

# Predicting Two Period G.P. Prescribing

**Giang Trinh**

Ehrenberg-Bass Institute University of South Australia

**Philip Stern**

University of Exeter Business School & Ehrenberg-Bass Institute University of South Australia

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# Predicting Two Period G.P. Prescribing

## **Abstract**

This paper applies the well-known stochastic NBD model to doctor prescribing behavior. We examine prescribing of three anti-depressants in the UK over two years, and show that the NBD is very robust in describing and predicting physician behavior. The results suggest that doctor prescribing can be modelled as a random process and the underlying stochastic assumption has important implications for pharmaceutical and healthcare marketers. These implications include the appropriateness of segmenting and targeting doctors and predicting future doctor prescribing behavior.

**Keywords:** *Physician behavior; Prediction; NBD*

**Track:** Public Sector and Non-Profit Marketing