

Induced Physician-Induced Demand*

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Abstract

We investigate the adoption and usage of expensive medical equipment, particularly MRI, using the panel data on all the Japanese medical institutions. We find that MRI adoption creates business-stealing effects on nearby hospitals, which further induces physician induced demand. Public hospitals does not take the expectation of future increase in patients into account when purchasing MRIs, and, as a result, greater business-stealing effect and physician-induced demand are created compared to MRI adoption of private hospitals. Our results suggest that adoption decision of expensive medical equipment needs to be made collectively rather than individually to avoid not only excessive adoption but also unnecessary physician induced demand.

JEL Classification: I11, I12, I19.

Keywords: Physician-induced demand, Business-stealing effects, MRI, Externalities.

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