

Innovative Ways to Use the LIS and Expert Rules to Help the Hospital Achieve Quality Measures in Stroke and Cardiology Services

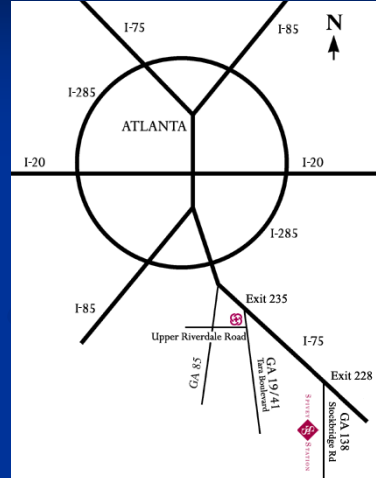
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Objectives

- Improve Operational Effectiveness
- Promote Core Measure Compliance
- Drive Appropriate Utilization of Laboratory Tests
- Improve Patient Outcomes



Who We Are



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Hospital Statistics

- 2,257 Employees
- >600 Physicians & Mid Levels on staff
- 331 licensed beds
- Accredited Chest Pain Center
- Stroke Center Accreditation
- Core Services
 - Acute, Critical Care, Women's Life Center, Acute Rehab,
 - Cardiac Rehab, Oncology Services, Outpatient Services
- Other Services:
 - Surgery Center
 - Long Term Acute Care Hospital
 - High Volume Emergency Department
 - 96 Acre Outpatient Diagnostic Center with Ambulatory Surgery



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Laboratory Statistics



- 73 FTEs
- 1.4 Million billable tests annually
- Integration of Horizon Lab, Horizon Blood Bank & Mobile Care Phlebotomy, Horizon Web Outreach & Horizon Anatomic Pathology
- Beta site for Horizon Anatomic Pathology

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Optimizing LIS Features



- Robust, Open Architecture
- Autovalidation
- Achieved Benchmark Turn-Around-Times
- Powerful Expert Rules
- Automated Tissue Temp Tracking
- Paperless Transfusion Reaction Work-up
- Inventory Tracking
- Patient Safety
- Standardized Process - Increased Efficiency

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Optimizing Automation, Instrumentation & Interfaces

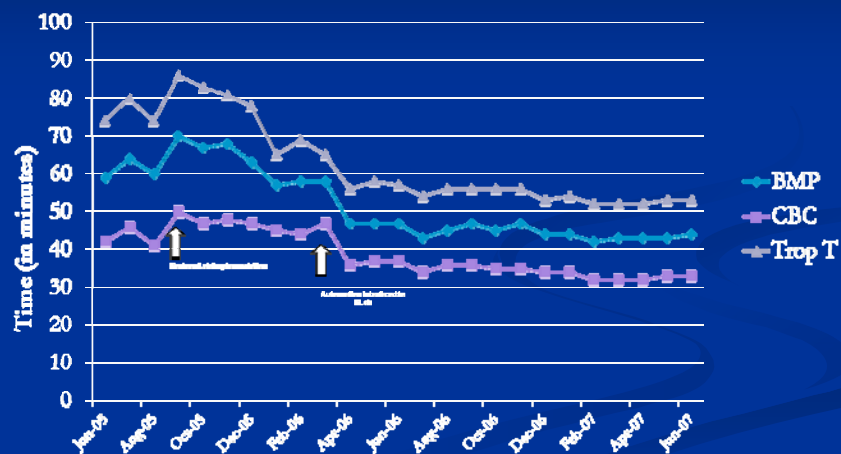


- Automate the Core Lab
- Combine Instrument Platforms when Possible
- Data Innovations for Instrument Interfaces

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Results

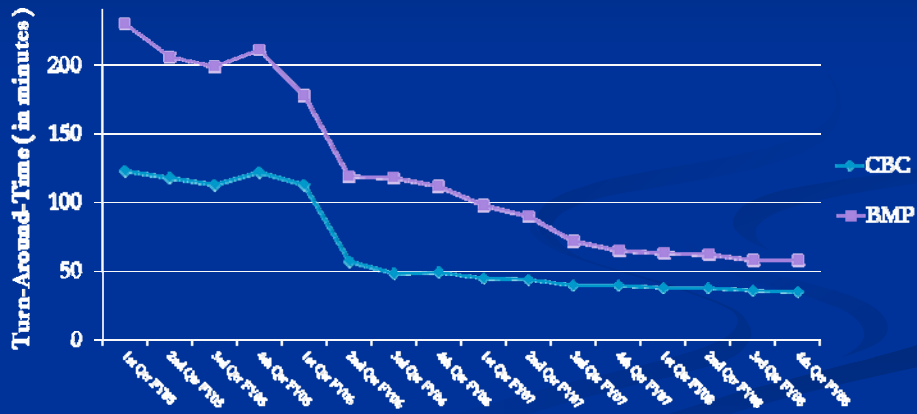
EMERGENCY DEPARTMENT ORDER TO RESULT TURN-AROUND-TIMES



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Standardized Processes

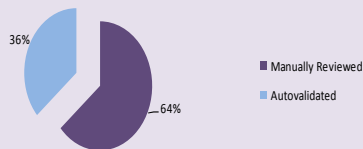
ROUTINE TURN-AROUND-TIMES ORDER TO RESULT



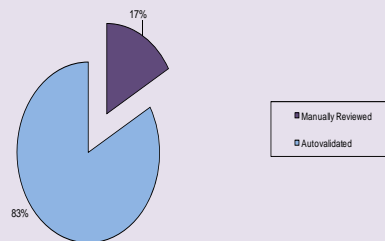
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Autovalidation

CBC Results Autovalidated

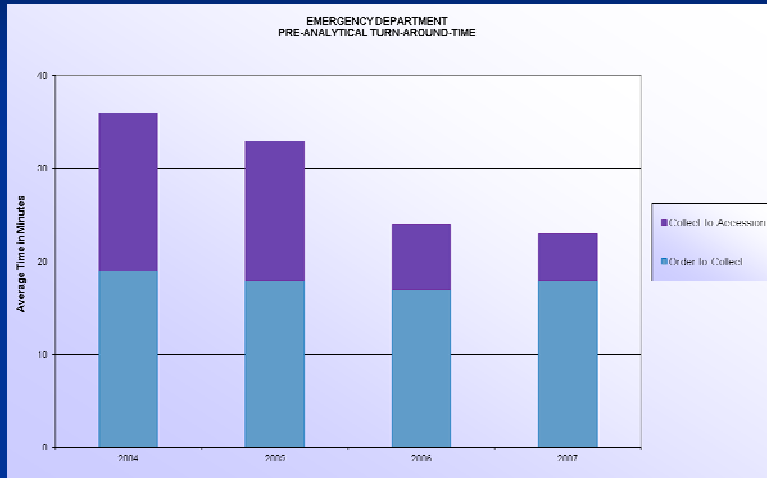


Basic Metabolic Panel Results Autovalidated



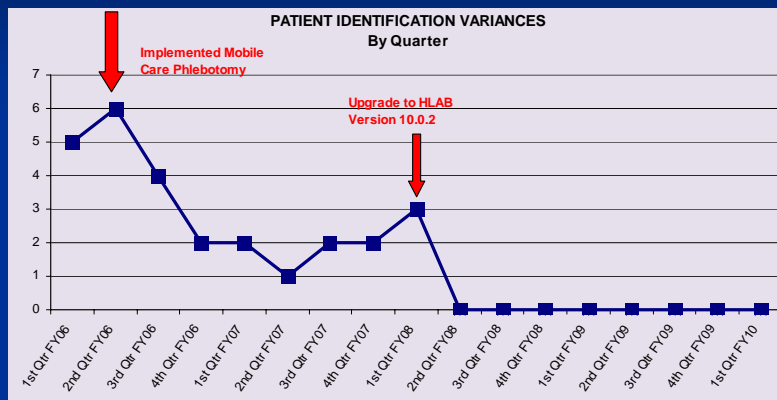
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Pre-analytical Turn-Around-Time



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Patient Safety



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Measurable Gains with Mobile Care Phlebotomy



- Decreased patient identification errors
- Decreased Phlebotomy staff by 39%
- Standardized and improved pre-analytical turn-around-time
- Improved employee satisfaction
- Improved patient satisfaction

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What's Next???



Joint Commission National Patient Safety Goals



- Barcode Patient Identification for Specimen Collection
- <17% Hospitals Have Implemented Barcode ID Solution*

*2008 Health Data Management Webinar Response

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Joint Commission Stroke & Chest Pain Center Accreditations

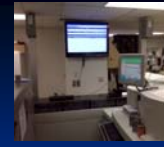


- Rapid Response Team
- Order Sets with Aggressive TATs
- Use of Expert Rules & Result Comments
(Positive Troponin reflex to Lipid* if no lipid result within prior 7 days)

*Level C recommendation from American College of Cardiology

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Challenging Economic Times



- Reduce Length of Stay (LOS)
 - Case Management Report Tool
- CMS Audit of Inpatient Utilization
 - Advocate the Ordering of Analytes Rather than Panels
 - Audit Serial Orders
 - Expanded List of Tests Only Approved for Once per LOS

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Challenging Economic Times



- Discontinue Printing IRRs
- Increase Autoverification/Excess Capacity
- Review Critical Values with Medical Staff
- Auto-Cancel Unnecessary Tests (Urine Cultures on Negative Urinalysis)
- Real-time Pending Lists on Large Screens

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Lab Utilization



- Hepatitis Acute Profile – once per length of stay
- HIV – once per length of stay
- HgbA1C – once per length of stay
- Lipid Panel – once per length of stay
- CMP – once per day
- Manual Differential – once per day
- Hepatic Profile – once per day
- Hepatic Profile – auto canceled if a CMP has already been ordered in the past 24 hours. D Bili will be ordered instead. Rationale: all tests in hepatic profile except for direct bili are included in CMP
- pro BNP – no more than twice per LOS

Future Plans



- Expand Outreach Business utilizing Horizon Outreach for Lab
- Phase II development partnership with McKesson for Horizon Anatomic Pathology
- Expand Autovalidation
- Electronic Crossmatches
- TS Instrument Interface
- ISBT
- Meds Manager Integration

Lessons Learned



What We Did Well

- Mapping of all processes
- Willingness to admit what wasn't working
- Willingness to embrace new processes
- Thinking beyond the Lab walls
- Physician support
- Participation in multidisciplinary committees

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Lessons Learned



What We Could Have Done Better

- Laboratory Project Manager for implementation
- Standardization of processes for training
- Train, Train, Train
- Communicate, Communicate, Communicate

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Questions?

