

Pharmaceutical company wanted to strengthen its manufacturing execution system.

This privately held manufacturer of both prescription and OTC ointments and creams for the treatment of various skin conditions wanted to refine its existing management system in anticipation of projected volume increases associated with planned new product introductions. Given the length of the overall cycle time and the multiple interdependencies between manufacturing and the laboratories' testing function, the company's management believed that a smooth functioning internal supply chain was essential for success.



Key Metrics

Manufacturing schedule attainment improved 26%
Packaging schedule attainment improved 63%
Inventory turns increased 81%
Raw materials inventory was reduced 10%
Throughput increased 27%
Laboratory productivity increased 17%
Average cycle time in the QC lab decreased 50%
Average cycle time in the analytical lab decreased 36%
Average cycle time in the microbiology lab decreased 14%

“We knew we did not have the experience or the resources to improve our operation to the point where it could reliably handle the volume increases we would be facing in a relatively short period of time,” said the director of U.S. manufacturing, “which is what led us to consider an outside resource.”

After a thorough review, the company's management team retained the services of USC Consulting Group (USCCG), a firm known for its world class operations management capabilities.

USCCG began in the manufacturing area by reviewing the scheduling and production planning process. They implemented a master production schedule, established a daily/weekly build schedule, and developed a reporting mechanism to track schedule attainment on a daily and weekly basis to ensure improved customer service. They also installed a closed-loop operating system in the pharmacy area to support planning, execution, follow-up and reporting needs.

The consultants developed controls to ensure cost-effective use of batch size and to achieve shelf life goals set by sales and marketing. Managerial and supervisory accountability was increased in all areas of the production facility by implementing follow-up and

reporting methods to ensure that operational opportunities were addressed and corrected. Lastly, a warehouse system was implemented to allow for the timely removal of obsolete and expired goods to free up warehouse space.

USCCG went on to develop and implement input/output volume controls in the quality control, analytical, and microbiology laboratories to monitor and record volumes of work going into and coming out of the laboratories, and a work order management system to allow for visual management of work orders through each of the laboratories. By using estimated process times to complete laboratory tests in conjunction with weekly capacity models to estimate laboratory volumes and backlogs, the consultants were able to ensure that the correct number of resources was being used to achieve the desired productivity levels.

Key performance indicators were then developed for each of the three laboratories and used to monitor progress, which was reviewed at weekly management meetings. Lastly, a method for identifying and resolving issues that affected laboratory productivity and a closed-loop operating system were implemented. As a result, manufacturing schedule attainment improved 36% and packaging schedule attainment improved 63%, while overall throughput increased 27%.

When asked what impact the project had on his business, the company's chairman and CEO said, "The project results were so significant that we were able to secure additional business in an environment where a few months earlier we had thought we were at maximum capacity. The changes we made together were dramatic and have proven to be sustainable."

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*Chairman and CEO,
Pharmaceutical Company*



For more information contact us at 800-888-8872 or www.usccg.com

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