

00023 **Diffusion of Innovation in Primary Care: A Review of the Literature on Factors Affecting Physicians' Decision to Adopt New Medicine**

Clement Lim¹, Leng Ho Keat²

¹Nanyang Technological University, ²National Institute of Education

Aims: Diffusion of drugs amongst prescribers is often the last but most crucial step in the drug development process as patients will not be able to benefit from novel medicines if physicians do not adopt these agents. The diffusion process is a complex interaction that reflects attributes of the new drugs as well as characteristics of the potential prescribers and patients. The aim of this paper is to propose a framework based on empirical findings from the literature to encapsulate this complex interaction.

Methodology: A search for relevant research papers was conducted using the electronic databases PubMed and Scopus for the period of 1980 to the present year. Through the means of a four-layered string search, 205 potentially relevant papers in various disciplines including medicine, healthcare and decision-sciences were identified. 35 studies eligible studies were synthesized critically, with a conceptual framework being developed to include factors found to affect the decision to adopt new medicine. Subsequently, the framework was refined by categorizing the factors.

Result: The literature review found that at the level of the individual physician, factors positively influencing the likelihood of early adoption include interest in particular therapeutic areas, participation in clinical trials, and volume of prescribing. Environmental factors that can affect the prescription of new drugs include the marketing efforts of pharmaceutical companies as well as the type and frequency of doctors' professional and social interactions leading to prescribing contagion. Finally, physicians are also likely to consider the patient's attributes. Physicians are more likely to prescribe new drugs to patients that are younger and with higher socioeconomic statuses and/or poorer health status.

Conclusion: The process of diffusion of new medicines amongst prescribers is complex. Understanding the factors influencing the decision making process involved in new medicine adoption is important and may result in shorter time between drug discovery and drug access.