

Hold-up in the Health Insurance Market

Rhema Vaithianathan

This paper offers a novel explanation for a number of empirical observations in the US health insurance industry, namely, partial insurance market coverage and the emergence of Health Maintenance Organisations (HMO) and Preferred Provider Organisations (PPO). I model equilibrium in the health insurance and physician market as a two-stage game. Consumers are risk averse, heterogeneous with respect to marginal cost of health care, and fall ill with some probability. In the first stage, a monopoly insurer sells insurance contracts consisting of a premium and a coinsurance rate specifying the portion of health care costs borne by the consumer. In the second stage, consumers who fall ill, buy health care from a monopoly physician. Because coinsurance reduces the elasticity of demand with respect to physician prices, the physician price discriminates on the basis of coinsurance rates, and increases price to consumers facing low coinsurance rates. Such discriminatory pricing, which is frequently observed in the US health care market, enables the physician to extract surplus created in the insurance market and therefore diminishes the value of insurance to both the consumer and insurer. I show that the sub-game perfect equilibrium of this game is for low cost consumers to remain uninsured. This 'hold-up' problem is solved if the physician and insurer integrate into a Health Maintenance Organisation, or negotiate a price agreement prior to writing the insurance contract (as is the case with Preferred Provider Organisations). Both approaches improve insurer and physician profitability, and restores complete insurance market coverage.

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Correspondence:

Rhema Vaithianathan

Department of Economics

University of Auckland

r.vaithianathan@auckland.ac.nz