

# MODELING THE IMPACT OF MAIL ORDER IN DRUG UTILIZATION AND REIMBURSEMENT IN AN OHIO RETIREMENT SYSTEM

*Jay Visaria<sup>1</sup>, Enrique C. Seoane-Vazquez<sup>1,2</sup>, Rosa Rodríguez-Monguió<sup>2</sup>,*

*<sup>1</sup>Division of Pharmacy Practice and Administration, College of Pharmacy; The Ohio State University. <sup>2</sup>Center for HOPES, School of Public Health, The Ohio State University.*

Although cost containment is the main reason behind the recent development of mail order pharmacy, there is no empirical evidence that substitution of community pharmacy with mail order services reduces overall drug expenditures.

The objective of this study was to compare drug utilization and drug net reimbursement for a retiree patient population using mail order pharmacy services with the results of a model simulating the effect of community pharmacy services for the same population. The data source was Ohio Public employees Retirement System (OPERS) pharmacy claims data for the period January 2000-September 2005.

A retrospective cohort study was comparing utilization and reimbursement patterns in community vs. mail order pharmacy. A simulation model was employed to assess drug utilization and reimbursement in community pharmacy using mail order pharmacy claim data. Drug claims were aggregated to obtain a set of that courses of drug therapy (CDTs) representing unique patient IDs and unique drug products. The model assumed that CDT in community pharmacy would have utilization patterns similar to those found in mail order pharmacy.

Results: The use of mail order was estimated to result in an increase in drug utilization and a reduction in net drug reimbursement. The differences in net drug reimbursement between community and mail order pharmacy were explained by differences in estimated acquisition costs, rebates, dispensing fees, and administrative costs.

The results of the simulation model indicate that mail order pharmacy could increase drug utilization and decreases net drug reimbursement. Decision makers should carefully evaluate the utilization and cost effects that result from the implementation of mail order pharmacy programs.

*This study was supported by the Ohio Public Employees Retirement System*