

# Selective contracting of Swiss physicians: ethical issues and open questions

Samia A. Hurst, Alex Mauron

Bioethics Research and Teaching Unit, Medical Faculty, University of Geneva, Switzerland

## Summary

One of the many important ethical issues raised by health care systems is how best to sustain equity. As conflicting individual interests are inevitable within a health care system, issues of fairness are bound to arise. Changes in the structure of a health care system are thus key events that can affect equity in important ways. Using the “Benchmarks of Fairness” approach, we assessed the possible effects of introducing selective contracting of

physicians on the equity of the Swiss health care system. This approach yields a number of open questions that need to be further addressed if this proposed reform is to be implemented without diminishing the fairness of health care financing and delivery in Switzerland.

*Key words: managed care programs; Switzerland; ethics; healthcare system; health policy*

## Introduction

Health care systems are complex structures that are maintained to address the medical needs of a population in specific ways. How they are constructed will affect how vulnerable persons are taken care of, how much the healthy will pay for the sick, how much citizens can expect to be helped when they become ill, and how much their health-related concerns will be taken into account at that time. Thus, the shape given to health care systems, and the way in which they change, can pose a number of ethical problems and difficulties.

One of the many important ethical issues

raised by health care systems is how best to sustain equity. As conflicting individual interests are inevitable within a health care system, issues of fairness are bound to arise. This can happen as a result of existing aspects of the health care system, but also when changes are being implemented. In this paper, we will evaluate the possible impact on equity of a currently proposed health policy change, namely abolishing the obligation to contract in the Swiss health care system, and replacing it by selective contracting of physicians by health insurance funds.

## The importance of equity in a health care system

A health care system needs to be equitable for several reasons. Some are based on ethical values, and some are more pragmatic in nature. The first reason is that we should recognise that illness and suffering are part of our common humanity. They should not be treated in some people and not others. Secondly, the fact that “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being” has been recognized by WHO and by member states [1]. Thirdly, if we recognise that all should have equal opportunities to a range of life choices, then access to health care should be equitable because health is a pre-requisite to having a full range of life options [2].

Even if we did not recognize the importance

of equity in health care for these reasons, we would still have reasons, albeit more pragmatic ones, to promote it. Firstly, our individual health care needs are not foreseeable. The health care needs of large groups, however, can be predicted to some degree. Thus, we all benefit from pooling risks. We also have an interest that this should apply as broadly as possible to all health risks, as we do not know presently what our individual need will be in the future. Secondly, illness can damage our wealth by affecting our ability to earn an income. Thus, if we tolerate a health care system that only responds to the needs of the rich, each of us risks being among those left behind. Thus, both for ethical and for pragmatic reasons, it is important to support an equitable health care system.

## Assessing equity

As applied to health and health care, the very concept of equity is difficult to define [3–8]. Thus, the equity of a health care system cannot be evaluated without first choosing the type of concept that will be used for this purpose. Very abstract concepts of equity then need to be interpreted in terms of concrete concerns. Once this has been done, an assessment of equity in a health care system can be performed on at least three levels. Firstly, one can evaluate the equity of the health

care system as a whole. Secondly, the equity of specific aspects of the health care system, such as access to health care, can be estimated. Finally, the impact of a policy change on the equity of the system can be predicted to some degree. Each type of assessment is difficult, and methods addressing each level have been proposed and reviewed [3, 5, 9–18]. As we intend to examine a proposal for reform, we will concentrate on the third type of assessment.

## The “benchmarks of fairness” approach

One of the proposed methods to assess the impact on equity of a health care system change is the “Benchmarks of Fairness” approach [12, 17]. This method, which was developed in the United States but quickly became international, is a tool for evaluating the impact of a system change on the equity of a health care system. When negative effects on equity are anticipated it also helps identify precautions that may be needed to minimize such im-

pacts. This approach has several strengths. It is a systematic tool and can help to elicit a comprehensive picture of how a health policy change affects the equity of the health care system. Furthermore, where an assessment is made difficult or impossible by lack of information or of clarity in the proposed policy change, this method is a useful tool to identify areas of vagueness and lack of data. Finally, as a practical tool, it has stood the test of field applications in several countries.

The domains of the nine “benchmarks of fairness” are shown in table 1. For each benchmark, more specific criteria have been proposed [17]. The impact on equity in each domain is assessed by examining whether the policy change is expected to increase equity, decrease it, or leave it unchanged in the domain of each benchmark. This can be done using a quantitative scoring system where the status quo is scored as “0” and positive and negative impacts are scores from “+5” to “–5”, according to their degree. If numbers are seen to cause confusion or are deemed unhelpful, a qualitative scoring of “plus” or “minus” can also be used. Figure 1 illustrates both of these possible scoring systems.

Using this approach, the proposal to introduce selective contracting can be assessed in terms of its impact on the equity of the Swiss health care system.

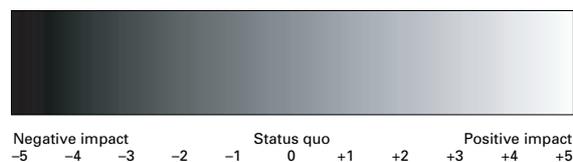
**Table 1**

The domains of the nine “benchmarks of fairness”.

	best	worst
Intersectoral public health	+	–
Financial barriers to equitable access	0	–
Nonfinancial barriers to equitable access	+	–
Comprehensiveness of benefits and tiering	0	–
Equitable financing	0	–
Efficacy, efficiency and quality of health care	+	–
Administrative efficiency	0	–
Democratic accountability and empowerment	+	–
Patient and provider autonomy	0	–

**Figure 1**

Scoring systems.



## The Swiss proposal and the international situation

Under the current proposal to introduce selective contracting of physicians by insurance funds in the Swiss health care system, health insurance funds would no longer be obliged, as they are now, to reimburse acts performed by all physicians to whom the state has given a right to practice medicine in private practice. Cantons would have the right to determine, for each category of physicians, the number they deem to be necessary to cover the needs of their population. Health insurance funds would choose whom to contract with, but would be under an obligation to contract at least with the

number of physicians deemed necessary by the canton. Physicians who are rejected by a health insurance fund would retain a right of appeal. Although it was rejected as part of the second revision of the Swiss Health Insurance Law in December 2003, this proposal remains on the agenda [19].

Selective contracting has been discussed and sometimes implemented in several countries other than Switzerland. As a tool used by state health authorities, it was implemented in a restricted manner in Sweden. As regional municipal health authorities were, in effect, contracting out to pri-

vate providers, this had the unusual effect of actually increasing patient choice of providers [20]. Selective contracting of providers by health insurance funds has also been discussed in Germany [21], where the possibility of implementing it has been increased by the Reform Act of 2000, which removed the requirement to obtain approval to contract selectively from physicians' associations [22]. In Holland, selective contracting has been possible since 1996 [23]. It was introduced in Australia in 1995 both for hospitals and physicians, but for private insurance only [24]. In the US, the best documented case is California, where selective contracting became possible in 1982 [25–28]. In

1990, over 685 “preferred provider organization” plans, that use selective contracting, were offering care to more than 36 million insurance enrollees in the US [29].

In several instances, selective contracting was abolished or limited after being tried out. In the US, several states have enacted “any willing provider” laws [30]. Health insurance plans are also increasingly giving up selective contracting, which may enhance their ability to compete on the basis of price, but decreases their ability to compete on the basis of key attributes such as convenience and quality of care [31].

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## Introducing selective contracting in Switzerland: a case study

We examined the proposed policy change of introducing selective contracting in the Swiss health care system using the “Benchmarks of Fairness” approach. One of the results generated by this approach is that it identifies a number of open questions regarding the proposed policy change. Consequently, for each benchmark, we have assessed the possible impacts in a best and a worst-case scenario. This was done by carefully scrutinizing the possible effects of this proposed reform on the Swiss health care system in each of the Benchmarks of Fairness domains. We discussed these until we reached consensus on two points. Firstly, that we had covered the main possible effects and, secondly, whether these effects should be considered as positive or negative. This methodology is based on that used by the authors of the method in their own assessment of several reform proposals in the US health care system [12]. We tested our assessment by presenting it to a wider group of professionals involved in health care policy, and included their proposed changes. We chose not to give numbered scores to the possible effects we identified in each domain, but to use the qualitative assessments of plus for a positive impact, minus for a negative one, and zero when we did not identify a departure from the status quo.

A summary of the resulting scores is shown in table 1. The questions raised during the entire assessment process are shown in table 2.

### Intersectoral public health

As one of the effects of this policy change could be to give more power to health insurance funds than they currently have, it could also place them in a better position to engage in coordinated efforts for prevention. If they do, the effect in this domain could be very positive. If they do not, however, a negative impact could result, as a limitation in the number of physicians could limit the time available for prevention during patient consultations.

### Financial barriers to equitable access

The proposed reform does not affect the fundamental principle of universal health insurance guaranteed by the Swiss Health Insurance Law. At best, the status quo would thus be preserved. There is, however, a risk that physicians who treat certain kinds of patients, for example those most likely to generate high costs, will be systematically rejected by insurance funds. If this were the case, these patients would find themselves *de facto* deprived of health insurance, and financial barriers could hinder their access to health care. In the 1980s, California's public hospitals, which provided more care for the indigent, were first-line victims of selective contracting [32].

### Nonfinancial barriers to equitable access

By making the assessment of needs a local matter, this policy change could encourage physicians to practice in underserved regions. It could also encourage specialization in underserved areas of medicine.

At worst, however, the assessment of need may not be local enough, or sensitive enough to less recognized health needs. For instance, cantons that have a large rural area as well as major cities could experience a higher degree of disparity in physician population than before, if decreasing the number of physicians yields a lower number willing to practice in rural areas.

Additionally, while price negotiation and selective contracting have been successful in slowing cost growth in the United States [33, 34], it seems that encouraging more efficient provision of health care through selective contracting while maintaining full population coverage is more difficult than was anticipated [35, 36]. This may be due to several factors.

One risk is that insurance funds, by chance or by choice, could systematically select against physicians who engage in certain types of care. This has been shown to be the case regarding substance abuse treatment in the US [37]. Physicians who provide care to uninsured and non-white pa-

tients, i.e. less economically interesting populations, were shown to be more likely to be refused contracts in California [38].

Moreover, if physicians fear that they will be rejected by health insurance funds on the basis of cost, they could refuse to treat patients who are more likely than others to generate high costs. Importantly, this effect would not require an intention on the part of health insurance funds to reject physicians on economic motives. All that would be required for this negative impact to occur is that physicians fear that treating "expensive" patients could endanger their contract, and act accordingly. Thus, avoiding this effect would require that health insurance funds 1) refrain from placing physicians who accept "expensive" patients at risk, and 2) clearly and credibly make this known. Alternatively, state regulations could restrict some aspects of their freedom to contract. Implementing either one of these measures would restrict the scope of selective contracting, and thus partly defeat its primary purpose. Importantly, however, achieving cost savings and admitting less economically interesting patients for treatment may be in contradiction. Thus, sustaining the equity of the Swiss health care system will require such limits on the scope of selective contracting.

It could be pointed out that an alternative risk may be the very opposite and that physicians may react to cost pressure by increasing service volume and focusing on expensive interventions [39]. This would hinder cost containment and diminish the effectiveness of the reform in achieving cost savings. It would also make access to more mundane care more difficult, and thus introduce an additional non-financial barrier to equitable access, namely, the nature of the intervention needed.

### **Comprehensiveness of benefits and tiering**

The package of health care services covered is not the target of this reform. Thus, at best, nothing will change regarding this benchmark. However, as this reform will limit the number of physicians with whom each insurance fund contracts, it will affect the freedom to choose one's physician. Importantly, it could do this unevenly. Nothing in the proposed reform bars insurance funds from offering the freedom to choose one's physician as voluntary additional insurance. Thus, access to a physician of their choice not otherwise covered by their insurance fund could be accessible to those who are willing to pay and healthy enough to be eligible. In Switzerland, private insurance companies enjoy full freedom to practice individual risk underwriting and "cherry picking". Thus, any move that transfers aspects of health care to the private insurance sector is bound to decrease equity at the expense of the chronically ill.

### **Equitable financing**

The structure of health care financing is also not among the targets of this reform. Despite this, there could be a negative impact on the equity of

financing. As financial and non financial barriers to access to care could increase for some people more than others, retaining the same mode of financing would mean that some would continue to pay the same, although the services available to them were in fact more restricted. They would be paying for others as they had done before, while at the same time others would pay less than before for them.

### **Efficacy, efficiency and quality of health care**

Increasing efficiency is the main purpose of this proposed reform. There is a correlation between physician density and health care costs, and this is often taken as a basis to argue that decreasing the number of physicians will control costs [40-43]. Thus, runs the argument, we should control the number of physicians. It could be tempting to dismiss this argument as "purely economical". However, it is important to remark that concerns of efficiency are not only economic concerns, but can have an ethical dimension. A health care system that offers more value for money to citizens is fairer to everyone, including those whose need is greatest.

In Switzerland, it has been shown that a higher physician/population ratio is not correlated with greater satisfaction [44]. Nevertheless, the conclusion that we should control the number of physicians is far more problematic than it usually seems. The correlation between physician density and cost raises an important and difficult question. What is the nature of the link? This is seldom examined, but four interpretations of this correlation have been proposed:

1. supplier-inducement
2. the effect of lower prices on patient demand
3. a supply response to variation in health status
4. improved availability, leading to a more appropriate response to existing health needs [45]

The second possibility is only marginally possible in Switzerland. Possibilities 3 and 4 are variants of improved availability. Thus, differentiating between improved availability and induced demand would be of particular importance. If health care costs increase through induced demand, then reducing the number of physicians would indeed be desirable to improve efficiency. If costs increase through improved availability, then reducing the number of physicians would introduce a mechanism for implicit rationing into the health care system.

Studies of physician practices in Norway have found the link to be based on improved availability, not induced demand [45-47]. Doubt has also been thrown on the physician inducement model in the US [48, 49], as well as on the idea that increasing the number of physicians would increase inducement [50]. Physician-induced demand is often put forward as the only possible explanation for the link between physician/population ratios and health services utilization. This is clearly not

the case. The true nature of this link is an important empirical question and one that needs to be answered locally. In Switzerland, this answer is lacking and yet, in assessing the impact selective contracting on the efficacy, efficiency and quality of care in the Swiss health care system, this question is crucial.

If this link is due to supplier-induced demand, then reducing the number of physicians will decrease this effect and lead to an important increase in efficiency without affecting the quality of care. However, if this link is due to improved availability, the proposed reform will decrease the quality of care, and introduce a source of implicit rationing.

Introducing selective contracting could also affect this domain in a different and more straightforward way. By giving more power to insurance funds, it would also enable them to introduce incentives for greater efficiency and quality of care. Whether or not they would make good use of this possibility, however, remains an open question. It could, however, be seen as a necessary compensation of the risk that cost control could otherwise decrease the quality of care. This could happen in two ways. If providers decrease quality to contain costs [51] or if providers who offer sufficiently high quality care to receive more referrals of difficult cases are selected against [52].

#### **Administrative efficiency**

This benchmark is likely to be negatively impacted by the proposed reform. There is a high risk that additional layers of administration would be added as insurance funds will need to keep track of lists of covered physicians and physicians will need to keep track of whether or not their patients are insured by an insurance fund that has contracted with them. Selective contracting of hospitals by General Practice fund holders has indeed been associated with increased administrative costs in the United Kingdom and New Zealand [53, 54]. At best, if this could somehow be prevented, this benchmark would be affected neither negatively nor positively.

Additionally, selective contracting offers a strong incentive to physicians to join forces to gain bargaining power. This simultaneously decreases the general effect of the policy change, while additionally increasing administrative costs in the health care system [55].

#### **Democratic accountability and empowerment**

Both accountability and empowerment could be negatively or positively affected by this measure. If selective contracting is implemented in a transparent manner, accountability could be enhanced. If this is not the case, however, then accountability will be decreased.

Whether or not the democratic element will decrease is linked to the question of empowerment. It could be argued that, as the proposed reform transfers a degree of power from elected representatives to the private sector, democratic input will decrease in any case. However, if empowerment of the public is high, this could be mitigated. This could happen if true competition existed between health insurance funds, as insurance enrollees would then have a degree of control over health insurance funds through market forces.

However, if the public is not informed enough for market forces to apply, or if health insurance funds behave like a cartel, empowerment will decrease. If this were so, democratic accountability would also decrease. In Germany, sickness funds have traditionally negotiated in groups with providers [21]. Cartels also emerged in Holland [23]. Indeed, group negotiations may even be necessary if we expect selective contracting to reach its primary goal, namely to reduce the number of providers. If insurance funds all negotiate separately, the result will be a highly complex contract structure that will continue to include all physicians. Additionally, the negotiating power that is needed to make selective contracting work as a cost containment tool requires purchasers to be "big and strong" [56]. Antitrust concerns regarding managed care have been rising in the US health-care system [57]. In Holland, selective contracting has required an increase in government regulation to control the rise of insurance cartels [23, 58]. It has also failed to yield the expected cost savings, a result attributed to ambiguous legislation, which retained the right for the state to regulate provider supply [58]. There may thus be an intrinsic tension between giving the tool of selective contracting to private companies and preserving democratic accountability and empowerment unless sufficiently strong government oversight reintroduces democratic accountability into the mix.

#### **Patient and provider autonomy**

An adverse effect on this benchmark is the most frequently encountered criticism of the proposed reform. The risk here is that selective contracting could have a negative impact on patient autonomy, as patients will not longer be free to choose their physician. The impact on provider autonomy could also be negative, if physicians are fettered by the fear that accepting "expensive" patients or implementing expensive clinical strategies even when appropriate could place their contract at risk. If this could be prevented, then a negative impact would be avoided. However, as no part of this reform is likely to increase provider or patient autonomy, the best case scenario under this benchmark would be the preservation of the status quo.

## Open questions

By using the “Benchmarks of Fairness” approach to assess the introduction of selective contracting on the equity of the Swiss health care system, we have identified a number of questions (table 2). Importantly, most of them could be addressed at least in part by targeted amendments of this reform proposal. Equally importantly, one cannot. The nature of the link between the number of physicians and utilization of health care services in Switzerland can only be ascertained by robust empirical research. Indeed, as the argument that this link rests on supplier-induced demand is one of the main arguments in favour of the proposed reform, resolving this question is crucial.

The method we have used has a number of limits. Its purpose is to provide a systematic assessment of the possible impact of a proposed change on the equity of a health care system. It does not,

however, provide a way of deciding which benchmark is to be given priority in cases where different aims conflict. The benchmarks are not necessarily given the same weights and these weightings can change in different health systems. For this reason, this method cannot be used to give a total score to a proposed change by adding up the effects on different benchmarks unless there is first an agreement on the weighting of each. This, however, does not affect the main strengths of this method. By its very comprehensiveness and by requiring that prognoses on the impact of a health policy change be justified, it reveals areas of vagueness both in the description and in the projected effects of a reform project. It also fosters explicit discussion of how important values will be affected by the proposed change (table 3).

**Table 2**  
Open questions.

1. Will health insurance funds engage in a coordinated effort for the prevention of disease?
2. In what manner and in what degree of detail will needs be assessed?
3. How will insurance contracts ensure an appropriate number of health care providers?
4. What will the degree of transparency and precision in the criteria used for choosing healthcare providers be?
5. How explicit and credible will these criteria be?
6. Will coverage of services by additional physicians be offered as voluntary additional insurance?
7. What security will be offered to patients who are more likely than others to generate high costs, such as the chronically ill or the elderly?
8. What is the nature of the link between the number of physicians and utilization of health care services in Switzerland?
9. What incentives, if any, will be implemented for efficiency and quality of care?
10. Could a decrease in administrative efficiency be prevented?
11. Will health insurance funds function as competitors in a free market or as a cartel?

**Table 3**  
Strengths and limits of this approach.

<b>What this method can do:</b>
Provide a systematic assessment of the possible impact of a proposed change on the equity of a health care system
Require that the prognosis on the negative or positive impact be justified
Reveal areas of vagueness both in the description and in the projected effects of a reform project
<b>What this method cannot do:</b>
Give a completely objective “score” to a proposed change
Give priority to one benchmark over another

## Conclusion

Selective contracting is primarily viewed as a method for controlling health care costs. It has also been hailed as a necessary tool in the hands of insurance funds if they are to discharge a responsibility for managing health care effectively [58].

However, its introduction in the Swiss health care system raises a number of serious concerns, as the effects this reform could have on equity are both uncertain and potentially serious. Two points should be made clear. Firstly, attaining “the most good for the least cost” is traditionally in tension with equity concerns. After all, dropping all coverage of the chronically ill would indeed decrease

costs and the effectiveness of the treatments these patients receive, while very real, is less dramatically measurable than that of acute life-saving care. This, however, shows the kinds of pitfalls that we risk if we only look at costs. It is essential that equity should not be absent from the political agenda. Secondly, this means that making health insurance plans responsible for managing health care may in itself be a problematic goal. Market forces cannot and do not function to optimise the delivery of health care [59]. Private corporations do not have the incentives to protect equity that elected representatives have. Indeed, it may not even be a part

of their expected role. Giving up democratic accountability regarding health care is a dangerous choice. In its current form, the proposal to introduce selective contracting in the Swiss health care system may very well be a step in the wrong direction.

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*Correspondence:*

*Samia Hurst M.D.*

*Unité de Recherche et d'Enseignement  
en Bioéthique*

*Villa Thury 8*

*Centre Médical Universitaire*

*Rue Michel Servet 1*

*CH-1211 Genève 4*

*E-Mail: samia.hurst@medecine.unige.ch*

## References

- 1 WHO, Constitution of the World Health Organization. 1946.
- 2 Daniels N. *Just Health Care*. 1985: Cambridge University Press.
- 3 Daniels N. Equity of access to health care: some conceptual and ethical issues. *Milbank Mem Fund Q Health Soc* 1982;60: 51–81.
- 4 Pereira J. What does equity in health mean? *J Soc Policy* 1993; 22:19–48.
- 5 Culyer AJ, Wagstaff A. Equity and equality in health and health care. *J Health Econ* 1993;12:431–57.
- 6 Chang WC. The meaning and goals of equity in health. *J Epidemiol Community Health* 2002;56:488–91.
- 7 Anand S. The concern for equity in health. *J Epidemiol Community Health*, 2002;56:485–7.
- 8 Braveman P, Gruskin S. Defining equity in health. *J Epidemiol Community Health* 2003;57:254–8.
- 9 Wagstaff A, Paci P, van Doorslaer E. On the measurement of inequalities in health. *Soc Sci Med* 1991;33:545–57.
- 10 Wagstaff A, van Doorslaer E, Paci P. On the measurement of horizontal inequity in the delivery of health care. *J Health Econ* 1991;10:169–205; discussion 247–9, 251–6.
- 11 Culyer AJ, van Doorslaer E, Wagstaff A. Utilisation as a measure of equity by Mooney, Hall, Donaldson and Gerard. *J Health Econ* 1992;11:93–8.
- 12 Daniels N, Light DW, Caplan RL. *Benchmarks of Fairness for Health Care Reform*. 1996, Oxford: Oxford University Press.
- 13 van Doorslaer E, et al. The redistributive effect of health care finance in twelve OECD countries. *J Health Econ* 1999;18: 291–313.
- 14 Murray CJ, Gakidou EE, Frenk J. Health inequalities and social group differences: what should we measure? *Bull World Health Organ* 1999;77:537–43.
- 15 Gakidou EE, Murray CJ, Frenk J. Defining and measuring health inequality: an approach based on the distribution of health expectancy. *Bull World Health Organ* 2000;78:42–54.
- 16 Gakidou EE, Murray CJL, Frenk J. A Framework for Measuring Health Inequality, in *Global Programme on Evidence for Health Policy Discussion Paper Series*, World Health Organization: Geneva.
- 17 Daniels N, et al. Benchmarks of fairness for health care reform: a policy tool for developing countries. *Bull World Health Organ* 2000;78:740–50.
- 18 Wagstaff A. Reflections on and alternatives to WHO's fairness of financial contribution index. *Health Econ* 2002; 11:103–15.
- 19 Département fédéral de l'intérieur, Assurance-maladie: le Conseil fédéral présente un plan de réformes. 25 février 2004: Berne.
- 20 Hjortsberg C, Ghatnekar O. *Health Care System in Transition*; Sweden, Rico A, Wisbaum W, and T, Cetani T, Editors. 2001, the European Observatory on Health Care Systems: London.
- 21 Busse R, et al. *Health Care Systems in Eight Countries: Trends and Challenges*, A. Dixon and E. Mossialos, Editors. 2002, European Observatory on Health Care Systems: London, UK.
- 22 Busse R, et al. *Health Care System in Transition*; Germany. 2000, European Observatory on Health Care Systems: London.
- 23 Riemer-Hommel P. The changing nature of contracts in German health care. *Soc Sci Med* 2002;55:1447–55.
- 24 Willcox S. Promoting private health insurance in Australia. *Health Aff (Millwood)*, 2001;20:152–61.
- 25 Johns L. Selective contracting in California. *Health Aff (Millwood)*, 1985; 4:32–48.
- 26 Johns L, Anderson MD, Derzon RA. Selective contracting in California: experience in the second year. *Inquiry* 1985;22: 335–47.
- 27 Johns L, Derzon RA, Anderson MD. Selective contracting in California: early effects and policy implications. *Inquiry* 1985; 22:24–32.
- 28 Johns L. Selective contracting in California: an update. *Inquiry* 1989;26:345–53.
- 29 Stoline AM, Weiner JP. *The New medical Marketplace; a Physician's Guide to the Health Care System in the 1990s*. 1993, Baltimore and London: Johns Hopkins University Press.
- 30 Ohsfeldt RL, et al. The spread of state any willing provider laws. *Health Serv Res* 1998;33:1537–62.
- 31 Mays GP, Hurley RE, Grossman JM. An empty toolbox? Changes in health plans' approaches for managing costs and care. *Health Serv Res* 2003;38:375–93.
- 32 Mobley LR. Effects of selective contracting on hospital efficiency, costs and accessibility. *Health Econ* 1998;7:247–61.
- 33 Martin JP. the Experience of OECD Countries in Coping with Rising Health Costs, in *Before the Joint Committee*. 2003, OECD.
- 34 Melnick GA, et al. The effects of market structure and bargaining position on hospital prices. *J Health Econ* 1992;11:217–33.
- 35 Docteur E, Oxley H. *Health-Care Systems: Lessons from the Reform Experience*, in *Economics Department Working Papers*. 2003, OECD.
- 36 Van de Ven P, Ellis R. Risk Adjustment in Competitive Health Plan Markets, in *Handbook of Health Economics*, A.J. Culyer and J.P. Newhouse, Editors. 2000, Elsevier.
- 37 Lemak CH, Alexander JA, D'Aunno TA. Selective contracting in managed care: the case of substance abuse treatment. *Med Care Res Rev* 2001;58:455–81.
- 38 Bindman AB, et al. Selection and exclusion of primary care physicians by managed care organizations. *Jama* 1998;279: 675–9.
- 39 Pham HH, et al. Financial pressures spur physician entrepreneurialism. *Health Aff (Millwood)*, 2004;23:70–81.
- 40 Hemenway D, Fallon D. Testing for physician-induced demand with hypothetical cases. *Med Care*, 1985;23:344–9.
- 41 Tussing AD, Wojtowycz MA. Physician-induced demand by Irish GPs. *Soc Sci Med* 1986;23:851–60.
- 42 Domenighetti G, Casabianca A. [Health care economics, uncertainty and physician-induced demand]. *Schweiz Med Wochenschr* 1995;125:1969–79.
- 43 Delattre E, Dormont B. Fixed fees and physician-induced demand: a panel data study on French physicians. *Health Econ* 2003;12:741–54.
- 44 Crivelli L, Domenighetti G. [The physician/population ratio in Switzerland: the impact of its regional variation on mortality, health expenditures and user's satisfaction]. *Cah Sociol Demogr Med* 2003;43:397–425.
- 45 Carlsen F, Grytten J. More physicians: improved availability or induced demand? *Health Econ* 1998;7:495–508.

- 46 Grytten J, Sorensen R. Type of contract and supplier-induced demand for primary physicians in Norway. *J Health Econ* 2001; 20:379-93.
- 47 Sorensen RJ, Grytten J. Competition and supplier-induced demand in a health care system with fixed fees. *Health Econ* 1999;8:497-508.
- 48 Stano M. An analysis of the evidence on competition in the physician services markets. *J Health Econ* 1985;4:197-211.
- 49 Feldman R, Sloan F. Competition among physicians, revisited. *J Health Polit Policy Law* 1988;13:239-61.
- 50 Stano M. A further analysis of the physician inducement controversy. *J Health Econ* 1987;6:228-37.
- 51 Mukamel DB, Jzwanziger J, Bamezai A. Hospital competition, resource allocation and quality of care. *BMC Health Serv Res* 2002;2:10.
- 52 Retchin SM. Adverse selection at academic health centers. *Clin Perform Qual Health Care* 1998;6:38-43.
- 53 Smee C. United Kingdom. *J Health Polit Policy Law* 2000;25: 945-51.
- 54 Le Grand J. Further tales from the British National Health Service. *Health Aff (Millwood)* 2002; 21:116-28.
- 55 Drake DF. Managed care. A product of market dynamics. *JAMA* 1997;277:560-3.
- 56 Light DW. Is NHS purchasing serious? An American perspective. *BMJ* 1998;316:217-20.
- 57 Dranove D, White WD. Emerging issues in the antitrust definition of healthcare markets. *Health Econ* 1998;7:167-70.
- 58 Schut FT, van Doorslaer EK. Towards a reinforced agency role of health insurers in Belgium and The Netherlands. *Health Policy*, 1999;48:47-67.
- 59 Arrow KJ. Uncertainty and the welfare economics of medical care. 1963. *J Health Polit Policy Law* 2001;26:851-83.

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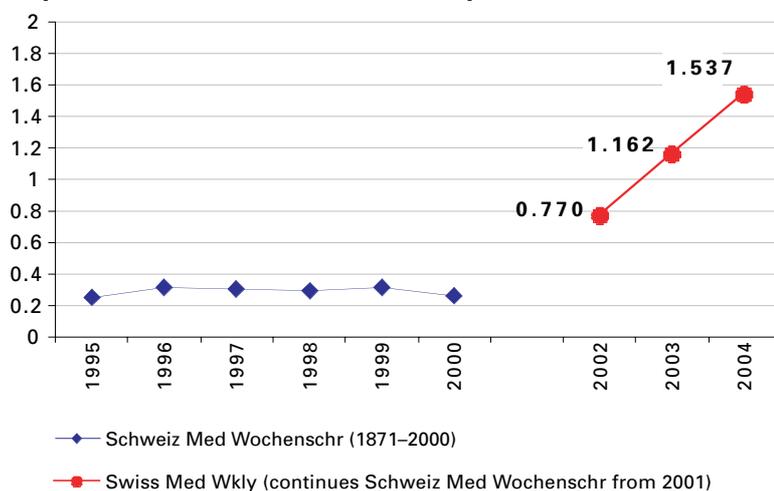
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