

# Understanding Deductible and Reimbursement Maximum: A Study of Rural China's Tiered Medical System

Castiel Chen Zhuang<sup>1</sup>

Department of Economics, University of Washington

December 13, 2021

[\(Click to view the most recent abstract\)](#)

## Abstract

A high-deductible coverage is shown to reduce inappropriate health care, while little is known about its effect on social welfare under a reimbursement limit. This paper utilizes a large claims level dataset from rural China and estimate preferences of inpatients under tier-dependent nonlinear cost-sharing schemes. Patients with high health risks prefer generous hospitals for financial protection, but it is countervailed by a potential mistrust of quality—this partly explains why patients with common diseases or minor illnesses may bypass primary care; moral hazard increases with health risks and willingness to pay in general but is modest. Increasing all hospitals' deductibles by 1,000 yuan improves social welfare by 2 percent and encourages more patients with lower health risks to visit lower-tiered hospitals and save the medical resources in higher-tiered hospitals for advanced treatments; the current reimbursement maximum is close to the optimal, and the additional insurer cost and efficiency loss of increasing the limit to promote policy acceptance do not outweigh the positive effects of higher deductibles.

**Keywords:** hierarchical medical system, hospital choice, moral hazard.

**JEL Classification:** D12, D81, D82, G22, I13.

---

<sup>1</sup> There will be two “data” coauthors, Julie Shi and Xi Wang, from School of Economics at Peking University. Email: [cczhuang@uw.edu](mailto:cczhuang@uw.edu). We are grateful to Shi Chen, Rachel Heath, Vanessa Oddo, Yuya Takahashi, Xu Tan, Jing Tao, and seminar participants in the Department of Economics at University of Washington for their helpful comments. The authors are responsible for all errors.