu with 22 subspecialties. Based on historic data, a 200% increase in lab costs had crept up on Hospital A in the last 2 years.

Management of Hospital A decided to take a closer look at the laboratory testing process. They saw a very good opportunity to lower or at least slow down the increase in costs that had been occurring in the last two years.

Management asked the hospital’s internal audit function to lead an effort to examine the lab test process and provide management with a set of suggested solutions for solving the rising lab test cost problem.

Management requested a report by the internal audit team in three weeks. They had an executive meeting early the following week and requested the internal audit team provide suggestions to an oversight committee.

Description of project team

Internal audit had little experience in working with the lab processing center of the hospital and even less experience in working with the third party outsourcers who handled the lab orders. Mary Barnes was the senior auditor assigned to the engagement, she had five years of internal audit experience, three had been with Hospital A’s internal audit department and two had been in public accounting prior to taking a role at Hospital A. Mitchell Lee was the staff auditor assigned to the engagement. Mitchell was recruited out of college and this was Mitchell’s third assignment at Hospital A, he had been with Hospital A for 7 months.
The ‘As Is’ Process

Mary sent Mitchell to talk to Susan Cole, the laboratory office administrator. Susan was responsible for ensuring that all of the doctor’s lab orders were fulfilled. Susan was very busy. Susan explained the process of fulfilling orders during a 60 minute interview Mitchell had arranged. The process was as follows:

- Starts with a written physician order
- Order is transcribed into Lab System
- Sample collected from patient and sent to lab for test
- Test performed by lab
- Results submitted electronically

Susan stated that the major casual factors of high lab costs were the following, in her opinion:

1. Duplication of test orders (the same test is ordered twice by the same or different doctors for the same patient)
2. Incorrect test orders (the physician orders an incorrect test but it is too late to stop the test)
3. New test utilization (the physician specifically requests a test that is ‘state of the art’ and is considerable cost)
4. Unnecessary test (the physician orders the test and it is unnecessary based on the patient symptoms or a physician/department being overly conservative)

Mitchell had also asked Susan for a list of major lab tests and a summary over the last 36 months. Susan indicated that she would not be able to provide those during the interview but would try and get that information by the end of the week.

The following week arrives and Mitchell did not receive the requested data. He requests it again and is told by a lab staff person it will take a few more days. By Thursday Mary interjects and contacts Susan. Susan emails Mary a list of the major lab tests performed at the lab and requests that Mary go to the controller’s office for the cost figures.

The controller’s office provides Mary and Mitchell the total lab test cost each month over the last 36 months. The state they will need codes for each lab test in order to get a cost breakdown. Mary contacts Susan for the codes. Susan did not understand what the team will do with the information and repeatedly has come back for more information from her. She tells Mary to contact her supervisor for further data.

Susan’s supervisor was Peter Valenta. He was a medically trained lab technician. Originally he had referred Mitchell to Susan when Mitchell stated he wanted to discuss lab costs. Since costs were administrative or clerical Peter thought the referral was appropriate. Peter and Mary talk on Tuesday of the final week of the project. Peter has several questions about the ‘project’ and feels out of touch with the work. Although he agrees to provide the codes to Mary he is not happy about the request nor the project in general.

On Thursday the codes arrive and Mitchell has the data from the controller’s office to analyze. He notes that all costs have risen in the past several months but does not have time to do further analysis with the data. The data did not provide the frequency of orders, just the costs as requested.
Determine the 'Should Be' Process

Mary and Mitchell also wanted to understand what other hospitals have experienced in respect to lab test costs. Based on past experience, Mary knows that the executive committee will ask this question and wants to prepare her report to be responsive to this.

While waiting to get the cost data back from the lab, Mary utilized a local healthcare association as a resource she had familiarity with from a prior project. The consortium was founded in 1984 and had a mission of advancing knowledge, fostering collaboration and promoting change to help all members compete more effectively.

The consortium actually tracked lab costs. They were able to provide Hospital A with lab costs for the prior 12 months. Upon comparing their costs with the costs of the consortium, Mary and Mitchell found that Hospital A was in the average to high range for costs. They felt they could definitely look at the low cost providers as a goal or benchmark.

After seeing some quantitative numbers, Mary then decided to talk to the top tier labs and try and understand how they handle similar issues that Hospital A identified in its “As Is” state.

They choose a few Hospitals that most resembled them. These hospitals were academic medical centers who do similar lab tests and who have a similar patient profile. Four hospitals matched the criteria and agreed to participate provided that Hospital A be willing to share information with them and provide them with a written document summarizing their improvement initiative. Mary agreed to this.

From these hospitals, Mary and Mitchell gleaned the following best practices:

- The other hospitals had also experienced significant cost increases in laboratory testing in the past two years
- The others did a prospective review of expensive tests before performing the test
- The others did a retrospective review of expensive tests after performing the test
- Tiered review process for all tests (some type of review for all tests is done)
- A model was used to help decide if a test should be performed (certain criteria must be met)

Audit Recommendations:

Mary requested the Mitchell prepare a summary report as the third week was drawing to an end and the executive committee was meeting on Monday morning. Mitchell prepared action plans that summarized the following key conclusions:

- Before lab test orders are even placed, procedures to change ordering practices were suggested. They would do this by educating physicians on the rising costs to make them more acutely aware of those costs and that they were going to be monitored more closely. The effects of this were to stem the tide of abuse in lab test orders placed by physicians.
- Test practices themselves should be changed. A prospective review of all test orders was to occur. It would be tiered such that a more costly test would be scrutinized more than a less expensive test, but all tests had some form of approval process before being entered into the system for scheduling.
- Test practices would be reviewed retrospectively. This time the lab reviewed the cycle time, quality, and cost of lab tests to spot any trends in behavior that might indicate a problem. This would be a set of performance measures not unlike the Consortium
metrics. This was a base of historic data to set goals and monitor continuous improvement efforts.

Implementation:

The executive committee appreciated the audit team’s suggestions. They wanted the team to help the lab and the physicians implement the training and the prospective and retrospective reviews.

Mary and Mitchell did go back to Susan and Peter in the lab. They had the support of the executive committee behind them but Peter and Susan were reluctant to help. Mary suggested that she and Mitchell take the first shot at the new procedures and the agenda for the physician training. Susan and Peter provided feedback and when everyone was comfortable they held the physician educational meeting.

During the meeting Susan presented the policies and explained to all of the physicians the new process. A handout was provided. The physicians did not take the meeting well. Many of them expressed concern citing patient care and physician knowledge over costs and procedures of lab technicians and clerical administrators. At the end of the meeting several physicians left the handout and stated the process would not be followed.

Questions:

1. Do you think that Mary was a good project manager on this engagement? What traits of a good project manager existed, what was lacking?
2. What could the audit team have done differently to manage change better with the lab and with the physicians?
3. Using the action plan template, write 1 action plan based on your assessment of the case.
4. What performance measures would you suggest be put in place to monitor this process?