

# Combatting Polypharmacy at Discharge: Ensuring Appropriate Use of Complex Regimens

As population age and the number of individuals with long-term conditions increase, so does the incidence of polypharmacy. Today, thirty-nine percent of older adults in the US take five or more drugs simultaneously, according to Harvard researchers.

This exposure to multiple drugs puts patients at risk of potential adverse events from each and every one – and from their interactions – that can be severe enough to result in hospitalization. And these effects are particularly problematic for the elderly suffering from deteriorating health. **In fact, adverse drug events are responsible for 5 to 30 percent of all geriatric hospital admissions.**

With patients over 65 disproportionately using medications, the high rate of polypharmacy is of growing concern among skilled nursing facilities. While organizations commonly utilize pharmacy interventions like medication reconciliation at admission to reduce the likelihood of excessive, unnecessary drugs and treatment-related complications, intervening at another stage in the cycle of care, namely upon discharge, can also help address the problem.



## Polypharmacy Defined

Numerous definitions of polypharmacy exist in research and literature but generally speaking, it is the administration of more medications than are clinically indicated, representing unnecessary drug use. Commonly, this amount is defined as the use of five or more medications. Among the elderly, the issues stemming from polypharmacy use are higher because of the metabolic changes associated with aging. In addition, **seniors have other risk factors that contribute to the complications from polypharmacy such as over-the-counter and herbal supplement use and multiple physicians and pharmacies, to name a few.**

## Potential Harm

While a single drug carries with it the risk of adverse outcomes, the combination of medications can prove even more dangerous. Drugs can interact in potentially harmful ways, such as cancelling out the intended effect of a medication or creating new risks. Research shows that over 20 percent of adverse drug reactions stem from drug interactions.

In addition, as the number of drugs prescribed increases, so does the chance of a prescribing or monitoring error. In fact, one study showed that, after adjusting for other factors, each medication added increased the chance of an error by 16 percent.

Lastly, the use of multiple medications can lead to a prescribing cascade, where signs and symptoms of an adverse reaction are misinterpreted as a disease, resulting in yet another drug being added to a regimen to treat this “new” condition.

**To ensure the correct combination of drugs for optimal outcomes, providers, pharmacists and residents should communicate about the appropriateness of each drug, the benefits and risks of potentially harmful medications, and whether alternative non-drug treatments exist.** When those discussions conclude that a multiple drug regimen is the best treatment approach, such as for conditions like heart failure, it's important that elderly patients take their medications correctly since one of the biggest concerns with polypharmacy is poor medication adherence.

## Reducing Risk at Discharge

When multi-drug therapies are recommended for residents to treat their conditions, it can be difficult for them to follow the prescribed regimens, especially when they return home with one or more new medications. To help improve adherence, particularly among those with complex treatments, skilled nursing facilities can provide a supply of medications and their instructions for use at discharge and have the pharmacy follow up once the resident is home to check on compliance, confirm they're aware of the complications that may arise from treatment, and make sure they're not experiencing effects from too many medications. Residents should also be reminded to schedule a visit with their primary care physician to confirm that their regimen remains appropriate.

*Collaboration among the entire healthcare team can help ensure the correct combination of drugs to improve health status, outcomes and quality of life. Minimize the risks of polypharmacy with DischargeRx. Contact PharMerica at [info@PharMerica.com](mailto:info@PharMerica.com) or [800-564-1640](tel:800-564-1640) to learn more.*