Medication adherence is the act of taking medication as prescribed by a physician. This includes consistently taking the proper dose, at the correct time, and for the recommended length of time. However, more than 50% of people do not take their medication exactly as directed by their doctor, resulting in poor outcomes, reduced quality of life, increased hospitalization, and soaring healthcare costs. This phenomenon, known as medication nonadherence (MNA), is a significant healthcare focus and the inspiration for a variety of products and techniques developed with the aim of improving medication adherence, and ultimately, improving healthcare outcomes.
Many people may be challenged by communicating adherence barriers to their healthcare team or are unaware of the health consequences of nonadherence. The reasons for MNA are different for each person but commonly include not understanding the instructions, inability to pay for medication, confusion about dosing schedule, mistaking one drug for another drug, no longer feeling symptoms, not understanding the reasons for taking the medication, and unpleasant side effects.

Having a process to both identify and rectify MNA should be part of the overall treatment plan for patients with acute and chronic illnesses dependent on medication. Fortunately, there are several medication-adherence strategies available today, and more to come as our understanding and technology advance.

Creating an Adherence-Conducive Atmosphere

There is no need to feel ashamed by asking a pharmacist for help understanding medication, including the reasons why it was prescribed, how it should be taken, and the expected side effects. Your pharmacist should maintain a blame-free environment and provide positive support for your health goals. The pharmacist and physician can potentially switch a medication that is causing unpleasant side effects, change the dose timing to work for your schedule, and find cost savings with manufacturer discounts or generic alternatives.

Tools to Help Organize and Remind

Medication adherence becomes more complicated when multiple medications are prescribed, and it is made even more challenging when the dosing schedules differ among them. Elderly patients with chronic diseases can be taking seven or more different medications at a time. Systems that remind people when it is time to take their medication can prove helpful for medication adherence.

A low-tech option that has been used for decades is a plastic pill organizer. This adherence tool helps sort medications by day, and can also include multiple dosing times each day. Organizing medications using simple, plastic pillboxes minimize the chances that a dose will be missed and will also serve as a visual reminder that the medication was or was not taken at its prescribed date and time. Because prescription drugs will be removed from their original bottles with identification labels, there is a risk of confusing different medications. To identify a medication outside of its labeled bottle, you can use online resources such as the Pill Identifier from Drugs.com. Be sure to keep your pill organizer in a spot where you will be reminded to take your medication throughout the day.

Leveraging Technology to Improve Adherence

Some versions of pill organizers have added high-tech features that further support medication adherence, such as alarms that can be scheduled to go off at the recommended dosing times, containers that flash as a visual reminder to take medications, and some that automatically dispense medication into a dosing cup at the correct time.

As many as 77% of people in the United States have a smartphone, which opens up a world of possibilities for medication-adherence support tools. Some pill containers can also synchronize with applications on a smartphone to automatically remind the user to take their medication. Additionally, these tools can help track if medications were already taken and how frequently. They can also be used to track symptoms and side effects.

Some applications, such as MediSafe, even have pill-identification capabilities that allow the person to differentiate a medication from others by shape, size, and color.