

Safety Alerts As Drivers For The Pharmaceutical Opinion Program: A Pilot Study To Reduce Potential Hospitalizations Due To Preventable Drug-Drug Interactions

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Abstract:

Background:

Drug-drug interactions (DDIs) represent a potentially serious problem that can result in adverse drug events (ADEs), which account for 2.8% of hospital admissions. Pharmacists are uniquely positioned to prevent ADEs by intervening in DDIs.

Objectives:

This project aims to reduce the occurrence of DDIs associated with potential hospitalizations, offer continuing professional development opportunities while providing a financially sustainable business model via the Pharmaceutical Opinion Program (POP).

Methods:

A Safety Alert regarding 13 evidence-based DDIs was disseminated and reviewed by pharmacists to allow for recognition of the cited DDIs as they were encountered in practice, and to inform communication with prescribers via a pharmaceutical opinion. Quantitative data was collected for six months in the form of the total number of POP claims submitted to the provincial ministry before and after the Safety Alert, while qualitative data was obtained through three focus group sessions.

Results:

At study completion, 35 pharmacies made 67 POP claims involving the 13 DDIs in this project, translating to a theoretical cost avoidance of approximately \$73,184 from potentially averted hospitalizations. The difference in the total number of POP claims was not statistically significant (2845 pre-intervention versus 2399 post-intervention; $p = 0.204$), however the 18 pharmacies with a net increase in POP submissions exceeded the 13 pharmacies with a net decrease. The focus group discussion indicated that the value of the Safety Alert was unequivocal.

Conclusion:

Through disseminating evidence-based DDIs via the Safety Alert, this project offers an innovative strategy to capture and reduce DDIs associated with potential hospitalizations; deliver continuing education to front-line pharmacists; and provide business opportunities through which cognitive services are reimbursed via the POP.