

NAVIGATING LABORATORY CONSOLIDATION AT A REGIONAL HEALTH SYSTEM

Case Study | Los Robles Health System

KEY FIGURES

Date Established

→ November 12, 1968

Number of Beds

→ 382

Number of Specialties

→ 22

Inpatient Visits

→ 7,100

Outpatient Visits

→ 15,854

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250 Best Hospitals in 2023 by
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OVERVIEW

Los Robles Health System (LRHS) is dedicated to serving patients in Ventura County, Los Angeles County, and the Greater Conejo Valley area in southern California. The laboratory supports a large clinical staff at multiple hospitals and processes a high volume of samples, which had recently increased significantly due to laboratory consolidation. While sample volume increased, the laboratory was allotted less space for microbiology and has faced staffing shortages.

The team was also bringing in a new instrument—VITEK® MS PRIME—and a new middleware system—MYLA®—which they knew would come with substantial changes in workflow. While those changes would be beneficial, navigating the new workflow alongside increasing volume of work and staffing shortages would be challenging.

LRHS decided to engage with the bioMérieux Lab Consulting team as part of the implementation process for VITEK® MS PRIME and MYLA® to help handle increased volume, changing workflows, and overall efficiency.

IMPLEMENTATION

Existing laboratory processes and staffing at LRHS led to employees working overtime to keep up with increasing volume, and space was at a premium with reduced laboratory footprint. bioMérieux's Lab Consulting team needed to address both of those challenges. The team began by observing existing laboratory space utilization and processes to determine where LRHS could make improvements and then made recommendations tailored to LRHS's specific needs.

Process improvements focused on the changes brought about with the addition of VITEK® MS PRIME to the lab—the team was able to rethink chemical workups and eliminate unnecessary downstream procedures. And, alongside implementing VITEK® MS PRIME, LRHS also converted their laboratory middleware system to MYLA®, enabling connectivity and processes that weren't previously possible. Kaizen events focused on organization and eliminating unnecessary items to help the laboratory make the best use of their newly reduced space.

KEY CONSIDERATIONS & CHALLENGES

- Recent substantial increase in workload
- Workflow changes and efficiency
- Reduction of available space for microbiology



RESULTS

Implementing VITEK® MS PRIME and MYLA® contributed to actionable results and improved turnaround times for LRHS. With VITEK® MS PRIME and CLSI guidelines, laboratory staff can quickly provide preliminary organism identification information and rule out certain antibiotics, which is important for antimicrobial stewardship. The information then helps Infectious Disease clinicians select and start empiric antibiotics earlier for their patients. With MYLA®, the middleware's decentralized nature enables distribution of tasks throughout the day and eliminates an evening bottleneck and its associated overtime work.

KEY RESULTS:



Preliminary observation and analysis



Enable earlier selection of empiric antibiotics



Rule out inappropriate or ineffective antibiotics



Eliminate workflow bottlenecks

The bioMérieux Lab Consulting team helped LRHS efficiently use their smaller space to bring in more lab equipment while keeping things organized. That organization also had direct impact on lab processes in some cases, such as optimizing space in the incubator, quickly locating necessary items, and reducing the touch time per plate. Overall, LRHS is now better positioned to efficiently handle higher sample volumes while maintaining quality results, contributing to both antimicrobial stewardship and patient care.

KEY RECOMMENDATIONS INCLUDED:



Better use of space



Reduce touch time per plate



Handle high volumes while maintaining quality results

KEYS TO SUCCESS



Be receptive to change



Make efficient use of space



Implement technology and processes together



"Turnaround times for patients and treatment go down with the usage of the VITEK® MS PRIME and lab optimization."

**Microbiology Supervisor,
Los Robles Hospital**



"Staff have become much more efficient on their workflow. We've been able to deal with and cope with higher workload than prior to the optimization."

**Microbiology Supervisor,
Los Robles Regional
Medical Center**



"Clearing out drawers helps streamline our workflow and it really becomes, 'work smarter, not harder.' That's huge."

**Microbiology Technologist,
Los Robles Regional
Medical Center**



"I would encourage other hospitals to try something like this. I think it's helpful to have another eye look at things."

**Microbiology Technologist,
Los Robles Regional
Medical Center**