

MANAGED CARE

OUTLOOK

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If Medication (Non)Adherence was an Easy Fix, It Might Not Be So Prevalent

Medication adherence (*i.e.*, following a treatment plan developed by an individual's health care provider, filling prescriptions, and taking medications as prescribed) is a serious problem for the U.S. health care system. Nonadherence costs billions of dollars in lost productivity, additional doctor visits, preventable hospitalizations and nursing home admissions, and even premature deaths each year. While the verdict is still out on what exactly needs to be done to address the problem, findings from a recent study suggest personalized health messages may be one viable option.

Findings from a study conducted by Health-Media,¹ AstraZeneca, and Humana reveal that personalized health messages delivered through interactive technology can improve medication adherence to a cholesterol-reducing drug, or statin, that helps reduce the risk of heart attack. More specifically, the study reveals that people who received a personalized behavioral intervention showed greater medication adherence than those who received a non-personalized intervention — promising news to those who conducted the study and possibly others in the industry.

The study was designed as a real-world effectiveness trial to imitate the way interventions would be implemented in a managed care organization. It sought to determine if patients can benefit from personalized, interactive health messages delivered through interactive technology. To maximize the validity of the findings, the personalized behavior intervention represented a mixture of elements from

evidence-based adherence-enhancing strategies grounded in several behavioral theories.

Subjects in the experimental group received personalized behavioral support interactions delivered via an interactive voice response (IVR) system based on their cholesterol-related knowledge, attitudes, beliefs, and perceived barriers to medication adherence. Subjects were also mailed a tailored guide that reinforced similar themes. They were reminded to refill their prescriptions on a timely basis, received positive reinforcement including tips for overcoming barriers and avoiding habit formation, and were encouraged to follow up with their doctor. The control group received behavioral advice from one IVR call that was not personalized, coupled with an untailed self-help cholesterol management guide received through the mail.

“The purpose of this study was to identify what drives or motivates people to adhere to their medication regimen,” explains Steve Schwartz, PhD, research director at Health-Media. “Through an IVR system we reached out to individuals who were prescribed a statin to assess what their unique set of barriers and challenges were and then provided an intervention that dealt uniquely with their set of barriers and challenges. We found rather convincingly that we could improve their adherence to the statin.”

The study reveals not only improved adherence but also a significant overall cost reduction associated with the personalized messages, says Schwartz. Further analysis brings to light

four primary categories of health care costs that influenced the overall cost reduction. Those four categories include inpatient, outpatient, professional services, and pharmacy.

In a separate yet unpublished study conducted by HealthMedia evaluating an online digital self-management program, significant cost savings were identified as well. “Professional services (*i.e.*, anything the doctor charges) remained flat while pharmacy costs went up,” says Schwartz. “We believe this could have been attributed to medication adherence, which is what I would expect to see as a result of individuals adhering to prescribed medication. The savings in both inpatient and outpatient costs more than paid for the increase in pharmacy costs.”

There are several things that are unique about this study, says Schwartz. First, it combines the skills of three different organizations that often do not work together to solve health care problems. It includes a large plan (Humana), a pharmaceutical company (AstraZeneca), and a behavioral science-based digital health coaching company (HealthMedia). It also finds a way to use high technology, combined with behavioral science, to solve the behavioral aspects of health care, which are often overlooked, he adds.

“This study shows that when you couple behavioral science with technology, you can impact the way people manage their health, as long as you have the key elements,” says Schwartz. “The ability to understand the unique nature of the individual at the individual’s level and then apply a unique set of recommendations to that individual is an important development.”

Unfortunately, there is no easy fix to medication nonadherence, acknowledges Schwartz. Ultimately, adherence resides with the patient, and patients are complex. Further complicating the issue is the fact that no two people are alike,

which means there is a huge list of factors that can contribute to whether someone is adherent. Some are attitudinal; some relate to the actual nature of the condition; others focus on side effects or economic factors; some are cultural — and the list continues. In normal clinical operations, physicians simply do not have the time to investigate all the potential barriers to adherence.

HealthMedia offers a digital coaching tool that does the digging for the physician. It is scalable and personalized, meaning it can be tailored to a wider audience but still be personalized specifically to an individual patient. A unique action plan is developed for each individual — no two plans are alike.

“We provide an intervention that’s not just about taking your medication like you are supposed to but also about building adherence into an overall approach to a lifestyle that’s healthier,” stresses Schwartz. “This technology allows us to take each individual and focus on the barriers that stand in the way *for that person*. At the same time, it can also be deployed to a much larger audience, which is one of the things that makes it so unique. For one person, it may be cost. For another it may be the inability to appreciate (or even recognize) improvements in their health, particularly for a condition like cholesterol where you can’t always see the results right in front of you and you may be tempted to ‘give up’ on a medication. We can be there for those people and find out what their struggles are and help them overcome the barriers that stand in their way to adherence.”

For additional information, go to www.healthmedia.com. ■

Endnotes:

1. HealthMedia, Inc. is a Johnson & Johnson company and pioneer in digital health coaching.