

ENCOURAGE Trial - Simple Nudges Improve Statin Prescription Adherence



Statins are an effective medication for treating patients with heart disease. They cut the risk of a second major adverse cardiac event by almost 50\$. But only about 6% of patients take statins as prescribed. One way to solve that? Nudge them. Literally.

In a new study presented to heart specialists from around the world, researchers at the Intermountain Healthcare Heart Institute in Salt Lake City found that simple "nudges" in the form of texts, emails and phone calls, not only help patients fill that first statin prescription, but also continue to help them take their medications over the long term.

"These nudges are helping individuals increase and maintain their adherence to their medications more than the standard approach of giving a patient a prescription with little follow up," said Benjamin Horne, PhD, director of cardiovascular and genetic epidemiology at the Intermountain Healthcare Heart Institute. "Given what we know about statins improving long term outcomes for patients with heart disease, just reminding patients to take their medication can give them a much better chance of survival."

Findings from the study, which are part of the ENCOURAGE trial, a randomised clinical trial on the improvement of medication adherence through the implementation of personal nudges, were presented at the 2019 American Heart Association Scientific Sessions in Philadelphia.

For the study, researchers identified 186 adults from Intermountain Healthcare cardiovascular clinics who had a statin prescription and were also enrolled in Intermountain's SelectHealth insurance. Patients were randomised so that half of them received nudges about their statin prescriptions (personalised in format and message per patient), and half received standard control care.

Nudges were personalised using machine learning techniques based on the patient's psychographic profile (e.g., their perspectives, impressions, and opinions about healthcare) and their health status and needs. The analytic methods segmented patients into groups of individuals who had similar perspectives and needs. The content of each nudge, as well as the timing, frequency, and mode of contact, were precisely matched to the characteristics of each patient.

Researchers then tracked passively using medications claims data how often patients filled and refilled their prescriptions to determine their proportion of days covered by statins.

Researchers found that patients who received nudges were more likely to take their medications and had a higher percentage of the proportion of days covered (80%), meaning that they had better adherence to their prescribed statins. They also found that patients in the control arm had gradual declines in proportion of days covered over the 12 months of the study, while those in the nudge group had a larger rate of adherence at the beginning of the study after their clinic visit.

"The group that received nudges then held those gains steady across the length of the study," said Dr. Horne.

These kinds of reminders are becoming more important in healthcare, said Dr. Horne, as less treatment is happening inside a healthcare setting, and as the popularity of technologies, such as wearables and smart watches, make these kinds of reminders possible.

"Nudges support and guide decisions made by the patients. We're not trying to take away any other options or stop them from making any specific decisions. It's just trying to make the right decision a little bit easier for the patient," added Dr. Horne.

Source: AHA Scientific Sessions 2019/Intermountain Medical Center

Image Credit: Intermountain Healthcare

Published on: Sat, 23 Nov 2019