

# The Impact of Decentralization on the Provision of Public Health Insurance\*

Evidence from Canadian Formulary Adoption Decisions

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## Abstract

This paper studies fiscal federalism in the context of public health insurance. Specifically, we study how provincial governments in Canada decide on what pharmaceuticals to cover as part of their provincial health plans (i.e their formularies) using a unique panel on province-drug adoption decisions, for 1200 drugs from 1993-2008. We develop and estimate a dynamic model of provincial drug adoption that accounts for province-specific tastes for different therapeutic classes of drugs, and sunk adoption costs required for drug listings. Our model allows for the possibility of strategic delay in adoption decisions, which arises if adoption costs are declining in the number of provinces that adopt a given drug. We estimate the model using recent innovations in the estimation of dynamic games developed by Aguirregabiria and Mira (2007). The estimated model is used to evaluate two important healthcare policies. First, we evaluate the impact that the Common Drug Review, a national institution that is founded in 2003 to perform experimental evaluations of new drugs on behalf of the provinces (with the exception of Québec), has on reducing duplication in experimental adoption costs, and on provincial free riding in drug adoption. Second, we evaluate a counterfactual policy proposed by the Romanow Commission (2002), who recommend that Canada nationalizes its drug insurance plan in lieu of the current decentralized provincial-based insurance schemes.

**JEL Classification:** H51, I18, C35, C63

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