The Hong Kong University of Science and Technology

Dept of Information Systems, Business Statistics and Operations Management Dept of Industrial Engineering & Decision Analytics Joint Seminar Announcement



To Err is Human: A Field Experiment in Making Prescriptions Safer by Prof. Vivek Choudhary Nanyang Technological University, Singapore

Date : 28 February 2025 (Friday)

Time : 10:30 – 11:45 AM

Venue : Case Room G003, LSK Business Building

Abstract: Can a simple and non-mandatory intervention enhance the safety of prescriptions by reducing errors, when mandatory systems often fail due to high override rates by doctors? We study the high incidence of Drug-to-Drug Interactions (DDIs) in prescriptions, which can lead to significant patient harm. We analyze data from a randomized field experiment in partnership with a leading health-tech platform in India using 2.81 million prescriptions from ~1700 doctors. Treatment doctors received real-time information on potential errors without requiring obligatory responses. Using difference-in-differences we estimate that treatment group prescribed ~8.6% fewer errors. Employing a theoretical framework, we find that doctors effectively learn, avoiding prescribing DDIs and reduce repeated errors. The effect remains consistent regardless of physician fatigue and does not negatively influence productivity or the quality of care. Our results indicate that providing autonomy to doctors can reduce medical errors and promote learning.

Bio: Vivek is an Assistant Professor in ITOM, NTU Singapore. He studies behavioral operations problems on service platforms. His research examines various platforms including Last mile delivery, Health Tech, and Insurtech platforms. Vivek employs techniques such as Field Experiments, Machine Learning, and Econometrics in his work. He holds a PhD from INSEAD. Prior to that he was a management consultant with McKinsey & Co. He is the coordinator for the OM PhD program. His papers have been published in Management Science and Manufacturing & Service Operations Management. His research has been covered in Harvard Business Review and INSEAD knowledge. He has published several case studies. He serves as the advisor for many startups.