

論文の内容の要旨

論文題目 Essays on Health Economics

(医療経済学に関する研究)

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This doctoral dissertation consists of three empirical studies on health economics related to healthcare and long-term care system in Japan. As in other developed countries, the total health care expenditure in Japan has skyrocketed mainly due to the rapid aging of the population. To make health care systems sustainable, it is increasingly important to enhance the efficiency of the health care system and make effective use of limited resources. The purpose of this dissertation is to clarify the incentive structure of people in the healthcare and long-term care system and to contribute to building a more efficient social security system in the future.

Chapter 2 investigates how financial incentives affect hospitals' inpatient care by exploiting the introduction of a new payment system in Japan. The new payment system called DPC/PDPS (DPC) has a feature of per-diem prospective payment and it is applied to large hospitals as a replacement for the traditional fee-for-service (FFS) payment system. Using patient-level discharge data of circulatory disease during 2008-2009, I find that DPC reduces LOS and medication, but the surgical procedure is not affected. I also show that the number of discharged patients significantly increase right before the drop of per-diem reimbursement. Furthermore, I find that the health effect of DPC is negligible.

Chapter 3 addresses the empirical question that how does the generosity of social insurance coverage affects the demand for healthcare and health outcomes for the elderly. I examine the effect of insurance coverage on long-term care utilization and its health consequences using novel administrative data on public long-term care insurance (LTCI) system in Japan. The LTCI coverage is determined by a standardized health index and there exist multiple thresholds that generate discontinuous changes in the insurance coverage limit. Using a regression discontinuity design, I find that the coverage expansion significantly increases recipients' long-term care utilization even without changing the prices they face. I also find that utilizing more long-term care has little effect on health outcomes. Together, these results suggest that generous LTCI coverage could induce excessive utilization mainly due to behavioral biases without having health benefits.

Chapter 4 examines the economic consequences of the manipulation of social insurance benefits. This chapter is co-authored with Takuya Ishihara. We show that there is a bunching in a distribution of the health score determining a benefit level of LTCI in Japan. The observed distribution suggests that recipients of LTCI receive more generous benefits due to the manipulation of the score. To quantify the impact of manipulation on long-term care expenditure, we develop a nonparametric partial identification framework exploiting general shape restrictions on counterfactual distribution. We find that the manipulation increases annual long-term care expenditure by at least 629 USD per recipient.