Applying Lean To Improve The Clinical Laboratory Science Program

Rolling Admissions Process

MAYO CLINIC

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Introduction

The Clinical Laboratory Science (CLS) Program was interested in streamlining their "rolling" admissions process and the Program Director asked for assistance from the Systems Engineering Team in the Department of Laboratory Medicine and Pathology (DLMP). Since the program began in 2008 the faculty encountered difficulty reviewing applications effectively and in a timely manner while balancing teaching responsibilities. This poster demonstrates the process that the team went through to improve admissions activities and increase efficiency. Lean concepts and tools with Six Sigma methodology were applied.
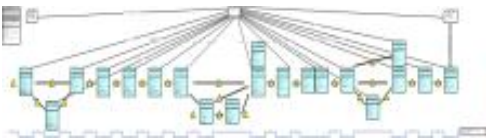
Define

The recruitment and admission process was slow and time consuming. The program had a high possibility of losing quality candidates because of inefficiencies in the recruitment and admissions process. The following goals were set for this improvement project:

- Refine the CLS program admissions process to maximize recruitment and admission of outstanding students
- Compete with other institutions for excellent candidates
- Educate all participants to the admissions process
- Improve efficiency
- Generate improved communication, collegiality, and teamwork amongst faculty

Measure

The team members were trained on Lean and value stream mapping before the creation of current and future state maps. The following is the current state value stream map, detailed at the beginning of the project, which represents a snapshot of the entire process on February, 2010.
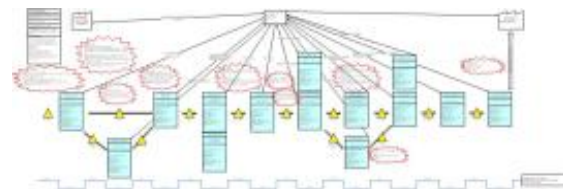

The value stream map shows all the activities from the time a prospective candidate submits his/her electronic application through "Apply Yourself" to acceptance into the program and confirmation of receipt of deposit to hold their slot.

The following values were collected from the mapping process:

- Total Wait Time = 28.25 - 67 days
- Total Processing Time = 7.55 - 10.97 hrs or 0.95 - 1.4 days
- TAT = Total Wait Time + Total Processing Time = 29.2 – 68.4 days

Analyze

In this phase we evaluated flow and eliminated waste and inefficiencies in the current state value stream to create a future state map.

The following is a list of improvement opportunities offered by the team members during the analysis phase.

Recruitment Process
- Increase communication with existing contacts
- Schedule Open House
- Increase number of recruitment trips
- Specify recruitment materials
- Standardize recruitment presentation
- Utilize social media tools to increase awareness
- Develop application instructions
- Generate post-recruitment event communications

Receive Applications
- Eliminate paper copies (generate an electronic copy of the application and create a shared file)
- Schedule interview dates in advance
- Facilitate closure of incomplete applications
- Create templates for letters and other communications
- Keep information on websites up-to-date
- Clarify differences between the CLS Program and the CLS Internship Program application process

Review Process
- Create interview schedule in advance and block faculty calendars
- Redesign and create digital application review form
- Mistake-proof transcript review of application
- Initiate electronic faculty review of application
- Facilitate faculty review of application via email communications
- Establish parameters to determine applicant status (i.e. invite or reject for interview)

Interview, Acceptance or Rejection Process
- Re-establish interview team
- Refine wait list criteria
- Implement questionnaire for applicants that decline offer
- Develop post graduation survey of students and employer survey
- Create a dashboard for monitoring the admissions process

Based on the future state the following goal will be reached if all the action items are implemented.

Total Wait Time = 23 - 44 days

Total Processing Time = 6.23 hrs or 0.78 days

TAT = 23.8 – 44.8 days

18.5% - 34.5% reduction in TAT

Improve

To keep the members learning and engaged as a team, action items were assigned to individuals who were asked to provide progress updates at the meetings. A list of action items was generated and then ranked based on priorities.

The application review and interview forms were mistake proofed and redesigned electronically. The application review and interview process was revised to eliminate paper and include completion of the new forms as an electronic part of the process.

Latest Results:

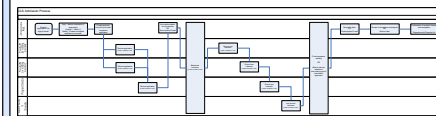Overall TAT = 22.65 – 43.65 days

22% - 36% reduction in TAT

Interview TAT = completed application to offering interview

Offering slot TAT = interview to offering to candidate

	2009-2010	2010-2011
Interview TAT	3-12 days	2 days (33%-%83 Reduction)
Offering slot TAT	2-6 days	1 day (50%-%83 Reduction)

Control

A swim lane of the CLS program admissions process was created as a tool for the program Administrative Assistant to utilize and train others.

To control and monitor the recruitment and admissions process a balanced scorecard was created.

The process, value stream maps, action items, forms, and outcomes from this project are shared with other academic programs in the Department of Laboratory Medicine and Pathology and the Mayo School of Health Sciences.