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# Who joins the network? Physicians' resistance to take budgetary co-responsibility

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ABSTRACT

Managed Care (MC) is expected to provide health care at a lower cost than conventional provision. Therefore, Switzerland intends to promote MC by forcing health insurers to write MC contracts and introducing budgetary co-responsibility for ambulatory care physicians. A discrete choice experiment conducted in 2011 including 872 physicians reveals a strong preference heterogeneity with respect to network participation and alternative remuneration schemes. The number of physicians working in networks is unlikely to rise on a voluntary basis, while general practitioners are more likely to join networks than specialists with surgical activities. For physicians considering joining networks, cost savings are predicted to be higher than the estimated willingness-to-accept payments.



## 1. Introduction

Over the last decade health care expenditure in most OECD countries has grown at a faster rate than the gross domestic product (GDP). Even if the national health care systems are organized differently, most countries face similar challenges. Firstly, there is a rising demand for medical services. On the one hand, an aging society and other demographical changes lead to more people in need of medical treatments and the number of patients with chronic diseases or co-morbidities is on the rise. On the other hand, additional demand originates from the coverage of uninsured citizens. A prominent example for the latter is the United States under the Affordable Care Act. Secondly, the number of innovative, but expensive therapies has increased. As a consequence, health care expenditure measured as a share of GDP increased to 17% in the United States in 2012, the highest share worldwide according to statistics from the OECD (2013). By comparison, Western European countries typically spent between 10 and 12% on health care. Only the Netherlands, France and Germany paid a higher share than Switzerland, where health insurance premiums have increased by 3.6% per year over the last decade according to statistics from the Federal Office of Public Health.

In the aftermath of the financial crisis and in the wake of the economic downturns, financing health care became an issue for many governments. An important contribution to lower health care costs is expected through a paradigm shift in physician reimbursement from fee for service to capitation. Under conventional fee for service, medical services are remunerated according to an administrated fee schedule, while under capitation a prospective payment is paid to the health care provider, e.g. a payment per enrollee per month. Transferring more cost responsibility to health care providers is seen as one way to reduce health care expenditure due to the avoidance of unnecessary medical treatments. For this reason, the so-called Alternative Quality Contract (AQC) was designed in the United States and is currently used by the Blue Cross Blue Shield of Massachusetts. Already more than two decades ago, the United Kingdom introduced its GP fundholding allowing larger general practices to work under a global budget for hospital referrals with the possibility to retain a surplus as a bonus.[1]

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[1] These two forms of risk sharing are discussed in more detail in the literature review.

Switzerland intends to introduce similar cost incentives for health care providers through the encouragement of Managed Care (MC). MC is understood as a model to introduce incentives for health care providers and patients with the goal to increase treatment quality and to reduce health care expenditure. While MC is the dominant form of health insurance in the United States, it is less established in Europe. Even if Switzerland was the first European country to allow MC contracts in its social health insurance in the 1990s, as discussed in Beck et al. (2009), the share of capitation policies has remained low (5.5% in 2011). Although half the population signed a insurance policy accepting some kind of restriction in return for a lower premium, the promotion of MC remains on the political agenda because several studies have shown that MC leads to lower health care expenditure (e.g. Berchtold and Hess, 2006; Beck et al., 2009; Reich et al., 2012).

### 1.1. Institutional background

The Swiss health care system is financed by a dual system composed of a compulsory basic health insurance and an additional voluntary insurance (e.g. free hospital and physician choice, private rooms in hospitals). The mandatory coverage includes most health care services and is written by about 70 competing private health insurers. The health insurers are not allowed to make profits for the compulsory coverage but for the voluntary coverage. The premium for the basic insurance depends on gender and area of residence, but not on health risk and income. Premium subsidies are granted to low-income citizens and are funded through general taxes. To set incentives for individuals not to consume unnecessary medical services, two cost-sharing incentives are installed. First, individuals have to choose one of six deductible levels that affect the final premium level. Second, a co-payment of 10% – limited to CHF 700 (USD 840 in 2011) per year – is imposed for annual costs exceeding the deductible. Insurers must accept all applicants for the mandatory coverage but are allowed to use medical underwriting to reject applicants for supplementary coverage. To mitigate risk selection for healthy risks in the basic insurance, a national risk adjustment scheme is in place, compensating insurers with a riskier portfolio than the Swiss population. Recently, a shift from conventional insurance plans to MC policies took place. The main reason for a shift in the demand toward MC policies are the lower premiums granted in return for the acceptance of certain restrictions, e.g. accepting a gatekeeper and giving up free physician choice. As a consequence, health insurers have to contract with additional physicians, physician networks, and Health Maintenance Organizations (HMOs) to enroll their portfolio. Additional information about the Swiss health insurance system can be found in Trottmann et al. (2012).

In Switzerland, ambulatory care is predominantly provided by independent private practice physicians. These are mostly paid through fee for service. Only a small number of ambulatory care physicians works in MC-type arrangements, where alternative remuneration models like capitation are used, but according to Berchtold and Peytremann-Bridevaux (2010) every second general practitioner and more than 400 specialists have cooperated with an established medical group in 2010. Contracting with these organizations is getting more important today with the increasing demand for MC plans, mainly because these are cheaper than conventional plans. A common contract form is what Reich et al. (2012) call a contract model with capitation. In this set-up, a health insurer contracts with either a group of (independent) physicians organized as a network or an HMO. These organizations agree to provide health care for the enrollees and to accept a global budget, which is calculated as a per patient per year payment. As Reich et al. (2012) emphasize, the global budget is in practice a virtual cost target and not an actual payment to the organization. The medical services are reimbursed through conventional fee for service, but the global budget (called spending target in the remainder of this article) is used to introduce a bonus/malus system as discussed in Section 3.

### 1.2. Health care reform

In 2012, Switzerland held a referendum with the intention to increase the quality and the efficiency of the health care system mainly through a better cooperation and coordination among health care providers. The government aimed at encouraging the nationwide development of MC networks. Among other changes, the legislative proposal encompassed that health insurers have to sign contracts with physician networks to govern their cooperation, data exchange, quality assurance, and the remuneration. In addition, the legal text contained that the health care providers organized in physician networks are financially responsible for the medical provision of the network-insured individuals. In other words, the implementation of a budgetary co-responsibility for ambulatory care physicians was intended. The referendum was rejected by a strong majority of voters (76%). The main reason for rejecting the referendum was not the implementation of budgetary co-responsibility. The physician community successfully campaigned against the referendum with the argument that the reform would abolish free physician choice because the reform also intended to impose a higher co-payment for patients that were not treated in a physician network (NZZ, 2012).

Even if the health care reform was rejected, budgetary co-responsibility remains of central interest for both, private health insurers as well as the government. Therefore, a better understanding of physicians' preferences for alternative reimbursement systems and their willingness to accept budgetary co-responsibility is of great interest. Hence, the objective of this article is to measure physicians' preferences to work in networks and accept budgetary co-responsibility. Willingness-to-accept (WTA) values are derived using a discrete choice experiment including 872 ambulatory care physicians surveyed in 2011.

The article is organized as follows. Section 2 gives a short literature review of physician preference studies and the design of payment incentives for physicians. Section 3 discusses how budgetary co-responsibility can be designed and describes how physicians' risk aversion can be expressed in WTA values. Section 4 presents the modeling approach, derives expected preference tendencies for or against reimbursement attributes used in the experiment, and explains the design of the discrete choice experiment. In addition, physician's utility derived from alternative reimbursement designs and the applied econometric model used to elicit the preference weights is discussed. Section 5 describes the survey data. The estimation results are interpreted in Section 6. The concluding Section 7 compares the estimated willingness-to-accept values with potential cost saving through global budgets and outlines the implications.

## 2. Literature review

A broad international literature on incentive pay exists, which mainly revolves around the impacts of differently designed incentive schemes to improve the performance of the employees (see Ichniowski and Shaw (2003) and Gibbons (1996) for an overview). With respect to physician payment, the focus is on installing incentives regarding the effort of ambulatory care or hospital physicians, mainly by replacing conventional fee for service by global budgets. As discussed by Robinson (2001), physician remuneration