

SEEKING LONG-TERM ADHERER

New systems, tools, and programs are available to improve LTC medication management

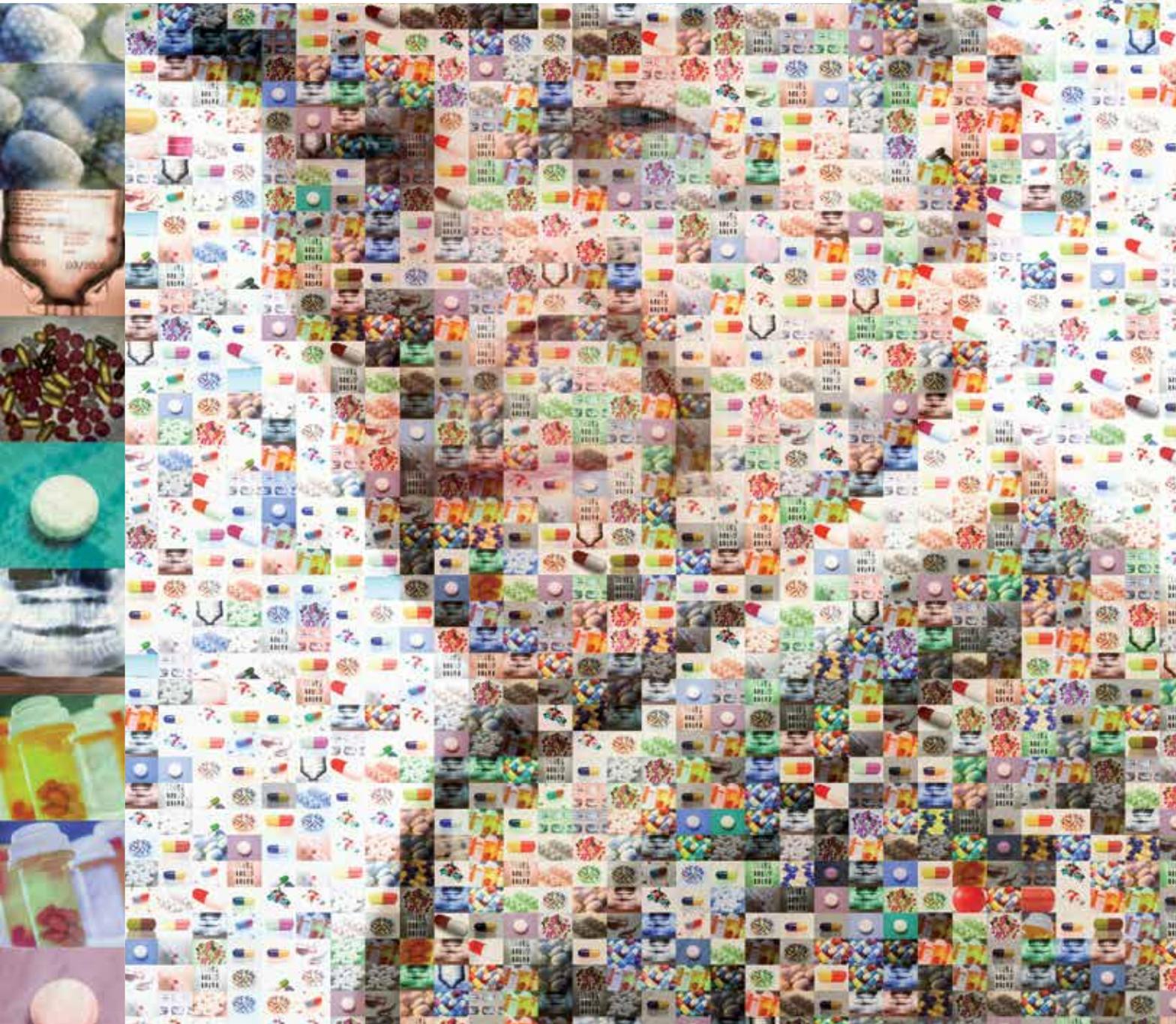
*By Nicole Brandt, PharmD, and
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There are 79 million people in the United States who were born between 1946 and 1964, the baby boomers who increasingly will be transitioning from homes and hospitals to various long-term care settings. As they do, the need for medication adherence packaging and services will only grow. It is estimated that already 23 percent of new admissions to skilled nursing facilities are due to medication non-adherence and that 85 percent of assisted living facility residents need medication management, administration, and oversight.

Given the rising demand for long-term care coupled with reduced state Medicaid dollars to pay for it means now, more than ever, is the time to look at systems, tools, and programs to improve medication management. The Patient Protection and Affordable Care Act (PPACA), the health care reform law enacted in 2010, has led to numerous changes within payment systems and mandates, which are impacting how care is being delivered as well as being reimbursed. Pharmacists and pharmacies are in a pivotal position to take action to improve this aspect of care. It is critical to look not just at the packaging of medications, but how to incorporate



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clinical services that are patient-centric and improve health outcomes. This article will highlight some considerations from emerging technologies to regulatory requirement and reimbursement mechanisms.

Medication Packaging

Whether it is a patient, caregiver, or trained health care professional, errors are bound to happen in administering medications. Using systems and processes to standardize delivery and packaging can help mitigate this risk as well as improve adherence. The following sections highlight the spectrum of interventions (low tech to high tech) that may be done to address medication adherence and errors. This is not meant to be exhaustive, promotional, or an endorsement of one technology over the other, but instead to illustrate various interventions that can be employed depending on the scenario. Regardless of your situation, it is imperative that you work with your state board of pharmacy to ensure that regulatory requirements are being met.

Patient Level:

Depending on the acuity level of the patient population you serve, reminder or dispensing systems may be effective to improve medication adherence and management.

Reminder systems

Vitality Glow Caps (www.vitality.net/) is a patient-friendly reminder system for those who are able to self-medicate. The bottle cap fits on the patient's prescription bottle and can be programmed to blink flashes of light as well as beep during the scheduled dosing time of the medication.

Rx Timer Cap (<http://rxtimercap.com/>) is a medication adherence reminder that is programmed like

a stopwatch to count down the time since the bottle was last opened or when the patient took the last dose.

Medication Dispensing System

TabSafe (www.tabsafe.com/) is an in-home medication dispensing system that can be operated by the patient or a caregiver. The pill cartridges as well as the dosing regimen can be registered online on a secure website for the individual patient. Then the information is downloaded onto the TabSafe machine, which dispenses the dose at the scheduled time and alerts the patient to take the medication. Furthermore, it also can help with clinical monitoring and reports for the medical team regarding adherence and vital signs.

Facility and Pharmacy Level:

Unit Dose Dispensing Systems

The Omnicell Medication Packager (www.omnicell.com) is a part of the WorkflowRx software for pharmacy inventory management. The Medication Packager holds 63 pill-dispensing units, allowing it to dispense patient-specific unit doses at a rate of 60 packages per minute. This system has been found to increase timely return of medications from the nursing facilities and an estimated increase in operational efficiency between 50–75 percent.

Paxit (www.remedirx.com/1515) is a unit-dosing, ultra-precision technology system developed by Remedi for the long-term care setting. This system uses robotic technology to dispense, inspect, and package the medications for each of the individual patients in a facility. It has shown to decrease the time it takes to do med pass by an average of 30 minutes. With its six-point optical verification technology, the system has been shown to improve medication accuracy. It also creates less medical waste, as the facility's on-hand medication inventory is for only a two-day period, rather than 30 days.

Blister Packages

DOSIS L60 (www.manhac.com/products.php) is a patient-specific unit dose dispensing system for long-term care facilities that can fill, seal, and label 30/31-day blister packets at 45 cards per hour. This machine utilizes bar code technology to ensure fast and effective medication safety during the mechanical filling of the blister packs. Being able to program these blister packs





into a machine saves time and money, freeing pharmacy technicians to perform other tasks.

Vial Labeling

Mypack Systems' (www.mpacksystems.com) flat vial—the m pack—improves label information visibility and comprehension. The child-resistant and elder-friendly container's flat, rectangular design replaces traditional round vials, providing 80 percent more usable area. The m-pack supports multiple quick response codes for personal online interaction with patients.

Overall, technologies are improving and advancing at a rapid speed. Dispensing and packaging of medications is just one aspect of the care provided by the pharmacist. Pharmacists are also needed to ensure that a patient's medications are appropriate and monitored on a regular basis as well as education and follow-up is provided to the patient, caregiver, and health care team. This is the premise behind the existing regulations discussed as follows.

Reimbursement Opportunities for Pharmacist-Directed Clinical Services

Regardless of where patients live, medication therapy management (MTM) services are being promoted to improve medication management and increase the education of patients and caregivers. These services, which are reimbursed through Medicare Part D plans, are increasingly being evaluated for their delivery as well as effectiveness. Starting in January 2013, the Centers for Medicare & Medicaid Services (CMS) mandated that every Medicare Part D plan must offer an annual comprehensive medication review for all qualifying beneficiaries, including those who reside in long-term care (such as skilled nursing facilities). Furthermore,

there is a Standard Format that needs to be completed and provided to the beneficiary and/or caregiver within two weeks of conducting a comprehensive medication review (CMR). Information about these mandates can be found at www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/MTM.html

Within the skilled nursing facility, monthly medication reviews (MMRs) are still required, but the new attention to MTM services such as CMRs has brought focus to the importance of the coordination of pharmacist-directed services and the medication management needs of the patients. The American Society of Consultant Pharmacists (ASCP) has an online educational program to address distinctions as well as similarities to MMRs and CMRs, which is available at <http://education.ascp.com/cmworkshoparchived/CMR>.

Assisted living facilities are considered community settings by CMS and fall under state regulation. Therefore, pharmacy reviews for assisted living residents vary from state to state. The National Center on Assisted Living publishes the Assisted Living State Regulatory Review, which has information for all 50 states, including the medication administration regulations and if the state requires any pharmacy reviews for residents of assisted living facilities. This can be accessed at www.ahcancal.org/ncal/resources/Pages/AssistedLivingRegulations.aspx.

Now is the time to take action to address America's medication-related problem— non-adherence. It is important to note that adherence technologies that only target pill formulations are not sufficient; very little attention is paid to non-pill dosage forms such as liquid, patches, and topical medications. Furthermore, ongoing education and awareness needs to be done to better explain the role of each of these services that pharmacies and pharmacists can provide. **ap**

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