Health care costs and the diffusion of medical technologies

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Objective

Investigate to what extent health care technology may be an important explanatory factor of health care costs in Switzerland.

Methodology

We capture health care technology through the availability of infrastructure-intensive capabilities involved in diagnostic imaging, in the treatment of cardiac and cancer patients, and newborns. We propose to build a unique panel data set at the canton-level based on data from various federal and cantonal offices, medical associations as well as our own data search.

We propose to assess the impact of technology availability on health care costs while controlling for the possible endogeneity of health technology availability variables. Instrumental variables methods will be used.

Furthermore, we will estimate a system of equations studying jointly the impact of technology diffusion on costs and the factors associated with the diffusion of several technologies, thus controlling for the fact that some technologies might be complements or substitutes.

Contribution to the literature

This research represents a significant contribution to the literature assessing the impact of technology on health care expenditures and to the literature identifying the determinants of health technology adoption. It will also have major health policy implications.

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