



It's Time To Think Outside The Bottle To Improve Medication Compliance

Packaged Medication Boosts Outcomes,
Especially for Post-Acute Care

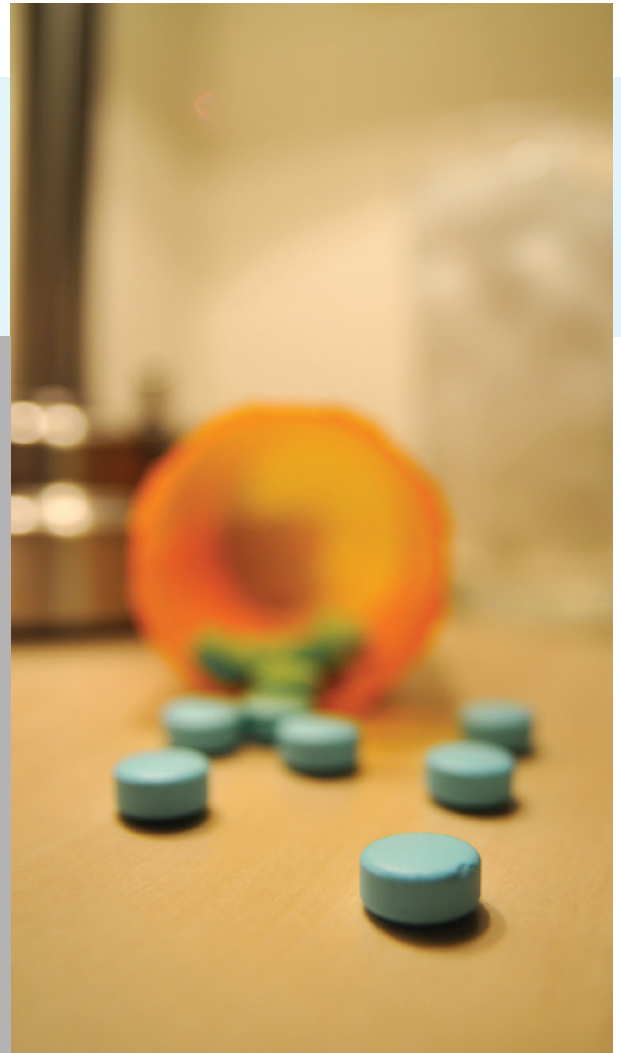


Healthcare industry veterans agree there's no single solution that targets skyrocketing costs and helps patients heal better and faster. But despite the vastness and complexity of the country's \$3 trillion healthcare system, there is one often overlooked area that holds promise for wresting control over cost and outcomes: better packaging to boost medication compliance.

Medicine Works, But Only If Patients Take It

It's estimated that half of all patients are not taking their medications as prescribed. Taking the wrong medication at the wrong time, or not at all, **contributes to 65 percent of all hospital readmissions and the deaths of over 125,000 Americans each year.**¹

Failure to either fill a prescription, not take it as prescribed (medication adherence), or not take the entire dose (medication persistence) is widespread. As health advocate Jane Brody quotes in a recent New York Times [article](#), "Studies have consistently shown that 20 percent to 30 percent of medication prescriptions are never filled, and that approximately 50 percent of medications for chronic disease are not taken as prescribed," according to a [review](#) in Annals of Internal Medicine. People who do take **prescription medications**—whether it's for a simple infection or a life-threatening condition—typically take **only about half** the prescribed doses.²



Why Don't Patients Take Their Medicine?

As previously noted, patients might not fill the prescription at all. They forget. Or they might mistakenly believe that since they feel better, they don't need to take the medicine anymore. Addressing these concerns is often outside the scope of the pharmaceutical industry. But how medicine is packaged is well within the control of the pharmaceutical and packaging industry.

Most Americans get their medication in a brown plastic vial with a cap that's often hard to remove, whose design hasn't changed for 55 years. There are exceptions. According to the Healthcare Compliance Packaging Council, "Birth control pills, certain common antibiotics and hormone replacement therapies and steroids are already being dispensed in compliance-prompting, unit-dose packaging that has proven highly effective in helping people manage their medications."³

When pharmaceutical companies design and test packages, according to the HCPC report, they do so according to "FDA and ICH guidelines to protect the product until it reaches the consumer and yet, our system discards that package in pharmacy."⁴ To make matters worse, the medication, now dispensed via the aforementioned plastic vial, has not been tested for the particular chemical makeup of the individual drug.

Compliance-Prompting Packaging

It's time to think outside the bottle. Patients need better tools to help the right medicine be taken at the right time and in the proper dose.

Packaged meds help eliminate the roadblocks to medication compliance by providing presorted, individual medication packs clearly labeled with the appropriate dosage and day and time instructions. They might also come with pharmacy backup and features such as an electronically scanned image of every dispensed pill. Whether it's presorted packs, punch cards, or multiple meds in one bubble, packaged meds have been shown to improve medication compliance.

Studies going back 20 years, and as recently as 2012, support the use of specialty packaging to boost medication adherence. For example, a 2012 study from Novartis Pharmaceuticals, through Walmart pharmacies, showed marked improvement in medication adherence by combining two common hypertension medications, and then packaging them in a "reminder packaging" format. Out of 4,633 patients measured over a year, those with the reminder package were more likely to take their medication on time and with the full dosage than were a control group of the same size. Those patients with the reminder package were also more likely to continue their therapy in the long term.⁵



Packaged Meds are Most Essential for Post-Acute Care

Demand for post-acute care is growing—but so are the expectations for greater value. Despite the fact that *it's the fastest growing healthcare segment*, with home health services and durable medical equipment leading the way,⁶ declining reimbursements and the shift to value-based care have everyone looking for ways to survive the change and establish themselves as better stewards of healthcare dollars.

Medication compliance is especially challenging for post-acute care patients. From assisted living and nursing homes to home care, getting patients to take the right dose of their medication at the right time is no small feat. Many of these patients are laboring under chronic conditions that require complex medication regimens.



Medication Compliance: Beyond Packaging

*Patient education is the logical first step to boost medication compliance,*⁷ and the right packaging certainly helps. But medication reconciliation—the process of creating the most accurate list possible of all medications a patient is taking, squaring that with physician and hospital discharge orders, and ensuring the correct medication is given—requires constant vigilance. Adverse drug events and hospital readmissions are all too common and costly. Care coordination to fill gaps in care from hospital to nursing home, or clinic to home care, is vital to medication compliance.

A 2008 [study](#), spearheaded by Purdue University, of 1,000 Indiana Medicaid patients⁸ found that combining specialized medication packaging with telephonic medication therapy management spurred improvement in medication adherence, and created a marginal improvement in readmissions or extra hospitalizations. As the study points out, pharmacists are the linchpin in this kind of care coordination: “These services present an opportunity [for pharmacists] to provide more direct patient care and expand the scope of the profession’s role beyond medication preparation and dispensing.”

Medication reconciliation, telephonic medication therapy management, and other care coordination elements help family members, caregivers, and health professionals to transition patients from acute to post-acute care environments.

As care delivery shifts to more post-acute settings, where providers are being asked to do more with less, it’s time to think outside the bottle and enlist packaged medications and care coordination to bridge gaps in care, enhance the patient care experience, and address critical compliance issues.

Sources

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² https://www.nytimes.com/2017/04/17/well/the-cost-of-not-taking-your-medicine.html?_r=0

³ Improving Medication Adherence through Packaging,” Healthcare Compliance Packaging Council, p. 3.

⁴ Ibid, p. 2.

⁵ Ibid, p. 8.

⁶ <http://legacy.alixpartners.com/en/Publications/AllArticles/tabid/635/articleType/ArticleView/articleId/1503/Higher-Growth-and-Lower-Reimbursement-for-Post-Acute-Care-Providers.aspx#sthash.DeC5bQyS.dpbs>

⁷ <https://www.ncbi.nlm.nih.gov/pubmed/8254571>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4126258/>

