

Medication Management with Technology

Introduction

The International Classification of Functioning System defines looking after one's health as a part of self-care in the domain of activities and participation (World Health Organization, 2017). It is imperative that older adults are able to manage and comply with the medications they take.

Most older adults use some form of medication. Thirty-eight percent of Medicare beneficiaries aged 65 and older have four or more chronic medical conditions requiring management. Polypharmacy, or the use of multiple medications, occurs in twenty to thirty percent of older adults. Half of all older adults use nonprescription medications alongside those that are prescribed. Medical advances, the greater number of doctors on a care team, and the overwhelming availability of nonprescription medications creates an increased risk for medication-related problems including adverse drug reactions (Levy & Barney, 2016). Because most older adults are using a variety of medications, it is important to ensure they are taken appropriately to ensure fewer accidents and greater medication adherence.

Medication management can be relatively simple using assistive devices and technology. There is a range of low and high-tech options to choose from. These can help take, track, and refill medications appropriately.

Low Tech Options

- **Visual timetables:** Daily or weekly timetables can be created to visually depict which medications need to be taken at which time of the day. This creates a visual system for tracking medications.
 - [This website has 40 different medication schedule templates that fit a variety of needs and are easily customizable.](#)
- **Pill Box:** Pill boxes are available in a variety of formats including weekly and monthly organizers. These are



[Weekly Twice a Day Pill Box \(Link to Purchase\)](#)

also available with sections for medication once, twice, or thrice a day. Medications can be separated and organized by dosage ahead of time.

- **Pill Pouches:** Like pill boxes, pouches can be used to create individual bags of medication that are travel friendly. Unlike pill boxes, these can also be placed in different areas of the home if necessary.



[Write-On Pill Pouches \(Pack of 100\)](#)
[\(Link to Purchase\)](#)

High Tech Options



[Automatic Pill Dispenser \(Link to Purchase\)](#)

- **Automatic Pill dispensers:** Most automatic pill dispensers have space for 28 days of medication. These have a motorized 28-slot carousel that rotates and delivers medication on a schedule along with audible and visual alerts. Many models have the capability of programming up to six alerts per day.



[Advanced Locking Pill Station \(Link to Purchase\)](#)

- **Advanced Locking Pill Station:** These stations also have 28 to 30 spaces for daily medications with a motorized carousel to dispense the medications. However, the advanced models provide additional security and control by providing locking options. They also include a tipper and cup which are helpful for individuals with issues with dexterity. Additionally, the advanced models can have up to 24 alarms, a dispensing log, and early dosing options.

Final Thought

Advances in medicine and science are allowing adults to live longer lives. However, the wide availability of medications, including nonprescription products, creates a greater chance of accidental medication related illnesses and reactions. This makes it more important than ever to manage the medications older adults take properly and carefully. The range of assistive devices and technology available makes this an easy task, so older adults can remain independent in self-care while complying with proper medication usage.

References

Levy, H. B., & Barney, K. F. (2016). Pharmacology, pharmacy, and the aging adult: Implications for occupational therapy. In K. F. Barney & M. A. Perkinson (Authors), *Occupational therapy with aging adults: Promoting quality of life through collaborative practice*. St. Louis, MO: Elsevier.

World Health Organization. (2017). ICF-CY, International Classification of Functioning, Disability, and Health: Children & Youth version. Geneva: World Health Organization. <https://apps.who.int/classifications/icfbrowser/Browse.aspx?code=d5702&hsr=1>