



Clinical Team Update: February 2019

How effectively are you identifying and managing drug-drug interactions (DDI)?

The Joint Commission defines medication reconciliation as “the process of comparing the medications a patient is taking (and should be taking) with newly ordered medications.”¹ Medication reconciliation is a key component in the identification of drug-drug interactions (DDIs). Clinical decision support tools are commonly utilized during medication reconciliation in order to reduce adverse drug events (ADEs) associated with DDIs and rely heavily on complete, up-to-date patient medical records in order to function appropriately. Clinical decision support tools are widely available and as of 2016 had been adopted by over 60% of all office-based physicians.² Despite widespread implementation of processes to identify DDIs and mitigate ADEs, studies continue to demonstrate that ADEs are responsible for nearly 7% of total hospitalizations, significantly increased length of hospital stay, and nearly \$2,000 more in costs accrued during hospitalizations compared to those without an ADE.^{3,4} Additionally, studies demonstrate that DDIs impact anywhere between 6-45% of patients across various patient populations.⁵⁻¹⁰ Why might DDIs and ADEs still be occurring at such a significant rate? According to one author, standard medication reconciliation practices, referred to as a “time-consuming, inconsistent, and error-fraught process,” may be to blame.¹¹

To gain a greater understanding into healthcare providers’ capabilities of identifying and mitigating DDIs during patient care, Aegis Sciences Corporation completed a study in conjunction with QURE Healthcare, an organization focused on generating health outcomes data with a goal to reduce variation in care. The study included a baseline survey of 330 board-certified primary care physicians and an analysis of data collected through completion of Clinical Performance and Value vignettes (CPVs) completed by each participant.¹⁰ CPVs allow for investigators to capture how providers treat patients in clinical practice utilizing a web-based platform that includes patient cases. Patient treatment is scored through assessment of 49-72 evidence-based criteria.¹¹ The CPVs included patients that presented to physicians with a chief complaint that had arisen secondary to adverse effects associated with a DDI. The study evaluated current DDI assessment practices and sought to identify barriers to effective treatment.¹⁰

Despite 99% of participants indicating regular completion of medication reconciliation and appropriate monitoring for DDIs, interactions contributing to the adverse effects included in each patient’s presentation were often unidentified and untreated. For example, providers identified that a DDI was the underlying cause of the patient’s chief complaint in only 15.3% of patients treated, while the specific substances contributing to the interaction were identified in less than 1% of patients. Failure to identify significant interactions in these patient cases likely contributed to substandard coordination of care (care coordination received by 16.4% of patients) and lack of patient counseling on the risks of DDIs (counseling received by 5.6% of patients).¹⁰

The findings of the study demonstrate gaps in DDI recognition that may negatively impact patient care, despite utilization of standard, widely-accepted practices developed to reduce the occurrence of DDI-related ADEs.

Please call our clinical team at 1-877-552-3232 if you require additional information.

NOTICE: The information above is intended as a resource for health care providers. Providers should use their independent medical judgment based on the clinical needs of the patient when making determinations of who to test, what medications to test, testing frequency, and the type of testing to conduct.

References:

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