

## Time to ditch the orange bottle

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Like most teenagers of my era, I spent my summers working. I didn't have to look for a job—I was lucky enough to work for my family's pharmacy business. I often ran the delivery route for prescriptions, many to families who had been customers for several generations. My family worked hard to help other families. I loved that continuity, but there was one constant that puzzled me—all the orange bottles crowding one kitchen counter after another. Not only did it seem inefficient, it was dangerous. How were some of our folks going to keep track of all those meds, especially if they lived alone, or were in the early stages of dementia?

There had to be a better way.

### Medicine works, but only if you 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% of all hospital readmissions and the deaths of over 125,000 Americans each year.**

Failure to either fill a prescription, not take it as prescribed (medication adherence) or not to take the entire dose (medication persistence) is widespread. As health advocate Jane Brody said a recent [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."

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.

Why don't people take their medicine? As previously noted, they 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 any more. 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 whose design hasn't changed for 55 years. There are exceptions. According to the Health Care Compliance Packaging Council, birth control pills, some common antibiotics and steroids have been dispensed in unit dose packaging for some time and with positive results.

### Compliance-prompting packaging

Clearly, patients need better tools to take the right medicine at the right time and in the proper dose.

Packaged meds help eliminate the roadblocks to medication compliance by providing pre-sorted, individual medication packs clearly labeled with the appropriate dosage, 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 pre-sorted 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 a control group of the same size.

### Packaged meds are most essential for post acute care

Packaged meds are especially helpful in post-acute settings. Demand for post-acute care is growing—it's the **fastest growing** healthcare segment - but so

are the expectations for greater value. 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.

From assisted living and nursing homes to home care, getting patients to take the right dose of their medication at the right time is especially challenging. Many of these patients are laboring under chronic conditions that require complex medication regimens. In addition, family members, caregivers and health professionals need some way to know that the patient took a drug.

While patient education is the logical first step to boost **medication compliance**, even the most skilled nurse or caregiver can use the extra help that packaged meds provide. Ongoing support is another piece of the puzzle, making it easier to access expertise when medications need to be refilled or a patient is taking multiple medications.

Medicine reconciliation—using technology such as scanning and then tracking every pill that is dispensed—adds to the packaged medication benefits and provides a level of quality assurance not found in a pill bottle.

It's been awhile since I stood behind the counter in my father's pharmacy. But, as care delivery shifts to post-acute settings, where providers are being asked to do more with less, the traditional prescription vial doesn't have a place in this new environment. It's time to think outside the bottle and look to packaged medications and easier access to professional pharmacy resources to boost medication adherence. ♦