



COMMUNITY PHARMACY FOUNDATION COMPLETED GRANT SYNOPSIS

Evaluation of Computer Generated DUR Alerts in Community Pharmacy

Michelle Chiu, PharmD, PhD

Midwestern University College of Pharmacy - Glendale

Objectives

To confirm previous research and gain a better understanding of the contribution that third party prospective DUR (OPDUR) and in-store DUR systems make to prescription drug therapy, the economic burden these programs impose on community pharmacy providers, and the level of duplication between OPDUR and in-store DUR systems.

Methods	
Design	• This project used an on-site observational data collection in 142 community pharmacies in four states.
	• Pharmacy students observed pharmacy personnel at their rotation site for three days during the first week of their community practice rotations.
	• Complete information on all alerts generated per prescription was recorded at the rate of approximately one prescription every ten minutes.
Study	To examine how community pharmacy personnel respond to the alerts they receive
endpoints	To quantify the cost to community pharmacies of responding to OPDUR and in-store alerts
	To determine to what extent are OPDUR and in-store alerts duplicative
Results	

- Across all prescriptions recorded, 33.2% were associated with an OPDUR alert.
- Of alerts received in the pharmacy, 90.5% of clinical alerts were overridden whereas 55.5% of administrative alerts were overridden, resulting in an overall override rate of 59.2%.
- Alerts that were overridden required 133 seconds of personnel time, valued at \$1.30.
- Non-overridden alerts (requiring intervention) required 878 seconds, valued at \$9.83.
- Duplicative alerts (OPDUR and in-store alerts) ranged from 15% for early refill alerts; 21.6% for drug-drug interaction alerts; and, 24.9% for therapeutic duplication alerts.

Conclusion

Several recommendations can be made for improving OPDUR and in-store programs. First, the selectivity of OPDUR and in-store criteria should be increased and standards should be developed so that criteria are consistent across all third party and in-store systems. Second, information regarding alerts resolved at the store level should be sent to third parties so that duplicative OPDUR alerts are not sent. Finally, alerts should contain as much information as necessary to allow pharmacy personnel to respond quickly and appropriately.