Successful Expansion Project Helps Laboratory System Gear Up for Growth

Management at a clinical laboratory system was grappling with a challenge: they wanted to expand their throughput, but needed to do so in a way that wouldn't compromise their current level of service.

Part of the challenge was the complexity of the work itself. The labs perform several hundred different types of tests for hospitals and other clients on a wide range of specimens, each collected and transported in unique containers. In the previous year, the labs had processed and performed more than 4.5 million tests—with more than 400 associates in the core lab and more than 1,600 in the entire system working three shifts a day, 365 days a year, to keep up with demand. Because many of these tests have serious implications for the more than one million patients involved, quality and reliability are critical.

Spurred by the aggressive growth objectives of a five-year strategic vision, the labs hired Integrated Project Management Company, Inc. (IPM) to ensure execution of initiatives critical for evolving its operations.

**ASSESSING BUSINESS PROCESSES AND PERFORMANCE**

Part of the lab system's growth plan involved increasing the volume of its core laboratory. But it was unclear whether the lab could achieve this based on its current setup. IPM consultants provided an impartial assessment of the core lab's current capacity and capabilities, determined the steps required to ramp up operations, and presented their recommendations to company stakeholders for approval.

**LAB EXPANSION AND EQUIPMENT REPLACEMENT**

It quickly became apparent that the core lab would need new equipment and systems to attain the intended increase in volume. One of the operational gaps was the capacity limitation of the labs' chemistry analyzers. Management had already selected a new equipment vendor and entered into an agreement to replace not only the chemistry and immunoassay analyzers at the core lab, but also more than 180 pieces of equipment at its partner hospitals—a total of 30 testing sites in all.

Recognizing that the plan required expert project management and close coordination of many stakeholder groups, the lab asked IPM to lead the planning and installation the analyzers throughout their locations.

IPM consultants managed the project scope, schedule, and budget, and communicated project activities and progress at multiple levels within the organization and across all sites. As the project evolved, they also led detailed plan-
ning sessions for a new automation line at the core lab, which required many changes to successfully prepare, install, test, and validate the new equipment and train staff before going live.

SUCCESSFUL INSTALLATION AND LAUNCH
IPM oversaw the commissioning of each new analyzer type, ensuring that staff was trained, analyzers were tested and laboratory information systems validations approved, and facility preparations completed. Because the implementation timeline for all analyzers spanned several months, IPM worked closely with sites that had already gone live and captured continuous improvement opportunities to share with sites still preparing for upcoming installations.

The project, which had a one-year time frame from planning through implementation, was completed on time with minimal disruption to lab productivity. The installation was so successful that the core lab is now a showcase site for the analyzer equipment provider.

KEYS TO SUCCESS

Replacing complex medical equipment at 30 sites while still keeping a busy lab running at full capacity required IPM consultants to focus on several key project management tenets. These included:

» Communication and collaboration: The development and execution of an effective implementation plan requires input and involvement from all concerned. Throughout the project, IPM served as the main point of contact for stakeholders and vendors, including partnering with the analyzer manufacturer. Stakeholder groups at each affected site included representation from operations, quality, finance, materials management, information technology, information services, and facilities management.

» Detailed planning: Once they had captured the specific equipment and associated support requirements, IPM consultants developed a comprehensive project plan addressing scope management, resource requirements and responsibilities, internal and external stakeholder communications, schedule, and risk management.

» Project leadership: Successful plan implementation required a dedicated project leader who could monitor the performance of all external vendors to ensure conformance to the agreed-upon plan and guide the progress of internal resources to prepare for equipment go-lives across the 30 lab sites.

» Change management: The IPM consultants ensured that staff at each of the sites were aware of the new equipment functionality and capabilities by coordinating vendor demonstrations and overviews. Additionally, staff were trained on new processes and equipment and informed about key dates and activities throughout the project.