

Physician peer influence affects repeat prescriptions

July 14 2015

A new study published in *Marketing Science*, a journal of the Institute for Operations Research and the Management Sciences (INFORMS), finds that peer influence among physicians can affect both trial and repeat prescription behavior of a risky new prescription drug.

The study, *Social Contagion in New Product Trial and Repeat*, tracks prescriptions of a new drug over 17 months, and measures the discussion and patient referral connections among physicians in New York, Los Angeles, and San Francisco. The research was conducted by professors Raghuram Iyengar and Christophe Van den Bulte of the Wharton School, University of Pennsylvania, Philadelphia and Jae Young Lee of School of Business, Yonsei University, Seoul, Korea.

Conventional thinking suggests that repeat prescriptions are primarily dependent on users' experience. The authors observe that repeat prescriptions are apparently affected by physicians' peers. They suggest that peer influence is not only informational but can also be "normative."

Informational peer influence exists when people observe the behavior of their peers to learn about the new product's effectiveness or ease of use. Normative peer influence exists when people conform to others' expectations about accepted behavior.

"Whereas informational influence is likely to decrease or even vanish as people proceed from first-time to repeat use, normative influence need not decline at all and may even increase," says Raghuram Iyengar.

Those who are most influential differ between first-time and repeat use. Physicians, who are central in the social network and prescribe heavily, influence others in first-time use but not their repeat use. On the other hand, nearby colleagues influence repeat prescriptions.

Physicians who do not consider themselves opinion leaders are most easily influenced about first-time use. For repeat use, in contrast, it is physicians in the middle of the status distribution, measured by how others turn to them to discuss treatment options or refer patients to them. Those at the very top and the very bottom of the status hierarchy don't appear to care what their colleagues do.

"For public health officials and pharmaceutical managers, the findings suggest that campaigns to leverage [peer influence](#) should be designed and targeted differently, depending on whether they want to increase first-time use or repeat use," says Christophe Van den Bulte.

Jae Young Lee adds, "Managers should target centrally located physicians for first time use and co-located [physicians](#) for repeat use. Managers should emphasize reducing perceived risk for first-time use and conforming to local norms for repeat use."

Provided by Institute for Operations Research and the Management Sciences

Citation: Physician peer influence affects repeat prescriptions (2015, July 14) retrieved 26 April 2024 from <https://phys.org/news/2015-07-physician-peer-affects-prescriptions.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.