

Slashing Pap Smear Turnaround Time with Lean to Gain Competitive Market Advantage

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Agenda

- I. Introduction
- II. Baystate Health (BH) Overview
- III. BH Case Study: Cytology PAP TAT
- IV. Lessons Learned
- V. Next Steps

“The key to success is to quit talking and begin doing.”

- Walt Disney -

Why do we do what we do --- the way we do?



Number #5



SHRUG

Number #4



NO TIME

Number #3



NOT MY JOB

Number #2



BLANK STARE

Number #1



**WE'VE ALWAYS
DONE IT THIS WAY**

Start doing ...

Make identifying opportunities for improvement a priority and remember that at the most basic level, performance improvement is:

- Data driven and Measurable
- Continuous and Proactive
- Teamwork and Accountability
- Patience and Persistence
- Trial and Error
- Imagination
- "Seeing" and "Accepting" the opportunities

II. Baystate Health (BH) Overview

II. Baystate Health Overview

Baystate Health (BH):

- ❖ 3 Hospital Integrated Delivery Network
- ❖ Mary Lane Hospital / Franklin Medical Center / Baystate Medical Center
- ❖ 800 – 950 Beds

Baystate Medical Center (BMC):

- ❖ Academic 'Main Campus
- ❖ Western Campus of Tufts University School of Medicine
- ❖ Only Level I Trauma Center in region
- ❖ ~250-300 residents & fellows

Baystate Reference Laboratories (BRL) / Laboratory Network:

- ❖ >4.5 Million Billable Tests/Yr
- ❖ 65% of volume external to hospital
- ❖ 480 FTE's, >600+ people
- ❖ 23 Pathologists
- ❖ 2,300 Providers Serviced
- ❖ 26+ Patient Service Centers



II. Baystate Health Overview (cont.)

Embracing "Lean" Concepts

- ❖ Baystate Reference Laboratories took a lead role in LEAN
 - ❖ Initiated first formal LEAN projects
 - ❖ Held "Showcase of Excellence" to promote/present processes and results across department and organizations
- ❖ Momentum --- Committed Time and Resources
 - ❖ Engaged consultant to facilitate on-site "train-the-trainer" LEAN/PI program (participants had little to no experience with Lean)
 - ❖ 4 projects identified with associated lead staff
 - ❖ KICK OFF NOV 8, 2008

III. BH Case Study: Cytology PAP TAT

III. BH Case Study

Cytopathology Department Overview

- ❖ Full Service Cytopathology Lab
- ❖ Performs approx 62,000 paps/year
- ❖ 21 FTEs
 - ❖ Average 10+ years of experience
 - ❖ High level of satisfaction and pride in quality
 - ❖ Low turnover rates
- ❖ 7 Cytopathologists
 - ❖ Nationally recognized Medical Director
 - ❖ Residents/Fellows

III. BH Case Study (cont.)

Western MA Cytopath Market

- ❖ Primary 'Players'
 - ❖ BRL
 - ❖ NEPA (Pathology Group); affiliated with local hospital
 - ❖ Quest
- ❖ Providers are 'fiercely' loyal to local hospitals; however, there is some opportunity to 'win' referrals through:
 - ❖ Service
 - ❖ Quality
 - ❖ Consistency
 - ❖ Access

III. BH Case Study (cont.)

The "Perfect Storm" that led to PAP TAT project

- ❖ Change in leadership = operations viewed from a new perspective
 - ❖ BRL Interim Director - consultant (Lean expert)
 - ❖ BRL New Director - hired from outside Baystate
 - ❖ New Anatomic Pathology Senior Manager
- ❖ Provider/Client perceptions = extensively long PAP TAT vs. competitors' TAT ≤ 3 days = threatening to leave!
- ❖ Truth! = 95% PAPs completed ≤ 5 days (accessioning to results)

III. BH Case Study (cont.)

CHARTER

To maintain and attract customers in an increasingly competitive environment, BRL must provide turn around time of PAP test results that meet or exceed the competition

GOAL

Achieve a PAP Turnaround time of ≤ 3 days from *date of collection* to results available for 95% of tests

III. BH Case Study (cont.)

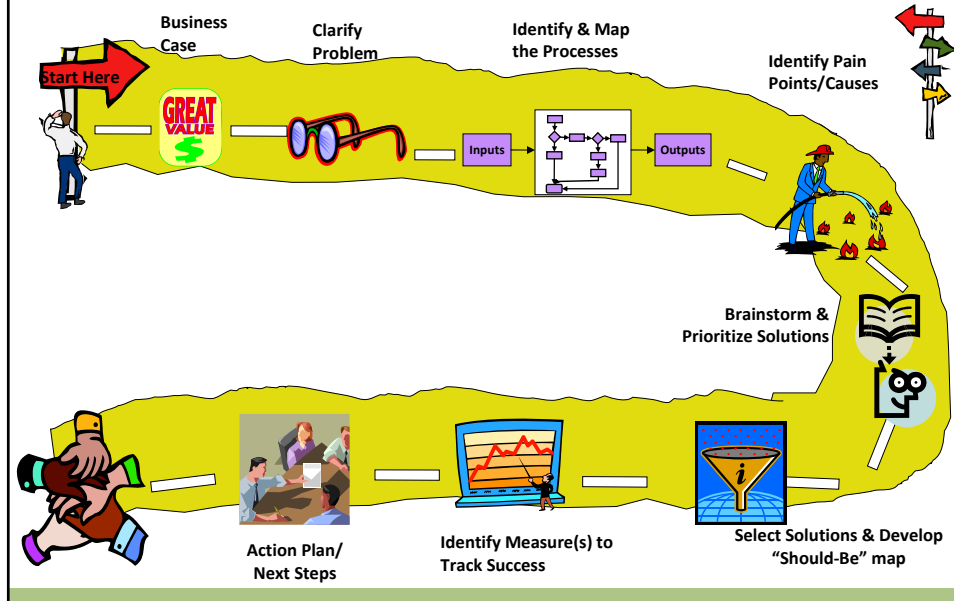
Cytology and BRL staff perceptions

- ❖ Lack of awareness of customer perception
- ❖ “Our turn around times are good, we can’t get any better”
- ❖ “Staff can’t work any harder”
- ❖ “It’s all been done before – you won’t find anything new that will improve TAT”
- ❖ Disbelief/denial that competitors could achieve shorter TATs

**“If the competition can do it,
we can do it”**

III. BH Case Study (cont.)

- Process Improvement: Lean Kaizen Event Roadmap -



III. BH Case Study (cont.)

Our "A-HA!" Moment (SIPOC Activities)

- ❖ Listen to the voice of the customer
- ❖ Customer perceived TAT from date of collection

Supplier	Input	Process	Output	Customer	Needs	Requirements	Measurements
Physician	PAP	[Blue Box]	Results	Physician	Results	Accurate Results	TAT
Patient	Specimen	[Blue Box]				Fast Results	
		[Yellow Diamond]					
		[Blue Box]					
		[Blue Box]					
		[Blue Box]					

III. BH Case Study (cont.)

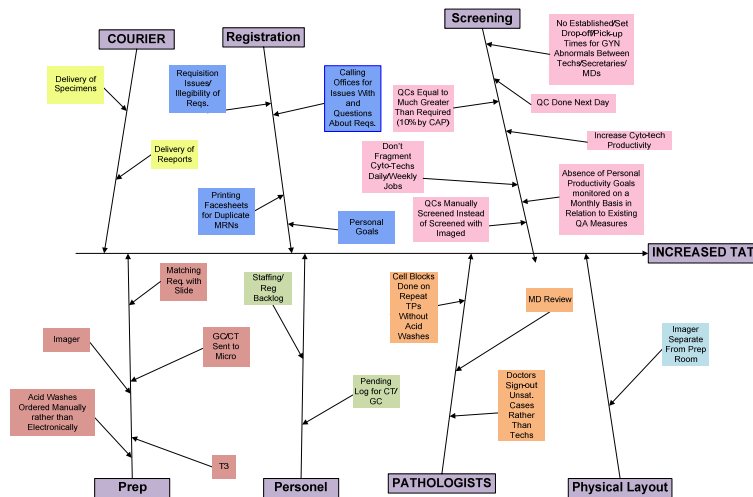
Mapping the Process

- ❖ Realization of **all** processes involved in turn around time
- ❖ “Front End” processes impact on Pap TAT
- ❖ Bottlenecks at registration, accessioning, and transfer of slides to cytotechnologists
- ❖ Highlighted time spent waiting for “my part” of the process

“Why are we operating this way?”

III. BH Case Study (cont.)

- Cause and Effect -



III. BH Case Study (cont.)

Top 10 List (Identified Issues)

1. Resolving problems owned by another department (e.g., duplicate medical record numbers)
2. Maintaining a paper trail of final reports
3. Limited cross training
4. Lack of communication between work areas: working in "silos"
5. Registration process long and cumbersome
6. Halting the process to investigate/resolve problems at front end
7. Greater # of QCs performed than required
8. Performance of QCs designated to 2 positions
9. Paps registered after processing - missing slides difficult to track
10. Absence of personal productivity goals and or active monthly monitoring

III. BH Case Study (cont.) SOLUTIONS

Solution Criteria Matrix

- ❖ Complexity vs. Time
- ❖ Impact to outcome
- ❖ Actions implementable within 60-90 day?

III. BH Case Study (cont.)

Brainstorming solutions and enacting changes...

- ❖ Tried Changes Weekly - ***not*** on a Monday or Friday
- ❖ Communicated changes
- ❖ Encouraged staff input/"tweaking"
- ❖ Remained flexible

COMMUNICATION



III. BH Case Study (cont.)

... and more communication!

- ❖ Team members with co workers
 - ❖ Input
 - ❖ Changes
- ❖ Facilitator with process Owner
 - ❖ Progress update
 - ❖ Support/Recognition
- ❖ Team with Champion/Sponsor
 - ❖ Roadblocks
 - ❖ Resources

III. BH Case Study (cont.)

Strategies In Action

- ❖ Reduced bottlenecks: Sent requisitions with problems (missing or incomplete info, illegible) to one person for follow up to eliminate backups/batching
- ❖ Reorganized staffing – adjusted hours- to register bulk of paps on D.O.C. (2nd shift)
- ❖ Eliminated investigation of duplicate medical record numbers – send to Med Rec for follow up
- ❖ Cross trained Registration/ Prep Staff
- ❖ Reduced the QC % volume by 7%

III. BH Case Study (cont.)

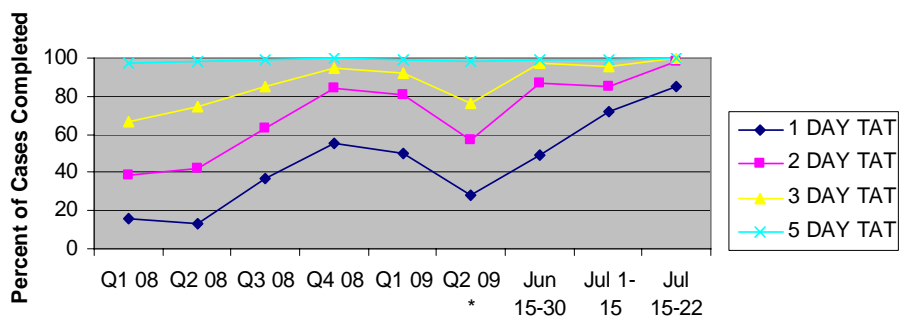
Strategies In Action (cont.)

- ❖ Trained all eligible cytotechs to perform QC
- ❖ Increased to 2 times daily the available QC slides put up for review
- ❖ Utilized post-its for reqs with illegible history
- ❖ Utilized technology: eliminated printing and filing of hard copies of the final report
- ❖ Implemented personal productivity monitors
- ❖ Post weekly turn around times

III. BH Case Study (cont.)

Results

PAP TAT - Percent Completion From Accession in Lab to Result Available



III. BH Case Study (cont.)

Results (cont.)

- ❖ **3 Day TAT:**
 - ❖ 67% to 100% PAPS completed in 3 Days
 - ❖ 33% Improvement

- ❖ **2 Day TAT:**
 - ❖ 39% to 98% of PAPS completed in 2 Days
 - ❖ 59% improvement

- ❖ **1 Day TAT:**
 - ❖ 16% to 85% of PAPS completed in 1 Day
 - ❖ 69% improvement

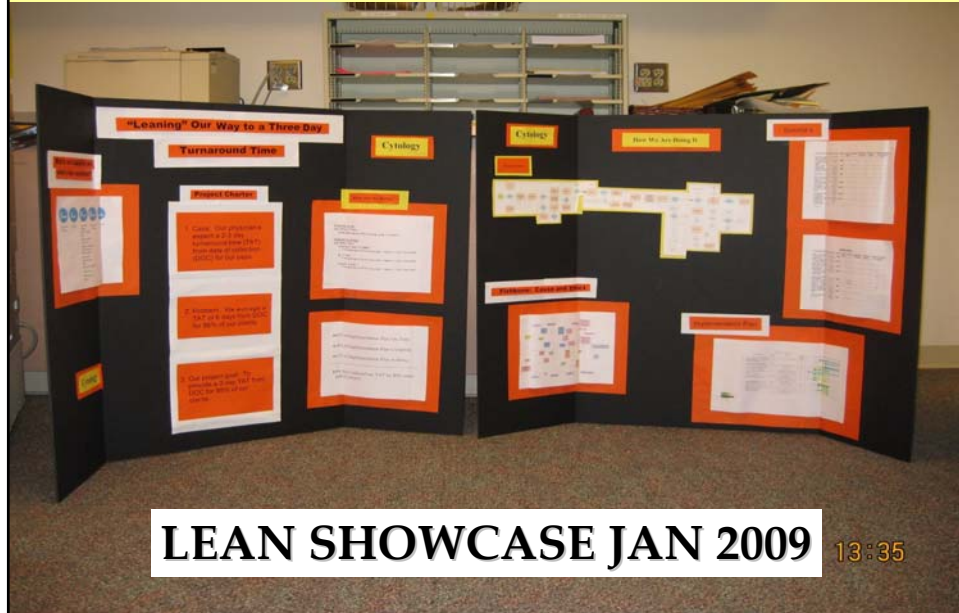
III. BH Case Study (cont.)

Results (cont.)

- ❖ **Ancillary Results**
 - ❖ Improved HPV TAT
 - ❖ Improved Tracking
 - ❖ Expense Savings

- ❖ **“Soft” Results**
 - ❖ Teamwork Across Dept (incl Pathologists)
 - ❖ Celebration and Pride (improved employee morale)
 - ❖ Recognition
 - ❖ BRL and System Leader
 - ❖ Direct Client Feedback
 - ❖ Learned a structured approach to solving problems

RECOGNITION



VI. Lessons Learned

**“It’s Kind of Fun to do
the Impossible”**

- Walt Disney -

IV. Lessons Learned

What We Did Well

- ❖ Employees were *really* engaged (and led project)
- ❖ Resources were allotted for project
- ❖ Changes were trialed before implementing
- ❖ Communication board posted for ALL staff to review and provide input throughout project
- ❖ Sponsor/champions were engaged and supportive
- ❖ Celebrated success / even baby steps

IV. Lessons Learned (cont.)

Keys to Success

- ❖ Lots of “small potatoes” can really impact the outcome
- ❖ Keep in tune with the voice of the customer
- ❖ Just because “we always did it that way” doesn’t mean we have to continue
- ❖ Relinquishing control and allowing staff to be engaged benefits everyone!
- ❖ “Finding the time” for meetings actually results in “saved time”
- ❖ Limit Scope and set realistic goals
- ❖ Have fun!

V. Next Steps

V. Next Steps

- *Cytology* -

1. Continue to monitor performance 'Report Card'
2. Implement enhanced technologies
3. Incorporate Lean in Cyto Lab relocation (Winter 2009)
4. Encourage/stress teamwork and involvement
5. Ensure consistency of processes and practices

V. Next Steps

- *Lean* -

1. Make Lean part of culture
2. "Keep Lean Alive" Facilitator Skills Training
3. Be "front-runner" for organization
4. Create additional Performance Improvement Team positions
5. Gain additional education/training AND attend national conferences (ala LabConFab!)

Bring on the next challenge!



Questions



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