How we blend LEAN and Career Ladders in the Lab to Identify and Develop Future Leaders

Atlantic Health System – Background

4 Hospitals – 1310 Beds
• Morristown Medical Center
• Overlook Medical Center
• Newton Medical Center
• Goryeb Children’s Hospital

Vital Statistics
• 11,348 Employees
• 2,852 Physicians
• 252 Medical Residents
• 1,310 licensed beds
• 70,034 Admissions
• 6,794 births
• 193,053 ED visits
• 803,458 OP visits
AHS + Hunterdon + Chilton Service Areas

AHS Laboratory Statistics

- Over 4.5 million tests performed annually
- Consolidated Services include: Immunology, Molecular, Cytology, Immunohistochemistry, and Client Services
- Increase in outreach test volume in 2012
  - 57% increase in revenue
  - Over $30 million YTD
Environmental Forces and Assumptions

- Health Care Reform
  - Quality/Outcomes as driver of reimbursement
  - Decreased payment
  - Moving away from fee for service to bundled payments
  - MD Alignment: ACO’s, Physician Employment
  - Impact of EHR and Connectivity
- New Jersey
  - Hospital Closures and Acquisitions
  - New centers geared towards Outpatient
  - Physician alignment
- Competition for Anatomic Pathology by Physicians owning and operating own labs
- Impact of environment changes on volume, expense and role/structure of the lab.
  - Volume increases – Baby Boomers
  - Inpatient Test Utilization
  - Capitalize on outpatients.
- Pressure for infection control and increase in lab roles
- Continued advances in technology and automation options including molecular testing, personalized medicine and demands on staff.

Lab Strategic Initiatives

- Develop Outreach
- Staff Development and Engagement
- Blood Management
- Facilities Consolidation
- Informatics and Technology
- Test Utilization
- Personalized Medicine

<table>
<thead>
<tr>
<th>2011 Engagement Scores</th>
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<tbody>
<tr>
<td>MMC Lab</td>
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<td>OMC Lab</td>
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<td>NMC Lab</td>
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<td>Lab Overall</td>
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<td>AHS Overall</td>
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Staff Engagement

- Focus groups as a follow up to Engagement surveys
- Quarterly Town meetings
- Lab Newsletters
- PACT – Career Ladder
- LEAN projects-inter and intradepartmental

Sample Lab LEAN projects since 2002

- Microbiology cost per test
- Reference lab
- Histology turnaround time
- Pathology-slide/block filing
- Blood Bank automation
- Courier/Specimen Transport
- Implementation of Positive Patient ID
- Green Lean
- Outpatient phlebotomy
- Newton lab pre-analytic processes
- Newton AP lab
Example: Newton Medical Center

- Small, community based hospital in Sussex County
- 148 licensed beds
- 6,520 admissions
- 138,417 outpatient visits
- Merged with Atlantic Health April 2011

LEAN/Career Ladder and Newton

- Keys
  - Capitalize on LEAN Experience at MMC and OMC
  - Career Ladder Program emphasizes LEAN
  - Benefit Multiple sites
  - Crash Course in Current Culture
  - Peer to Peer Evaluation
  - Financial Goals ($750,000 removed from NMC Budget in 18 months)
Pre-Merger Environment

- Staff not involved in decision making
- Poor communication, worked in silos
- Inefficient operations
- Reactive vs. Proactive environment
- No prior experience with LEAN

Staff Feedback

- Need more people
- Need more space
- Too much work

Ideal situation to engage employees in LEAN
Newton - Where we started

- Pre-analytic process
  - Phlebotomy
  - Patient Service Centers
  - Couriers
  - Add ons
  - Manual processes
  - Job responsibilities
  - Who did what, when and how

Challenges

- Lack of IT support
- Lack of Process improvement tools (LEAN, Six Sigma)
- Inaccurate reports/statistics
- Pushback from Lab Management
- Lack of IT equipment at patient service centers
Changes accomplished within 18 Months

- Phlebotomy
  - Defining Duties, Hours of Operation
- Office Staff
  - Redefine staff to clinical lab assistants
  - Increase in duties
- IT- Standardization
  - Build, Training, Implementation Go-Live in 6 months
  - Better monitor for volumes, revenue and productivity
  - Move to consolidated testing
  - Specimen Tracking
  - Phone calls to central location
- $750,000 removed from Budget
- Decreased TAT by 25%

Pre LEAN Lab Layout

- Poor lab design/floorplan
- Wall separated Chemistry from Hematology
- Unorganized supplies
- Excess inventory
Current Newton Lab Volume

NMC Lab Volume

- Corelab: 64%
- AP: 9%
- AP Contract: 9%
- Micro: 8%
- Cyto: 6%
- Trans Serv: 4%
- Specials: 3%
- 7014 Microbiology accounts for 8% of the Total Volume

Volume by Specimen Type

- Urine: 30%
- Blood: 22%
- MRSA: 28%

Source: Newton Annualized Micro Testing, Jan-Jun 2011
24/7 Microbiology
- Read cultures on three shifts
- Technical expertise available around the clock
- Blood cultures stay at Newton-monitor 24/7
- Positive bottles are sent to Morristown to be worked up after gram stain result is reported
- Microscope equipped with camera at Newton allows Morristown to view gram stains remotely if needed
- Reduce costs
- Decrease turn around time by at least a day for most cultures
- Move to rapid molecular testing
- Standardize and improve collection procedures
  - Urine move to closed system with preservative
  - E-swab (flocked swab with multipurpose media
  - Urinalysis with reflex to culture

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  - Operational Goals – Decreased TAT
Atlantic Health Laboratory PACT Program

What is PACT?
- Professional Advancement Career Track
- Voluntary professional development program, to:
  - promote professional advancement of lab personnel
  - support the professional goals of the laboratory
  - enhance laboratory standards
  - develop leadership skills of lab personnel
- Recognition of personnel who contribute to laboratory excellence
- Meet objectives “above and beyond” the normal day to day job responsibilities.
- Based on the RN PACT Program
- Laboratory PACT implemented in 2007

Laboratory PACT Program – Eligibility/Compensation

Who is eligible?
- Full time or Part Time (22.5 hrs)
- Professional Staff: CLS, MLS, MLT, HT, CT
- Supervisory staff: Coordinators, Lead Techs
- Clinical Lab Assistants

Individual Criteria:
- Acceptable Performance Appraisal
- Employee is not on a Performance Improvement Plan or Written Warning
- Employee consistently arrives to work on time (meets AH standards for tardiness)
- Employee meets the AH Attendance requirements
Laboratory PACT Program – Eligibility/Compensation

Compensation Levels:

- **Professional and Supervisory Staff**
  - Three Levels on the PACT Ladder
    - Progressive levels of difficulty
    - Supervisory Staff is not eligible for Level 1
  - Bonus at the end of the year for level completed
    - $1,000 - $1,500 - $2,000

- **Clinical Lab Assistants**
  - One Level only = $750

Laboratory PACT Program – Criteria

- **PROFESSIONALISM** - Act as a resource demonstrating our knowledge, expertise, and skills in clinical laboratory science through interactions with patients, physicians, and other caregivers to affect care.
- **RESPECT** - Recognize that everyone has or makes a contribution and we will strive to develop a culture of honesty, courtesy, and integrity
- **IN卷VOLMENT** - Work together by sharing responsibility, empowering staff, and partnering with others on the patient care team
- **DIGNITY** - Conduct ourselves in a professional, supportive, and respectful manner; focusing on quality and going beyond accepted standards exceeding our customers’ needs.
- **EXCELLENCE** - Exceed expectations in technical excellence by delivering accurate, timely, value driven diagnostic, theranostic, and prognostic laboratory information and services.
Laboratory PACT Program – Process

- Submit Letter of Intent
- 27 different objectives in each Level
- Five Categories
- Must complete total of 10 objectives
- At least one from each category
- May complete an objective in a higher category for lower Level
- One year to meet objectives
- Policy, Criteria, Timeline, Forms – available on AH Lab Intranet site.

Examples: Professionalism

- Research, analyze and recommend one cost containment project which is implemented during the current PACT period
- Assist coordinator in revising 1 policy, procedure, or section based competency
- Participate in a Performance Improvement project or formal Lean Project
- Participate in the implementation of a new procedure, instrument, equipment, LIS upgrade
Lean Project #: 435
Project Title: Reducing Duplicate Lab Orders on Jefferson 1 N&S and Franklin A
Project Start Date: October 2011
Expected Completion Date: January 2012
Sponsor: Trish O’Keefe
Lean Proj. Lead: Michelle Downing, MPA, RN-BC
Black Belt: Wendy Rothenberg
Team Members:
• Candice Patton (LT)
• Bethany White (LT)
• Jeanne Giaquinto (LT)
• Janet Walker (LT)
• Marie Daly (LT)
• Keith Moureaux (LT)
• Debbie Chin
• Steve Green
• Barbara Markt
• Lauren Screnci

Project Objective: To reduce the number of duplicate nurse collect lab orders on the units. To develop a process that is replicable to all units and supports the future adoption of CPOM.

Scope:
IN: All nursing collect lab orders on J1 N&S and FA, 24x7.
OUT: All lab collect orders.

Key Performance Indicator (kpi) To Be Measured: Number of duplicate orders per day

KPI Comparison:

<table>
<thead>
<tr>
<th>KPI</th>
<th>KPI Baseline</th>
<th>KPI Goal</th>
<th>KPI After</th>
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</thead>
<tbody>
<tr>
<td>Number of duplicate orders per day</td>
<td>21</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

We are very happy to report that we exceeded our goal, and have improved our process by about 90%. We currently are in the process of implementing the pilot to other nursing units.
Examples: Respect

- Coordinate one activity within your lab section to improve morale
- Actively participate on a formal committee for no less than 6-9 months, must attend 80% of the meetings and complete one project.
- Use a collaborative approach to a lab-wide issue or regarding other hospital departments and lab or other sites.
- Assume a leadership role in lab section for a minimum of 5 occurrences.

Examples: Committee Participation
Examples: Improve Morale

Examples: Improve Morale
Examples: Involvement

- Present on unit in-service, journal article, or newsletter, to the lab staff inclusive of all shifts
- Perform staff training within your lab section
- Be responsible for lab section Quality/Safety monitoring
- Evaluate, investigate and provide follow up to at least 5 lab services "incident reports"

Examples: Unit Inservice

The Blood Storage Lesion: Fact or Fiction
When: Thursday, September 15, 2011 8:00 am, 11:00 am, 3:30pm
Where: Lab Conference Room
Presented by: Vicki Wille, MT (ASCP) SE
All are invited to attend
Light Refreshments will be served
Examples: Poster

Examples: Dignity

- Demonstrate customer service by achievement of 2 of the following in one year: ACE or other employee award, written acknowledgement from customer or mention in Press Ganey
- Identify, research and present an opportunity for improvement of a customer satisfaction problem
- Participate in community projects that promotes the laboratory, blood donor service, AHS or healthcare for a minimum of 4 hours
- Show commitment to lab success and foster positive interdepartmental relationships by participating in a multidisciplinary committee or acting as a liaison between departments to foster solutions.
Examples: Recognition

Examples: Blood Drive
Examples: Excellence

- Attain 8 Continuing Education Contact hours
- Participate in teaching in the AHS School of Medical Laboratory Science, Phlebotomy or Histology Programs
- Participate in a minimum of 1 formal AHS development course
- Be enrolled in a college course and take at least 3 credits, or attain a AA, or BS degree during PACT year
- Attain or maintain current Packaging and Shipping Certification

Examples: Participation in MLS School

Key to Our SUCCESS
Immunology Instructor

In Honor of Your Outstanding Instruction, Dedication and Patience, We Gladly Present
Cindy Warner

With this Certificate of Recognition for Excellence in Microbiology.

From the Class of 2011
July 20, 2011
Examples: MLS School

PACT - Timeline

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DUE BY</th>
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<tbody>
<tr>
<td>Statement of Intent to Lab Mgr.</td>
<td>Feb 1, 2013</td>
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<tr>
<td>Approval of Statement of Intent</td>
<td>Feb 27, 2013</td>
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<tr>
<td>Mid-Year Review Luncheon</td>
<td>May 2013</td>
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<tr>
<td>Portfolio Submitted to Mgr.</td>
<td>Oct 1, 2013</td>
</tr>
<tr>
<td>AHS Lab PACT Review Committee</td>
<td>Oct 2 – 31, 2013</td>
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<tr>
<td>Letters for resubmission or acceptance</td>
<td>2 weeks after notification</td>
</tr>
<tr>
<td>Awards Luncheon/Ceremony</td>
<td>November, 2013</td>
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Career Ladder Keys

- Formalize Criteria but be Flexible – Criteria, Eligibility
  - Questions regarding criteria can either be sent to the Manager, or in some cases the management group.
  - "If there's a question, Ask"
  - Make Forms and Set Rules/Requirements

- Incentive must be great enough to encourage:
  - Above and Beyond Current Duties
  - Use as a way to identify and mentor future leaders, succession planning
  - Encourage Multi-disciplinary projects
  - Break out of the Lab Tech Black Box

Questions?