"Please Take Your Medication!" The Impact of Marketing Communications on Medication Adherence

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Abstract

Medication Adherence is of vital importance to patients with chronic medical conditions. With the wide availability of smartphones, many medical providers and pharmacies now allow patients to communicate with their doctors and pharmacists and order or refill prescriptions on the mobile app. This study investigates the influences of doctor consultations, customer service calls, and mobile reminders on medication adherence of patients who use these mobile apps. For this purpose, we apply advanced machine learning techniques on text and audio data representing such marketing communications. We find that the frequency and content of marketing communications significantly impact patients' medication adherence. Patients' medication adherence improves, for example, after consulting doctors on issues possibly jeopardizing their health, and after service representatives resolve issues pertaining to their order. Vocal tones of service representatives also have significant effects in terms of both directly influencing medication adherence and moderating the effects of the contents of the marketing communications. We discuss marketing implications for medical providers.