THE MAYO CLINIC

Optimizing Inventory Management for Labs

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The Mayo Clinic, a $14B nonprofit organization, is a leading health system in the United States that is committed to "providing the best care to every patient through integrated clinical practice, education, and research". Mayo Clinic's Department of Laboratory Medicine and Pathology (DLMP) performs testing services for diagnostic and therapeutic evaluations, completing 27 million tests annually for both internal patients and external customers. Tens of thousands of unique lab supplies are required to perform hundreds of distinctive medical tests and services. To source, procure, manage, and distribute inventory, DLMP partners with Mayo Clinic's Supply Chain Management (SCM) group.

Organic growth in testing volume and COVID-19 pandemic-related supply chain disruptions put pressure on DLMP's inventory management practices and revealed areas of opportunity. DLMP's 125 production labs were each independently managed, which led to great variation in how inventory was handled and by whom. Limited SCM support and inadequate technology systems inhibited positive change.

The Tauber project team leveraged a framework of people, process, and technology to identify inventory management improvements that would net financial and operational gains. To this end, they interviewed 150 lab staff, conducted lean rapid plant assessments on 40 labs, and held benchmarking conversations with 15 industry partners to create a current state gap analysis. Next, they conducted a proof-of-concept implementation within three DLMP labs to measure the impact of their recommended changes and evaluate their ability to scale solutions. Finally, the Tauber team refined their analysis and delivered final recommendations and a phased rollout roadmap.

The Tauber team identified the potential for significant revenue gains through lab capacity advancements and cost savings through the application of lean principles. Over three years, they projected that Mayo Clinic can net $112M. To unlock this value, the Tauber team recommended that Mayo Clinic form SCM teams for supply logistics and complex order management and transfer inventory responsibilities from laboratory staff to these new, improvement-focused groups. As a result, it is estimated that 83K labor hours per year would be returned to DLMP lab activities. Additionally, the Tauber team built the business case for improved data analytics and project management capabilities in order to transform DLMP's inventory management from a business challenge to a strategic advantage.

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