

## Optimal payment schemes for physicians\*

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**Abstract.** Increasingly, physicians' payment schemes are being reformed to enhance performance and to ensure an optimal allocation of scarce medical resources. The empirical evidence points towards the use of mixed payment schemes that appear better at achieving efficiency than either lump sum payments (such as capitation) or piece rates (fee for service). Yet, this alleged superiority remains to be established from a theoretical standpoint. The Principal-Agent model developed in this paper offers a contribution in this line, with a primary care physician as agent and a public regulator as principal. Alternative specifications of the principal's objective function are considered in the model (efficiency versus fairness). Uncertainty is introduced by two random variables that represent the probability for an individual of being ill and his productivity parameter which determines the amount of resources (the physician's effort in particular) necessary to restore health. The relationship is characterised by information asymmetry since the physician is assumed to observe both variables after the contract has been signed, but before choosing his effort level. Both selection and moral hazard issues are addressed in the model and the results show that, under GP risk neutrality, mixed payment schemes fully correct for both types of information asymmetry.

**Key words:** Primary care – Payment schemes – Asymmetry of information

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