

Creating Laboratory Value for a Competitive Advantage

LEO SERRANO

FIRSTPATH LABORATORY SERVICES



Learning objectives

After this webinar, you will be able to:

- Illustrate how clinical laboratories can use Clinical Lab 2.0 as a path to adding value
- Describe the need for clinical laboratories to expand services outside of usual practice
- Identify opportunities in their institutions where integrated care can be applied
- List the ways in which a lab can apply the Clinical Lab 2.0 philosophy to yield cost savings and improved patient care

Introduction

In today's healthcare environment, more is being done to keep patients out of the hospital.

- Patients are discharged to Long Term Acute Care hospitals (LTACs) and are much sicker than in past years.
- Taking a broader view of the value of Laboratory Medicine in terms of value added services outside of the usual practices is critical.
- By providing mobile bedside laboratory testing by licensed laboratory professionals, FirstPath is extending laboratory quality testing to the patients bedside at a significant overall savings.

Clinical Laboratory 2.0

Changing environment

- There is uncertainty around how new legislation will affect the dynamics of the healthcare industry, and uncertainty for patients on how they will continue to access care.
- The challenge for medical laboratories is to plan for this inevitable reality by beginning the transition from fee-for-service to value-based care models.
- Laboratories need to move away from being a transactional to one where they position themselves as health information companies that can add value across the healthcare ecosystem.

Clinical Laboratory 2.0

A whole new business model

- Laboratories can help lead the transition from fee-for-service to value-based care models and leverage diagnostic data they produce in new and exciting ways.
- **The past:** labs were focused on patient service centers, the cost per unit, their turnaround time, their contribution margins, and their test menus.
- **Today:** labs should focus on cost per care episode or cost per population, moving from volume to value.

Clinical Laboratory 2.0

Test utilization

- Physicians don't follow up on roughly 6 out of 10 outpatient test results - tests are overused or underused about 30 percent of the time
- Tests are misused between 5% – 50% of the time, depending on the disease
- Data possessed by laboratories presents opportunities to assist with proper test ordering and follow-up
 - Imagine being able to document by zip code, the Hemoglobin A1c outliers for a given population
 - Imagine being able to document by zip code, the patients with EARLY ACUTE kidney disease for a given population

Clinical Laboratory 2.0

The future of the laboratory

- Just imagine...
 - Being able to take laboratory diagnostics to the patient, either in their home, LTAC, or other non-acute care setting
 - Combining these concepts with comprehensive data analysis using discrete data elements within your LIS and utilization/outcomes software
 - Using this data to produce true value added information that can be used by clinicians, healthcare systems, insurers and others interested in population health
- Using an Acute Mobile Point of Care model, FirstPath Laboratory Services is addressing a need and reducing total cost of care.

Acute POC Mobile Services at FirstPath



Acute POC Mobile Services (AMS)

THE CONCEPT

Current situation

- Nursing Homes and Rehabilitation Hospitals that are Part A facilities are getting sicker patients and are reimbursed on a fixed payment.
- When patients have an acute episode, they must be transferred to an acute care facility Emergency Department for evaluation and care.
- The Part A facility is financially responsible for the episode of care costing a facility thousands of dollars.
- **AMS alone or in combination with Telemedicine can markedly reduce this expense and provide ED quality of care for the patient without the cost.**

Acute POC Mobile (AMS)

HOW IT WORKS

With a Telemedicine provider:

- FirstPath Lab partners with a Telemedicine Services provider to provide a comprehensive patient evaluation
- This Service has a telemedicine service with 8 Board Certified specialists
- Diagnostic modalities included EKG, Ultra Sound, Mobile Imaging, all connecting to the specialists electronically
 - Laboratory was missing making it not a complete service
- FirstPath provides the laboratory services and integrates seamlessly

Acute POC Mobile Services (AMS)

HOW IT WORKS

Without a Telemedicine provider:

- Medical Oversight and Intervention provided by Facility Private physicians
 - In many Long Term Acute Care facilities, there are a variety of specialties available and they assume medical oversight
- FirstPath Laboratories provides the laboratory component at the bedside
- For stat tests not available for POC, the blood is collected and tested at the main laboratory by the AMS tech immediately after the POC testing is done
 - TAT is 2 hours after leaving the facility

Acute POC Mobile Services (AMS)

THE DETAILS

Overview

- 8 Emergency Protocols using National Guidelines.
- Each protocol has step by step directions, diagnostic tests and guides
- Lab uses State Licensed Laboratory Personnel to provide Point of Care Laboratory Testing at the facility on an emergency mobile basis
- i-Stat analyzers are used with 6 different cartridges available



Acute POC Mobile Services (AMS)

THE DETAILS

Operational description

1. Facility nurse, in conjunction with the Clinician, decide if the patient is a candidate for AMS POC testing
 - If a candidate, the facility initiates the call
 - Call goes to a cellphone as well as the AMS Lap Top
 - Facility leaves a voice mail message
 - Message contains – Facility, Nurse, telephone # of nurse, Patient Name, Room # and tests being requested or Protocol being utilized.
2. The AMS tech on call accepts the call, immediately calls the nurse and repeats the instructions on the voicemail (The 2 hour clock starts)
3. The AMS takes the bugout bag (with refrigerated cartridges) and departs for the facility

Acute POC Mobile Services (AMS)

THE DETAILS

Operational description continued

4. Upon arrival at the facility, AMS tech proceeds to the Nursing Station.
5. AMS tech sets up equipment
 - Appropriate Cartridges are removed from cooler and allowed to come to temperature
6. Nurse accompanies AMS tech to patient room and verifies patient ID
 - Two unique identifiers are used by both the tech and the Nurse.
7. AMS tech collects a venipuncture specimen according to protocol
 - Arterial specimens for ABGs are collected by Respiratory Therapists and tested by AMS
8. Test is performed using i-Stat analyzer
 - Results entered into lap top and report printed on site and physician is called
9. Results and demographic data sent to LIS via VPN from lap top

Acute POC Mobile Services (AMS)

PROTOCOL WITH TESTS

Acute Chest Pain:	Acute Heart Failure	Acute COPD/SOB	Acute Renal Failure	Acute Bleeding	Sepsis	Urinary Tract Infection	Falls
<ul style="list-style-type: none">• Chem 8+• cTnl <u>OR</u> CKMB	<ul style="list-style-type: none">• Chem 8+• cTnl <u>OR</u> CKMB• BNP	<ul style="list-style-type: none">• Chem 8+• CG3+ (Blood Gases)• BNP• cTnl	<ul style="list-style-type: none">• Chem 8+• BNP	<ul style="list-style-type: none">• EC4+• PT/INR	<ul style="list-style-type: none">• Chem 8+• CG4 + (Blood gases + Lactate)	<ul style="list-style-type: none">• Chem 8+• CG4 + (Blood gases + Lactate)	<ul style="list-style-type: none">• Chem 8+• PT/INR

Acute POC Mobile Services (AMS)

FINANCIAL CONSIDERATIONS

What are the costs?

- An ED visit for an acute LTAC event can run between \$5000 to \$15,000 (including Ambulance, ED charge, MD, Diagnostics, etc.)
 - If the patient is admitted, the costs immediately double
- AMS service charge is <\$500 per event.
 - At one of our facilities, they average between 5 to 8 patients per week having an acute LTAC event

Acute POC Mobile Services (AMS)

POINTS TO CONSIDER

Final thoughts

- Due to costs and other issues, we bill facility, not insurance
- This is often considered a non-covered service
- Cost of cartridges is significantly higher than in-lab testing
- Depending on State Regulations, there may be additional requirements
- Accrediting agencies have mechanisms for Mobile Point of Care evaluation
- This is a Niche market - it is offered as a supplementary service in addition to Main Laboratory Testing services

Change stories for consider – Acute Mobile Service

Business Overview

- Rehab Hospitals, Acute Care units in Nursing homes and Home Health Agencies needed Acute Lab Services on Site in short period of time.
- No one in area would provide the service and patients were being sent to EDs and Hospitals for admission-costs were borne by the facilities who were paid a fixed fee per day.

Business Challenges

1. Establishing an Acute Care Section in facility (Cardio-Pulmonary).
2. Obtaining competent staff available on as needed basis.
3. Currently offered to Part A patients but need to develop mechanism for Part B patients.

How the business challenge was addressed?

- FPL created a division staffed by laboratory professionals who provide limited emergency POCT at the facility with results within 2 hours of call.
- Done in collaboration with a Telemedicine provider as well as a standalone service according to needs of the facility.

Stakeholder Impact

- Payer
 - Reduction in expenses of ~\$6500 per case
- Clinician
 - Results in 2 hours from call.
 - Standardized national protocols
- Administration
 - Ease of use, improved expense control
- Patient
 - Improved quality of care, speed of service

Business Outcome (specific KPI, \$\$ etc.)

- Reduction of Re-Admission rates
 - 28% reduction without labs
 - 62% reduction after addition of lab services
- Reduction of ED visits and associated costs
 - ED visit w/o admission (\$6900 average)
 - ED visit w/ observation (\$9600 average)
 - AMS visit (\$180 to \$400 depending on protocol used.
- Improved patient care on site at facility

Key learnings (focus on change management)

- Look at opportunities with unbiased eyes-
 - Be creative in your thinking.
- Select your audience and listen to their needs.
- Evaluate the various reimbursement models and if necessary work with insurers to collaborate.
- Work with the various stakeholders –
 - Physicians
 - Facilities
 - Payers

Questions?



Presented by:

Leo Serrano

FirstPath Laboratory Services

Pompano Beach, FL

lserrano@firstpathlab.com

THE INFORMATION IN THIS PRESENTATION IS PROVIDED FOR EDUCATIONAL PURPOSES ONLY AND IS NOT LEGAL ADVICE. IT IS INTENDED TO HIGHLIGHT LAWS YOU ARE LIKELY TO ENCOUNTER, BUT IS NOT A COMPREHENSIVE REVIEW. IF YOU HAVE QUESTIONS OR CONCERNS ABOUT A PARTICULAR INSTANCE OR WHETHER A LAW APPLIES, YOU SHOULD CONSIDER CONTACTING YOUR ATTORNEY.