

SEMINAR SERIES
Department of Quantitative Analysis and Operations Management
College of Business, University of Cincinnati

Prescription Filling Analysis in a Major Chain Pharmacy

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The James L. Winkle College of Pharmacy
University of Cincinnati

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1:30 p.m.
214 Carl H. Lindner Hall

Pharmacies have been facing the problem of critical staff shortages, increasing quality of service requirement, and reduction of payment from third party payers. These problems led to the need to understand how the pharmacy staff has been utilized and which factors might be associated with a more efficient pharmacy operation. A pharmacy operation study which was conducted in a major chain pharmacy will be discussed to illustrate the scientific approach applied. The study utilized videotaping technology and work sampling technique. The data collection was conducted at eight pharmacies located in four states, Ohio, Colorado, Georgia, and Kansas. A total of 2,778 hours during the 56-day study period at the eight sites was analyzed, among which were 1,088 hours for pharmacists and 1,691 hours for technicians. The study also examined the effects of variables (daily workload, automated prescription filling systems, drive through and walk in, and central fill operations) on the prescription filling efficiency. The results provided a micro-view of labor utilization for each prescription filled. It was found that daily workload was positively associated with the efficiency of the pharmacy, while automation does not correlate with the efficiency of the pharmacy.

Alex C. Lin, Ph.D., is an Assistant Professor in Pharmacy Operations Analysis and Design, the James L. Winkle College of Pharmacy, University of Cincinnati, Cincinnati, Ohio. Dr. Lin's expertise is in pharmacy automation technologies. He has been a consultant/advisor to many of major US and international companies. These include: US organizations - McKesson APS, Procter and Gamble Healthcare, Kroger Co., NIH Outpatient Pharmacy, and Pyxis Corp. ; International organizations - All Japan Drugstore (AJD), Oriex Drugstores, Uni-President Enterprises Group, and Ministry of Health and the Egyptian company of El Sewedy Enterprises. Dr. Lin's credentials include his involvement with the Pyxis Corporation in developing the Pyxis MedStation (a computerized medication control system) from product concept to beta-site evaluation. (Email: alex.lin@uc.edu).

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