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MOVING TOWARDS MORE SUSTAINABLE HEALTHCARE FINANCING IN GERMANY

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by

Nicola Brandt

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ABSTRACT/RÉSUMÉ

Moving towards more sustainable healthcare financing in Germany

The aim of the recent healthcare reform was to increase the sustainability of healthcare finances, by reducing its negative impact on employment and increasing cost-effectiveness via enhanced competition. Higher budget contributions will help decouple healthcare finances from labour income a bit, if and once they materialise. An improved risk adjustment between insurers could reduce incentives for risk selection, raising chances for competition to lead to more cost-effectiveness instead. However, the segmentation of the healthcare system in a private and a social insurance market will continue to pose equity and efficiency problems. Owing to its design, the price signal in the new financing system for social health insurance will be both weak and distorted and this will need to be corrected for competition to produce desired results. More freedom for contractual relations between insurers, healthcare providers and pharmaceutical companies could help to better reap the benefits of competition, but the government will need to watch the results closely and adjust framework conditions if needed.

JEL classification: I11, H51, H73

Keywords: Healthcare; public sector efficiency

This Working Paper relates to the 2008 *OECD Economic Survey of Germany* (www.oecd.org/eco/surveys/Germany).

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Pérenniser le financement des dépenses de santé en Allemagne

La réforme récente du secteur de la santé vise à assurer un financement plus viable des dépenses de santé en réduisant leurs effets négatifs sur l'emploi et en améliorant leur efficacité économique grâce à une concurrence accrue. Si l'augmentation prévue des contributions budgétaires se matérialise, elle permettra un certain découplage entre le financement du secteur de la santé et les revenus du travail. Une meilleure répartition des risques entre les assureurs pourrait réduire la tendance à une sélection des risques, si bien que la concurrence pourrait en fait conduire à une plus grande efficacité économique. Cela étant, la segmentation du système de santé dans un marché où cohabitent assurance privée et assurance publique continuera de poser des problèmes d'équité et d'efficacité. Par sa conception même, le nouveau système de financement de l'assurance maladie publique limite et fausse les signaux transmis par les prix ; il faudra donc remédier à ce problème pour permettre à la concurrence de produire les résultats souhaités. Une plus grande liberté des relations contractuelles entre assureurs, prestataires de soins et laboratoires pharmaceutiques permettrait sans doute de tirer un meilleur parti de la concurrence, mais les autorités devront faire preuve de vigilance et adapter les conditions cadres le cas échéant.

Classification JEL : I11, H51, H73

Mots clefs : Santé ; gestion publique

Ce Document de travail se rapport à *l'Étude économique de l'OCDE de Germany 2008* (www.oecd.org/eco/etudes/Germany).

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By Nicola Brandt[1]

The efficiency of the German healthcare system

Public spending on healthcare in Germany is higher than in most OECD countries …

The development of healthcare expenditure is a concern in all OECD countries, as its increase has outpaced GDP growth over the last 30 years, putting considerable strain on public budgets. In Germany health spending per capita increased, in real terms, only by 1.3% per year on average between 2000 and 2005. This also reflects the success of recent cost-containment measures (Figure 1). Even so, the German healthcare system remains expensive. Only France allocates a larger share of its GDP to public spending on healthcare. The share of public and private healthcare spending in German GDP is the fourth highest among OECD countries.

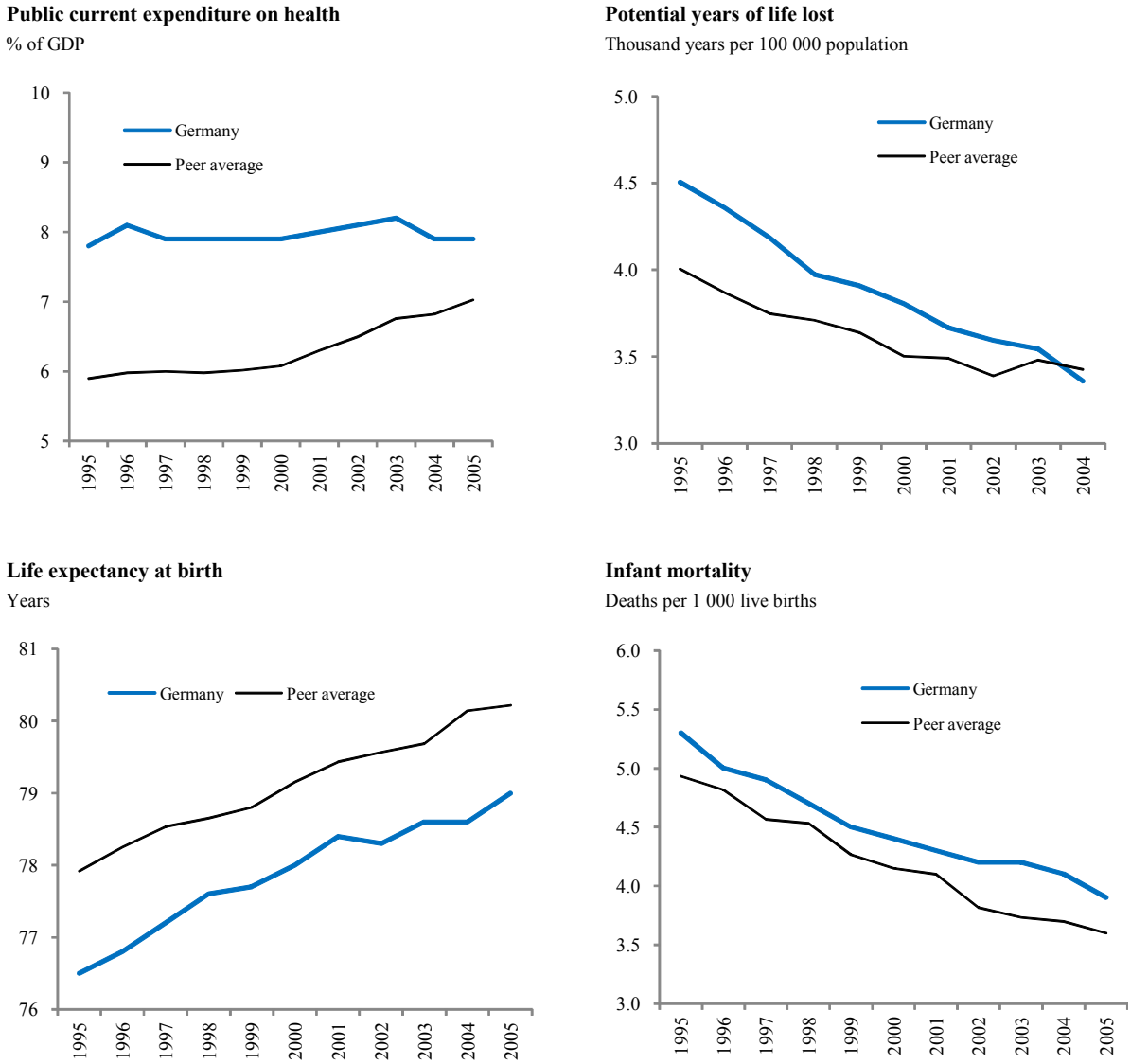
Notwithstanding Germany's success in containing rising healthcare costs in recent years, the combined effects of ageing and technological progress in the healthcare sector are likely to exert considerable upward pressure on healthcare spending over the years to come. OECD projections suggest that public expenditures on health could rise by more than 1½ percentage points of GDP, even in a cost-containment scenario, while extrapolating spending trends from the 1980-2000 period would give a much higher increase, reaching up to 3½ percentage points of GDP (Oliveira Martins and de la Maisonneuve, 2006).

Rising healthcare costs have also put a strain on employment in Germany, as healthcare is mainly financed via social charges levied on labour income (Box 1). This has increased labour costs and reduced work incentives, especially for low income earners. Average contributions to finance social health insurance have increased from 8.2% in 1970 to 13.9% in 2007. Since July 2005 an additional contribution of 0.9% is levied on members of social health insurance funds (SHIFs).

1. This paper is largely based on material from the *OECD Economic Survey of Germany* published in April 2008 under the authority of the Economic and Development Review Committee (EDRC). The author would like to thank Francesca Colombo, Valérie Paris, Martin Albrecht, Val Koromzay, Andrew Dean, Andreas Wörgötter, David Carey, and Felix Hüfner for valuable comments on earlier drafts. The paper has also benefited from discussion with the German authorities. Special thanks go to Margaret Morgan for technical assistance and to Susan Gascard for technical preparation.

… yet available indicators suggest that outcomes are only average

Figure 1. Healthcare spending and outcomes



Note: Peers are 6 countries with similar average GDP per capita (purchasing power parity basis) to Germany – Finland, France, Italy, Japan, Sweden and the United Kingdom. Potential years of life lost records years of life lost due to death before age 70 that could potentially have been prevented. Infant mortality refers to deaths of children aged under one year.

Source: OECD (2007), *Health at a Glance*, OECD, Paris.

While it is notoriously difficult to evaluate spending efficiency in the healthcare sector overall the evidence seems to suggest that there is room for further improvement in Germany. Most health status indicators, such as life expectancy, are more favourable in peer countries with similar GDP per capita who spend less on healthcare on average (Figure 1). On face value this would suggest that healthcare spending is more efficient in these countries. Concerning recent developments in efficiency, however, approximated by these indicators, the picture is a bit different. The number of years of life lost due to death before age 70 (potential years of life lost), that could have been prevented a priori, has come down much faster in

Germany than in peer countries, while other outcome indicators have developed broadly on par. Together with the observation that Germany has been relatively successful in containing the growth of healthcare spending in recent years, these indicators would suggest that it has improved the spending efficiency of its healthcare system to a greater extent than its peers. However, these results should be treated with caution. Health status indicators cannot be directly linked to healthcare spending, as other factors such as lifestyle, income and the environment also play an important role.

Nevertheless, more detailed indicators with a closer link to the quality of treatments also suggest that there is room for better outcomes. Germany in general achieves only average or worse for the available ranking indicators (Table 1, see also OECD, 2007). Keeping in mind that international comparability of these indicators is limited, it still seems striking that Germany does not achieve better outcomes given that it invests so much more resources in its healthcare system than other countries.

One reason for Germany's above average spending consists in the high capacity it maintains in the healthcare sector. Germany ranks on top of most other OECD countries in terms of doctors, nurses and hospital beds per inhabitant according to OECD health data.[2] While maintaining high capacity is expensive, it has advantages for patients. Unlike many other countries Germany does not report problems with waiting times for elective surgery (Hurst and Siciliani, 2003). Access to new medicines, to the family doctor and to specialists also compare well in international comparison.[3] At the same time, the substantial capacity of the German healthcare system suggests that there is enough supply to allow for more competition in a number of areas.

Table 1. Health quality indicators, German rankings

Indicator	Rank	German data
Cervical cancer 5-year survival rates	18 out of 19	66%
Breast cancer 5-year survival rates	18 out of 19	78%
Colorectal cancer 5-year survival rates (males)	9 out of 11	55%
In-hospital mortality rate, stroke		
Hemorrhagic stroke	7 out of 23	21%
Ischemic stroke	12 out of 23	11%
In-hospital mortality rate, myorcardical infarction	20 out of 24	12%
Mortality rate asthma	14 out of 25	0.16 per 100 000

Source: OECD (2007), *Health at a Glance*.

Germany faces important challenges to improve spending efficiency

Currently, healthcare coverage is provided through a mix of social health insurance for about 90% of the population and primary private health insurance for eligible individuals that opted out of the system. Labour-income dependent social health contributions are set by insurers. The government has used rationalisation rather than rationing to improve efficiency in recent years and competition between insurers has been one tool, as insurers in the social health system have competed on the basis of their contribution rates since 1996 and most members have been free to switch insurers since then (Box 1). Despite efforts to develop this system further over recent years, a number of problems remain, that prevent competition from yielding desired results.

2. These measures are not fully comparable in the OECD health data collection and the German measure may well be biased upward in comparison to other countries, but this would probably not change the qualitative result.

3. See the *Euro Health Consumer Index 2007* of the Swedish thinktank *Health Consumer Powerhouse*.

In the current system there are incentives for insurers to direct their efforts at attracting high income members with low morbidity risk (risk selection) rather than to improve the cost-effectiveness of their services. The reason is that while adjustments for differences in the income and risk structure of insurers' members exist, they remain incomplete. Currently, only 92% of income differences between insurers' members are adjusted for, as administrative expenditures are not included in the income adjustment mechanism. There is indirect risk adjustment mainly for differences in income, age and gender. These characteristics have some predictive power for morbidity risk, but remain imperfect. While the introduction of partial outlier risk sharing for cases with large expenditures in 2002 had extended the risk structure adjustment, it currently remains incomplete. The distribution of risks was very uneven when free choice of insurers was introduced in 1996 and switching has led to further risk separation since then. Switching has been largely limited to young and healthy members with relatively high income, many of whom have chosen company-based funds (*Betriebskrankenskassen*) that can set lower contributions, largely thanks to the historically more favourable risk- and income-structure of their membership. The sick and the poor, in turn, have tended to stay with their local health insurance funds (*Allgemeine Ortskrankenkassen*). While this need not be a result of conscious risk selection, but could be because of the well-off and people with lower morbidity risks having better information and lower switching costs than the sick (Nuscheler and Knaus, 2005), risk separation is still undesirable. Indeed, risk separation can drive insurers with an unfavourable risk structure out of the market even if they are more cost-effective than competitors with an economically more favourable membership. It has been a policy goal for some time to reduce the remaining incentives for risk selection, which has also prevented better treatment of the chronically ill (*Sachverständigenrat Gesundheit* 2000/2001).

A second problem for effective competition consists in the system of healthcare provision based on collective contracts between insurers and associations of providers (Box 1 and 2), which along with a benefit basket and fee schedules for physicians and hospitals defined at the national level leaves little room for insurers to distinguish themselves on the basis of their products and compete on quality. Therefore, insurers had little incentive to offer new and improved products and this has hampered innovation. In addition, separate negotiations and quasi-budgets for hospitals and physicians in the outpatient sector have hampered care coordination and thus both healthcare quality and efficiency.

Box 1. The German healthcare system

Social health insurance: Around 90% of the German population are covered by social health insurance, which is financed via proportional social charges levied on labour-income up to a threshold (€3 600 per month in 2008) and shared evenly between employers and employees except for a surcharge of 0.9 percentage points which is exclusively financed by the members of SHIFs . There is free co-insurance for spouses without or with limited income and for children.

There are more than 200 SHIFs (*Krankenkassen*) who act as quasi-public non-profit corporations. Most social health insurance members have been free to choose their insurer since 1996. Insurers compete on the basis of their contribution rate, which they set themselves at a level which allows covering costs.

Contractual relations with providers: Nongovernmental corporatist bodies are the main actors in the social health insurance system; in particular insurers or their associations contract services collectively with physicians' and dentists' associations. Services are rewarded by lump sums paid to doctors' associations which they distribute among their members in line with the quantity of services provided. Hospitals are represented by organisations based on private law.

Private health insurance: The self-employed and individuals with gross monthly earnings exceeding a threshold for three years in a row (currently €4 012.50) can opt out of the social health insurance and take out private health insurance instead. Civil servants get 50% of their health care costs reimbursed by their employers if they take out private insurance to cover the rest. Premia are flat and rated by individual risk. People who qualify for private insurance can stay in the social health insurance system and many do, as risk-rated premia that increase with age and the need to pay insurance for all family members can make private insurance financially unattractive. After a switch to private insurance it is difficult to go back to the social insurance system.

A further problem is the segmentation of the health insurance market hampering equity and efficiency, as around 10% of the population opt out of the social insurance system to take out private insurance instead. Private health insurance members are in general wealthier than social health insurance members, because they have to surpass an income threshold to qualify (Box 1). Equity problems arise, because the social health system involves many re-distributional elements that are deemed socially desirable, for instance the transfer from higher to lower incomes through the income-dependence of contributions and from childless singles to families through the free co-insurance of spouses and children without own income. Exempting people with higher incomes from contributing to this seems questionable. The segmentation also impacts on risk pooling in unfavourable ways and therefore on efficiency, as it tends to remove good risks from the social health insurance system (Colombo and Tapay, 2004). People with private health insurance tend to be not only wealthier, but also healthier than the population insured via social insurance, as income and health are in general highly correlated and people with high-morbidity risk qualifying for private insurance often stay in the social insurance system on account of the high premia they would have to pay as a result of individual risk-rating by private insurers (Box 1).

The recent reforms aim at improving cost-effectiveness and equity

The original aim of the healthcare reform enacted in April 2007, the competition reinforcement act for social health insurance (*Gesetz zur Stärkung des Wettbewerbs in der gesetzlichen Krankenversicherung)*, was to put healthcare financing on a more sustainable footing and limit its effect on employment. As the name of the reform law suggests, the government saw enhanced competition as the main tool to achieve higher cost-effectiveness. Reform elements include:

- A financing reform of the social health insurance system to partially decouple healthcare costs from labour income. A central health fund will collect uniform – rather than insurer-specific – labour-income dependent contributions and general tax money, which will then be distributed to insurers as income- and risk-adjusted capitations. Insurers that cannot cover their costs with the money received from the central health fund have to levy surcharges on their members, while insurers with surpluses can grant refunds.

- Greater freedom for insurers in their contractual relations with providers to allow them to compete based on the quality of their products and their efficiency (cost-effectiveness). In particular insurers possibilities to contract a limited set of – at least for the German system – rather novel forms of care directly and selectively with providers will be broadened.

- Greater contractual freedom for insurers to enhance price competition in the pharmaceutical market, in particular through improved possibilities to engage in rebate agreements with pharmaceutical companies.

- In addition, the recent reform addressed the problem that an increasing number of citizens has no health insurance, by making health insurance mandatory and improving affordability of private health insurance.

While the governing coalition partners shared the reform goal to decouple healthcare costs more from labour income, the final result of the reform effort has been a difficult political compromise between their different concepts how to reach this goal. The Christian Democrats preferred a Swiss-style social health system based on community rated[4] flat-rate premia with tax subsidies for low-income earners, while

4. That means unlike in the German private health insurance system premia would not be subject to individual risk rating; they would not depend on the individual age and risk of the insured, but on the average age and morbidity risk in the insured community.

preserving a separate private market segment. Decoupling from labour income would have been achieved by making contributions independent of income. Social Democrats, instead, wanted to preserve income-dependent contributions, while achieving some decoupling through an enlargement of the base. Their proposal was to extend it to income sources other than labour and include private health insurance members in the social system.

Healthcare financing reform

The reform improves the framework conditions for competition between insurers…

The new financing model based on the central health fund will be introduced for the social health insurance system in 2009. While social health insurers currently decide on their labour-income dependent contribution rate independently, the government will then set a uniform rate for all insurers. To make insurers' revenues completely independent from their members' income, the central health fund will distribute flat premia to insurers for each of their members. Moreover, it is planned to introduce morbidity-oriented risk adjustment in 2009, which would provide insurers with financial adjustments for members with costly catastrophic chronic diseases. A scientific advisory board has recommended 80 diseases to be included in the calculation of these adjustments.

The new adjustment for differences in income and risk structure will be an important improvement, as incentives for insurers to compete for high-income members with low morbidity risk are strong as long as the adjustment remains as incomplete as it is now. The introduction of a more complete income and risk structure adjustment will allow insurers to concentrate on providing their members with cost-effective, high quality treatment. Incentives to avoid offering good treatment, as it could attract costly customers with high morbidity risk, should become less important. This will improve chances for competition to lead to cost-effectiveness rather than risk selection.

… but the price signal will be both weak and distorted

The price signal for competition in the new system will come from a surcharge that those insurers will have to levy that cannot cover the costs with the payments they receive from the central health fund. Insurers with lower costs in turn can grant refunds to attract new members. Patients can switch their insurer anytime, including when they announce surcharges and insurers have to inform their members about this possibility with their surcharge announcement. Insurers can choose whether they want to levy income-dependent or flat surcharges, but to avoid financial hardship, even the flat surcharge cannot exceed 1% of members' income subject to contribution charges. A check as to whether the 1% ceiling applies will be performed once the surcharge is higher than € 8 per month. Thus, for low-income members the surcharge cannot exceed € 8, while for higher income members it cannot exceed € 36 per month, given the current threshold for income that serves as a contribution base. The government will initially set contribution rates so that the central health fund covers 100% of the social health system's expenditures. If the proportion of the system's costs financed by the central health fund falls below 95%, the government will have to increase contribution rates. By implication, the current goal seems to be that surcharges cover not more than 5% of the system's costs.

The price signal will be weak, as only a low share of the system's total cost will be financed by surcharges. In addition, the 1% hardship rule limits surcharges beyond the differences in contribution rates that exist between different insurers today, which can reach up to 4 percentage points. On the other hand contribution rates are shared between employers and employees in the current system, whereas in the new system employees will pay the surcharges alone, which by itself would increase the impact on them. Yet, this effect is very likely to be too weak to outweigh the limitation of the surcharge built in through its relatively low percentage of members' income and of the system's total costs.

The hardship clause will lead to the size of the surcharge partly reflecting members' income rather than only the cost-efficiency of the surcharging fund, which is a distortion. As the surcharge is intended to be a price signal and thus the vehicle to enhance competition for cost effectiveness, it should ideally reflect insurers' efficiency only.

Moreover, redistribution associated with the 1% ceiling or with an insurers' family structure will occur within the membership of surcharging insurers, leading to additional distortions (*Sachverständigenrat*, 2006). As a result of the hardship clause, insurers can only raise limited revenues through surcharges on low-income members and they will have to obtain the rest by increasing surcharges on those who earn more. This will put insurers with many low income members at a competitive disadvantage. In the extreme, the hardship-clause can lead to subsequent waves of members hitting the 1% ceiling, which will oblige insurers to increase the surcharge levied on members above the ceiling even more. As a result of this effect, a simulation study shows that 61% of the members of some insurers with a high percentage of low income members would hit the 1%-ceiling with a relatively low surcharge of € 10 per months (Schawo and Schneider, 2006). If local insurance funds needed a flat surcharge of € 20 per month to fill their financing gap none of them would be able to raise the full amount they need as a result of the 1% rule. Likewise, surcharging insurers with many contribution-free family members have to levy higher surcharges on those of their members who do pay than insurers with the same costs but with fewer contribution-free family members.

The surcharge should be flat and redistribution should be tax-financed

The implicit choice to limit the price signal to finance only 5% of the system's overall costs and to 1% of members' income seems to be an opportunity lost, especially in terms of encouraging more low-income earners to react to it. With a directly collected flat surcharge combined with the possibility to switch insurers any time, including before they levy announced surcharges, the incentive for low income earners to switch might have been enhanced to a considerable degree. The envisaged large share of labour income dependent contributions to the system's overall finances and the possibility to leave insurers announcing surcharges immediately should be sufficient to protect low income earners from financial hardship. Therefore, the government should make the surcharge flat without any limitation in terms of its share in members' income.

To the extent that additional redistribution is needed, it should not be organised within the membership of surcharging insurers, but through tax subsidies to avoid distorting competition and ensure that redistribution is financed by all taxpayers.[5] Otherwise, insurers with an unfavourable income or family structure will be put at a competitive disadvantage and undesirable incentives to attract high-income members without co-insured family members will remain. As reducing incentives for risk selection is one important reform goal, this should be avoided. It should be noted, however, that tax subsidies would not only distort incentives for lower income earners to search for an efficient insurer, but it would also involve subsidising relatively inefficient insurers with public funds.

Higher flat surcharges would help decouple healthcare finances more from labour costs

Increasing the flat surcharge would help decouple healthcare financing from labour costs, which had been an important reform goal, but it also raises the need for higher subsidies for low-income earners, which can create problems of their own. Decoupling would occur even if tax subsidies were needed to

5. Tax subsidies could be administered through the central health fund or they could be paid directly to recipients (see *Sachverständigenrat*, 2006). As long as labour income contributions finance 100% of the system's costs, the central health fund can finance subsidies for surcharges of individuals with low income without requiring further tax contributions.

avoid financial hardship, because general taxes draw on a larger base than social contributions. In the Netherlands, which had introduced a similar system in 2006, flat-rate contributions make up a much larger part of total contributions. The intention was for it to cover 50% of the costs (Greß *et al*., 2007). This can make for a more significant price signal with a potential to increase price competition. On the other hand, higher flat-rate premia also raise the need to protect lower income earners from financial hardship, which is done through tax subsidies in the Netherlands. As pointed out above, this reduces the price signal for subsidised insurance members, while at the same time providing tax subsidies to inefficient insurers assuming that competition is undistorted by differing income and risk-structures. Switzerland experiences these problems with its system of flat premia combined with subsidies for low income earners. The Swiss case also shows that it can be difficult to contain increases in tax subsidies, if continued health cost inflation pushes up the premia, raising a need for further financial help for low income earners (OECD, 2006). There seems to be no way around an equity-efficiency trade-off when competition is used as a tool to attain more cost-efficiency in healthcare and there is currently no example of a country that has addressed both problems at the same time in an entirely satisfactory way.

When developing the reform further, Germany should aim at striking a careful balance between the need for the surcharge to be high enough to act as a functioning price signal and the need to avoid that necessary tax subsidies for lower income earners create efficiency problems of their own. A moderate surcharge that requires little or no tax subsidies for low income earners may well be the right solution, but there is probably scope to raise the financing contribution of the surcharge to a higher share than the currently envisaged 5% of the system' s total costs.

Higher budget contributions will limit the impact of healthcare financing on labour costs …

To reduce the effect of rising healthcare expenditure on labour costs, contributions from the federal budget to the central health fund will be gradually increased until they reach € 14 billion after 2015. Conceptually, the government intends budget contributions to compensate insurers for benefits for which they receive no or only partial member contributions, such as the free co-insurance for spouses and children without earnings subject to social contributions. Budget contributions extend the financing of these redistributive elements to all taxpayers, thus partly addressing the equity problem that arises as a result of the segmentation of the healthcare system in social and private insurance.

Table 2. General budget contributions to social health insurance
In billion euros

Year	2004 healthcare reform	2006 budget law	2007 healthcare reform
2004	1	1	-
2005	2.5	2.5	-
2006	4.2	4.2	-
2007	4.2	1.5	2.5
2008	4.2	0	2.5
2009	4.2	0	4.0
2010	4.2	0	5.5
2015	4.2	0	13
2016	-	-	14

Source: Ministry of Health.

However, there may be some doubt as to whether the reform will actually materialise in view of the see-saw policy changes with respect to general budget contributions to the social healthcare system in the recent past. Table 2 shows how envisaged budget contribution paths have been changed by subsequent law. As a result budget contributions have been reduced substantially in 2007 compared to 2006 and, notwithstanding the planned increasing path of budget contributions, they will not exceed their 2006 level before 2010. The government has found no agreement yet on how to finance increasing budget

contributions to the central health fund. The government should solve this issue soon to avoid putting this important reform at risk.

If it materialises, however, the increasing path of budget contributions will eventually help relieve the burden of healthcare financing on non-wage labour costs with potentially favourable employment effects, especially for low-wage earners. This would be the case even if increasing federal budget contributions were to be financed mainly through an increase in income taxes. This is so because income tax is levied not only on labour income, but also on other bases, more people pay income taxes than insurance contributions, including 10% of the population currently covered by private health insurance; and, unlike that for contributions the base for income labour taxes is not capped. A shift from insurance contributions to income taxes would thus spread the financing burden more widely. The pressures of healthcare financing on non-wage labour costs could decrease even more if higher budget contributions were to be financed by increases in other taxes, *e.g.* consumption taxes, or by expenditure reductions in other areas. A recent study suggests, that the positive effects on efficiency, economic growth and fiscal sustainability of shifting the tax burden from labour income to other sources can be substantial (Botman and Danninger, 2007).

… but for now the burden of healthcare financing on non-wage labour costs has increased

For the time being, political decisions have decreased revenues, while increasing costs of insurers. This has led to contribution increases in 2007, thus running counter to the government's goal of reducing non-wage labour costs. In anticipation of lower contributions from the federal budget and higher costs for medicines as a result of the VAT increase by 3 percentage points in early 2007, a majority of insurers increased their contribution rates at the beginning of 2007. As a result, average contribution rates were 0.6 percentage points higher in 2007 than in 2006. This combined with favourable labour market developments helped insurers to achieve an unexpected combined surplus of € 1.78 billion in 2007, which may put some of them in the position to lower contribution rates. Yet, these revenues are probably at least to some extent of a cyclical nature.

Higher budget contributions and the abolition of free co-insurance for spouses would be helpful

The VAT increase in 2007 has contributed to an unfavourable, if unintended, impact on healthcare expenditures and thus on non-wage labour costs, running counter to one of the stated goals of the tax reform, namely the partial shifting of social contributions from labour income to other tax bases. The VAT increase in 2007, together with favourable cyclical effects, has allowed the government to lower unemployment benefit contributions quite significantly from 6.5% to 3.3% in 2008. On the other hand, it has fully impacted on the prices of medicines, as they are subject to full VAT rates in Germany unlike in most other OECD countries. For policy consistency, the government might want to consider whether it should not increase budget contributions to alleviate the effect of the increase in VAT on insurers' finances.[6]

In addition and as an alternative to a part of the budget contributions to the central health fund, the government should also reconsider free co-insurance for spouses as it increases non-wage labour costs for those who do pay, while also contributing to an unintended unemployment or low-employment-trap for second earners. This puts a strain on the contribution base and on economic growth. Engaging all tax payers in the financing of free co-insurance for spouses through budget contributions would be more equitable than the current financing via social charges and it would also reduce the negative effect on non-wage labour costs to some extent. However, the negative incentives for second earners to take up full-time

6. Reducing the VAT rate on pharmaceuticals, instead, is not a good option, as it decreases the transparency of the tax system further and runs counter to efforts of increasing tax collection efficiency (OECD, 2008).

work that result from free co-insurance can only be abolished by requiring every couple to pay for the insurance of both spouses (OECD, 2008). In addition, this would lower contributions with a potential to unleash further positive employment effects. The government sees free co-insurance of spouses as one element of compliance with the constitutional requirement to protect marriage, but given the negative side-effects, it should consider whether there are other instruments to achieve the same goal. Corresponding social concerns about the availability of health care for non working spouses are on one hand already taken care by the current health insurance reform, which introduces mandatory health care insurance. Affordability issues on the other hand would have to be dealt with by contributions from the budget and could be financed with savings on payments to compensate SHIFs for non-contributing members.

Private health insurance reform

Making health insurance mandatory and more affordable will improve universal access to healthcare…

To address the issue of an increasing number of uninsured citizens – around 200 000 people in early 2007 – the reform makes health insurance mandatory and takes measures to improve affordability. While people covered by private health insurance are wealthier on average than those in social health insurance, transferral to the private insurance system can lead to a loss of insurance coverage due to an inability to pay the premia as a result of income or job loss later on or strong increases in premia associated with risk-rating, including premia increasing with age.

To make it easier for people with high morbidity risk and for those who have experienced income losses after qualifying for private health insurance to pay their insurance premia, private health insurers will have to offer a standard insurance policy dubbed "basic tariff" from 2009. There will be no risk adjustments, except once for age and gender when entering the contract, and coverage will be similar to the social health insurance. Private health insurance companies have to offer this tariff to anybody qualifying for their system who asks for it, although strict time limits apply for switching for those who are already covered by a different private insurance policy.[7] The premium cannot exceed the maximum contribution to social health insurance and additional subsidies apply for people who cannot afford the premium.[8]

… but including private insurers in the social insurance financing reform would be better

However, including private health insurers and their clients in the new financing system based on the central health fund would be preferable as it would address the equity and efficiency problems resulting from the segmentation of the healthcare system in social and private insurance. While the equity problem will be addressed somewhat by channelling more federal budget contributions into the central health fund, this will not compensate for the full amount of redistributive elements in the social health insurance and past experience has shown that budget contributions are vulnerable to change. Including private health insurers in the financing system based on the central health fund would be a better targeted and more reliable measure to improve financing equity.

7. People who are already in the private health insurance can switch to the basic tariff of a company of their choice, but only during the first 6 months of 2009. Those who are older than 55, pensioners and people who can prove that they are unable to pay the premia can switch beyond that time limit. Those who move into the private health insurance system after 2008 have the choice to switch to the basic tariff of any insurance company without any time limits.

8. Private insurers will be obliged to halve the premia for the basic tariff for people belonging to the private health insurance system who are eligible for means-tested unemployment benefit or would become eligible as a result of the premia. These individuals can receive additional subsidies from the municipalities or the Federal Labour Agency if they are still unable to pay their contributions to private health insurance.

A unified system to finance the social health insurance coverage for all citizens would also improve risk pooling and increase efficiency, as explained above, helping to lower contributions with a potential to boost economic growth and employment. Recent studies suggest that the social health insurance system loses around € 750 million each year, as a result of switching between the private and the social health insurance systems (Albrecht *et al*., 2007a). Allowing high-income earners with low morbidity risk to withdraw from the system makes risk sharing among the remaining social health insurance members costlier, thus leading to higher contributions. Since contributions are levied on labour income this also acts as a brake on employment, thus undermining both economic growth and the basis for social contributions, thereby leading to a vicious circle that negatively affects society as a whole. Including private insurance in the financing system based on the central health fund as practiced in the Netherlands would provide for more efficient risk pooling and improved financing equity. Private health insurers would still be free to offer additional coverage that goes beyond social health insurance.

The reform provides only limited room to enhance competition among private insurers

To stimulate competition between private health insurers, the government has made it easier to transfer accumulated reserves to a new insurer, but this is very limited. Reserves serve to smooth contributions over the life cycle. Without them premia would rise even more sharply with age, as morbidity increases. That means that if reserves are not portable, switching insurance company becomes more and more unattractive over time. However, strict time limits will apply for people already insured in the private insurance system and transferring reserves will be limited to the amount of assets that would have been accumulated on a basic tariff. People on an insurance contract with a broader coverage risk losing a considerable part of their assets and switching will remain unattractive for them. Thus, competition between private insurers will be limited to the basic tariff which will probably be attractive mainly for those confronted with high risk-surcharges on regular private health insurance contracts. Thus, the basic tariff may be subject to negative risk selection. To prevent that insurers will face competitive disadvantages through different morbidity risks within the basic tariff a risk-structure-adjustment will be implemented.

Competition based on healthcare provision

The system will be further opened to direct and selective contracting…

Freedom for insurers to contract selectively and directly is enhanced further with the new reform, which will enable insurers to influence the quality and cost-effectiveness of services that they provide and distinguish themselves on the basis of their offer. If instead they were to remain bound to buy healthcare solely on the basis of collective contracts (Box 2), the only parameter that they could influence would be their own administrative costs.

Box 2. Collective contracting in the German healthcare system

In **ambulatory care**, regional physicians' and dentists' associations negotiate collective contracts with insurers or their associations. The insurers make total payments to the physicians' associations for the remuneration of all of their members, in lieu of paying the physicians directly. The collective payment to the physicians' association is intended to reimburse it for its obligation to ensure access to healthcare for everyone within reasonable distances and time limits. The total payment is usually negotiated as a capitation per member or per insured person. The physicians' associations distribute these payments among their members as fees for services based on a floating point system. All approved medical procedures are listed in the Uniform Value Scale which assigns points to each service. The monetary value of these points depends on the total budget negotiated with the insurer divided by the total number of delivered reimbursable points for all services within the regional physicians' association, At the end of each quarter, every office-based physician invoices the physicians' association for the total number of service points delivered. With the reform the floating point-system will be changed to a fee for service system with fixed euro values for each service which will be developed jointly by insurer and physicians' associations. The morbidity risk is thus transferred to insurers in the sense that they have to pay more, if doctors have to treat more cases because morbidity increased.

Hospitals are financed on a dual basis: investments are planned by the governments of the 16 *Länder*, and subsequently co-financed by the *Länder* as well as the federal government, while insurers finance recurrent expenditures and maintenance costs. Since January 2004, the German adaptation of the Australian diagnosis-related group (DRG) system has been the sole payment system for recurrent hospital expenditures, except for psychiatric care where per diem charges still apply. There are quasi-budgets, in the sense that regional associations of insurers and hospitals agree on a level of DRG activity in advance for one year based on historical data. If this agreed level is exceeded, only 35% of the full additional DRG income is payable within the first year. Conversely, if the agreed DRG activity level is not reached, the hospital is required to pay back 60% of the underachievement. In other words, payments for under or over-shoots are adjusted marginally rather than at full cost. This level of performance is then taken into account in negotiating the agreed level of activity for the following year. In addition to smoothing the financial impact of activity changes on hospitals, such an arrangement also protects insurers from sudden increases in activity.

The government uses selective contracts also to develop a number of – at least for Germany – relatively novel forms of care (see Box 3), as it turned out to be difficult to do this within the traditional framework of collective negotiations between corporatist associations of insurers and providers. Separate contracts for the in- and outpatient sectors and limited possibilities to transfer resources across them had provided few incentives for providers to cooperate across sectors and improve care coordination. Selective contracts involving providers from different sectors can address this problem. Moreover, collective contracts in the outpatient sector are essentially based on lump-sum payments from insurers to physician associations, which they then distribute to their members in line with the quantity of services provided. There were no incentives for providers to develop innovative forms of care in this system. Again, this problem can be addressed by allowing insurers to contract directly and selectively with providers and the government has increasingly opened up possibilities to do this over the past few years. However, it should be noted that selective contracting will be limited to the care models described in Box 3, while collective contracts will continue to be legally binding for all other healthcare services.

Box 3. Novel forms of care

Integrated Care Programmes have been designed to better coordinate care between general practitioners (GPs) and specialists, across the inpatient and the outpatient sectors, rehabilitation and in some cases with pharmacies. Since 2 000 insurers have been allowed to negotiate integrated care models, in general involving actors from at least two different sectors or different specialties The hope was to improve both quality and cost-effectiveness of healthcare provision. Yet, take up was slow initially because the law prescribed that sectoral budgets would have to be cut by the amount spent on integrated care programmes to avoid increasing healthcare expenses. This turned out to be impractical, as negotiators were reluctant to agree to cut their budget partly to sponsor healthcare providers in other sectors. To improve the legal framework and financial incentives for integrated care programmes, insurers have been allowed to contract directly and selectively since 2004 with providers from different sectors and specialisations on integrated care programmes. As a start-up, financing up to 1% of sectoral budgets has been earmarked for these projects, initially until 2006, but this has been extended with the 2007 reform. That means that insurers are allowed to retain up to 1% of all hospital bills and up to 1% of payments for ambulatory care physicians. If insurers do not invest the money in integrated care projects within 3 years, they have to pay it back to hospitals and ambulatory care physicians.

Disease Management Programmes (DMPs) are supposed to provide improved healthcare for some chronic diseases, by establishing clinical pathways and up-to-date evidence-based guidelines for these programmes. They currently exist for diabetes, breast cancer, coronary heart disease and asthma. They are intended to better involve patients in treatment decisions and to improve care coordination across sectors as well as rehabilitation. The Institute for Quality and Efficiency in the Health Care Sector (IQWiG), founded in 2004, is supposed to provide research and advice. The number of registered DMPs for some chronic diseases has increased significantly since 2002. Since 2004, hospitals have also been allowed to offer inpatient care within DMPs. The main incentive for insurers to provide DMPs has been their financial promotion through the risk structure adjustment, as insurers receive additional funds for the standardised costs of treatment for their members enrolled in DMPs. This will become redundant and will probably be abolished once the new risk structure adjustment mechanism is introduced in 2009: this will provide adjustments for the standardised costs of treatment for 50-80 chronic diseases. DMPs can be offered and financed as integrated care programmes. While they have not been evaluated comprehensively, preliminary research in some regions suggests that at least some of them have helped improve quality (Altenhoffen *et al*., 2002). However, another study suggests instead that the link of DMPs to the risk structure adjustment has led to an excessive enrolment of patients in these programmes without due regard to their therapeutic value (Häussler and Berger, 2007).

General Practitioner (GP) centred models have been promoted since the healthcare reform of 2004 which obliged insurers to offer such programmes to their patients. The idea is that the general physician will direct patients through treatments, avoiding costly multiple treatment or diagnosis and improving the flow of information between different healthcare providers, thus improving cost efficiency.

Special ambulatory care: The 2007 has made it easier for insurers to buy outpatient care for their clients outside collective contracts directly from healthcare providers or groups of them based on selective contracts. Insurers can then offer healthcare plans to their members whereby they bind themselves to use only those ambulatory care services for which the insurer has contracted selectively.

Highly specialised outpatient care in hospitals: The possibility for hospitals to provide highly specialised outpatient care, for example for cancer or AIDS patients, has been introduced in 2004 as part of the integrated care programmes. However, it has hardly been used so far.

While the care models described in Box 3 have existed before, the 2007 reform aims at strengthening them further. It obliges social insurers to offer GP-centred models, as tariffs for those of their members who participate in DMPs, integrated care[9] and special ambulatory care. Members who wish to enrol in

9. Integrated care plans will be expanded by the recent reform, as they can now involve non-medical healthcare providers (such as speech therapists) and long-term care providers. The 1% start-up financing provision for integrated care (see Box 6.3), which was due to expire in 2006, is extended until 2008.

these programmes would bind themselves to limit their free choice of physicians for some time in line with the model provided. Insurers can offer financial incentives for members who choose to enrol in one of these models, including lower co-payments and premia. They are obliged to offer incentives to enrol in GP-centred models. To boost the supply of highly specialised outpatient care in hospitals, which had hardly been developed until now, *Länder* can now accredit hospitals in their territory to provide these services. Insurers will have to reimburse highly specialised ambulatory care based on fees prevailing in the outpatient sector.[10]

… but the co-existence of collective and selective contracts involves challenges

However, as collective contracts will continue to be the norm and all insurers will be legally bound by them, their co-existence with selective contracts will involve challenges. To prevent selective contracts from being financed as add-ons, insurers have to be able to cut their payments for collective contracts by the value of services they have contracted selectively (Cassel *et al*., 2006; Greß *et al*., 2006). Indeed, the reform law requires such an adjustment. However, the details of the adjustment mechanism have been largely left to collective contracting partners to negotiate. This has not worked well in the past, given that selective contracting benefits only some of the members of collective contracting parties, while hurting others (Jacobs, 2007). Physicians' associations, as an example, would have to agree to a downward adjustment of the payments they receive from insurers based on collective contracts, while only those of their members who engage in selective contracts can be expected to obtain re-compensation.[11] Against, this backdrop, there is a risk that collective contracting partners will not come up with a fair adjustment mechanism that could help generate overall savings.

Primarily as a result of these difficulties, take up of selective contracts has been strong so far only for those models for which extra financial incentives were provided, namely DMPs and integrated care programmes.[12] For other programmes, such as special outpatient care and GP-centred models, take-up has been limited and those that were developed were often financed as add-ons to the collective contracts. In the case of highly specialised ambulatory care in hospitals the incomplete risk structure adjustment has proved to be an additional problem hampering take-up, as insurers offering this kind of care for patients with catastrophic chronic diseases would have risked attracting new members requiring highly costly treatments without receiving financial re-compensation.

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10. Highly specialised ambulatory care can now also be provided as an integrated care programme, even without the involvement of actors from other sectors, which is generally required for a programme to qualify as integrated care. This gives insurers and hospitals, that develop such a highly specialised outpatient care programme, access to the start-up financing provided for integrated care.

11. In addition, the 2007 reform would probably complicate negotiations on the insurers' side, by stipulating that regional umbrella associations now have to negotiate uniform contracts for all insurers in the region, while they negotiated individually or by type of insurer before. Insurer roof associations would face the same problem as physicians' associations when negotiating an adjustment mechanism, as their members will probably engage in selective contracting to different degrees, and those who do so less may not want their competitors to be able to reduce their collective payments to a large extent.

12. For integrated care the 1% start up financing rule has ensured take-up, but this due to expire. There is a strong incentive for insurers to enrol chronically ill patients in DMPs, as this allows them to receive extra money through the current risk structure adjustment. However, the more comprehensive risk structure adjustment to be introduced in 2009 will make this provision superfluous, as it should provide adjustments for diseases covered by DMPs. The new risk structure adjustment should avoid disincentives to offer high-quality treatment to the chronically ill, while removing the extra payments that insurers can receive for patients enrolled now in DMPs. In principle, this may even be beneficial, as it could make that sure that insurers develop only cost-effective services. However, the problem of how to adjust collective payments for services provided and paid for through DMPs will become more pressing by then.

There is a risk that selective contracts could be financed as add-ons to collective contracts

Going forward, the government will have to watch very carefully whether insurers are able to engage in selective contracts without financing them as add-ons. If this is not the case, the government will need to find ways to strengthen the position of insurers in negotiations. Otherwise, there is a risk of an inefficient expansion of services and payments for those programmes that insurers are obliged to offer, undermining the potential for new forms of care to help enhance the cost-effectiveness of healthcare provision.

One option to strengthen insurers' position in contract negotiations would consist in allowing them to contract all of their services directly and selectively. They may well wish to continue contracting a part of their services collectively as this may involve lower transaction costs. In addition, collective contracts are associated with a clear responsibility for physicians association to guarantee access to healthcare within reasonable geographic and time limits, which has proved to work well. As insurers engage more in selective contracts, the responsibility to provide access will need to be shifted to them.[13] This will involve costs for them and it may not work as well as the current system at least in the beginning. However, allowing insurers to walk away from collective contracts altogether might strengthen their negotiation power sufficiently to enable them to enforce cuts in their collective contracting payments that would account for the services they contracted collectively.

The government needs to evaluate whether competition produces desired results

It is hard to predict now whether competition based on selective contracts will actually succeed in enhancing cost-effectiveness and quality, not least since the novel healthcare programmes described in Box 3 have not been evaluated thoroughly and systematically, so far. The government should monitor outcomes closely and augment quality assurance foreseen by law and implemented by contractual partners through regular independent evaluations.

Regular evaluation and publication of results will also be important, because patients and insurers need sufficient information for competition to lead to better quality. Selective contracts involve binding members to limit their choice of healthcare providers. The insured will only be willing to do this if they are sure that the healthcare plans they are being offered are of high quality. Likewise, they will only switch from insurers offering lower quality to those offering higher quality if they have the necessary information to judge this.

While the government has worked on improving information on healthcare quality, including by establishing the Institute for Quality and Efficiency in Healthcare (IQWiG), more remains to be done. The IQWiG provides independent evidence-based information including for consumers through a webpage, but the programmes described in Box 2 have not been evaluated systematically for patients, so far. It could be a task for the government to define a standard set of indicators and other high-quality information that providers will be required to publish regularly. Independent product testing and certification organisations, such as *Stiftung Warentest*, may also have a role to play to test the quality and cost-effectiveness of offered health plans. While this is a challenging task, it is necessary to strive for providing the required information for competition for quality to work. Working on improving the reliability of information about healthcare quality needs to be a continuous process in a system that relies on competition to provide better value for money for consumers.

Whether patients will actually demand the new services is not clear and insurers may have to offer substantial financial incentives for them to agree to limit their choice of physicians, while they are enrolled. Experience in the Netherlands has shown that patients can be very reluctant to do this. In this

13. This is also what the reform law stipulates.

context, there is some doubt whether insurers should have been required to offer their clients voluntary GP centred models with financial incentives for take up. Over 90% of German patients report having a family doctor and only just over a quarter say that they have no GP directing them through treatments (Schoen *et al*., 2007). Moreover, there is no clear evidence that GP centred models do help reduce overall healthcare spending (Greß *et al*., 2004). A recent study suggests that the cost of diagnosis and treatment duplication as a result of free and direct access to specialists in Germany is overestimated (Albrecht *et al*., 2007b). Thus GP centred health models may not generate the necessary savings for insurers to recover the associated financial incentives they are required to offer to their members. Leaving it up to insurers to decide whether they think they can reap savings with GP centred models and how they want to design them might have been a better option. Alternatively, Germany could have introduced a mandatory gatekeeper model, as this, at least, would not involve extra costs for insurers.

New health plans expand consumer choice but may be misused for risk selection

The reform obliges insurers to offer healthcare plans with deductibles or partial repayment of premia in return for limited use of healthcare services. Furthermore, they will have to offer a choice between benefits-in-kind, which is the norm now, and reimbursement plans. Before this deductibles were available only for people who were voluntarily insured in the social healthcare system, but could have taken out private health insurance.

While increasing the range of tariffs available to all social health insurance members will certainly increase consumer choice, it is not so clear whether deductibles or tariffs with repayments will generate savings for the social insurance system as a whole, as desired. For this to happen, savings would have to be higher than the financial incentives that would have to be granted to those who choose this option. There is no direct link between the quantity of healthcare services used and insurers' payments to physicians associations as these are based on capitations and past expenditure.[14] A reduction in doctors' visits could only reduce insurers' payments to physicians' association in the longer run, if the decrease in healthcare services use were to become noticeable so that it could become a basis for renegotiating capitation payments to physician's associations. Although the law states explicitly that if an SHIF provides such new tariffs the costs have to be financed by savings and efficiency gains within these new tariffs *ex ante*, it will have to be closely monitored if this is also the case *ex post*. It is therefore important that the regular reports about the effects of the new tariffs contain specific information about how the requested savings are realised.

At the same time, tariffs with deductibles or repayments can have undesirable side effects. First, patients should not reduce necessary physicians' visits to enjoy cost savings through deductibles, not least because this could increase treatment costs later. Yet, surveys suggest that lower income earners do skip doctors' visits when sick to avoid out-of-pocket payments. The proportion of people reporting that they have done so in the last year is actually relatively high in Germany compared to other countries **(**Schoen *et al*., 2007). There is also a risk that deductibles are used for risk selection. As they are mainly interesting for higher income earners with low morbidity risk who would visit doctors infrequently in any case, they could be used to attract this group of individuals. The improved risk structure adjustment to be introduced in 2009 will reduce this risk, depending on how complete it is. However, since the way the surcharge in the new financing system is currently designed entails some incentives for insurers to try and attract higher income members, as discussed before, the danger that deductibles might be used for risk selection is real. It will be necessary for the government to monitor very closely the effects of the new tariffs on insurers' finances and competition between them, including on whether it leads to risk selection.

14. However, morbidity structures of insured in selective contracts are taken into account to adjust the amounts negotiated in collective contracts.

The pharmaceutical market

Administrative measures have helped curb spending for pharmaceuticals

In some respects, price and market access regulation in the German pharmaceutical market is relatively light compared to other OECD countries, but efforts to contain costs with a host of small-scale, overlapping and often temporary instruments has made the regulatory environment rather complex (Box 3, see also Häussler *et al.,* 2006). There is no direct producer price regulation, unlike in most other OECD countries (Docteur and Oxley, 2003), and accredited medicines are immediately re-imbursable unless they are on a negative list. Thus, unlike in many other countries, there is no need for medicines to be admitted to a positive list to be re-imbursable, providing for fast access to new medication. However, there is indirect price regulation for medicines for which substitutes are available in that they are grouped and assigned a reference price, which is the maximum that insurers will reimburse.

Not all of the instruments used to control costs have proved to be sustainable. They have included incentives for pharmacists and physicians to join in cost containment measures, but also purely fiscal and often temporary measures, such as price moratoria and an increase in global rebates that pharmaceutical companies or pharmacists have to grant to insurers. New instruments have sometimes led to strategic reactions by market participants, in turn inducing the government to introduce new reforms to counteract the unintended side effects (see Box 4. on the *aut-idem* rule as an example). In addition, temporary price regulations have led at least once to significant spending increases after they have expired, as happened with the increase of the rebate that pharmaceutical companies had to grant to insurers from 6% to 16% in 2004 only, which led to an expenditure increase of 16.8% for medications in 2005 (Schwabe and Pfaffrath, 2006).

While cost-containment measures have probably prevented even higher expenditure increases in recent years, there are some indications that there is still room for savings without loss of quality through more effective price competition and more efficient prescription behaviour. Reference prices have been successful as a ceiling for prices of medicines to which they apply, but there is also evidence that they act as a floor at the same time discouraging price competition below this (Danzon and Ketcham, 2003). Indeed, some reports claim that prices of generics are a lot cheaper in other countries, such as Sweden or the UK (Schwabe and Paffrath, 2006; Häussler *et al*., 2006; Marty 2006). In any case, many policy measures to contain costs in recent years affected the generics industry, based on the assumption that price competition in that sector could work better than it does in Germany elsewhere in the pharmaceutical market and that prescription behaviour could be made more cost-effective. [15]

15. According to one report (Schwabe and Paffrath, 2007) the potential to save through more cost-effective prescription behaviour without loss of therapeutic value amounted to €3.2 billion in 2006: € 1.3 billion could have been saved by substituting prescribed medicines through cheaper generics, that is medications with the same active ingredient, another €1.3 billion by substituting medicines with others that have a different active ingredient, but an equivalent therapeutic value, *e.g.* analogous compounds. Another € 600 million could have been saved by avoiding the prescription of medicines of disputed effectiveness (Schwabe and Pfaffrath, 2006). However, the corresponding savings potential is measured to be significantly lower with a different methodology in a similar publication evaluating the pharmaceutical market in Germany (IGES, 2006).

Box 4. Cost-containment instruments in the German pharmaceutical market

The reference price is the maximum price that insurers will reimburse for a medicine belonging to a group with the same or pharmacologically similar active ingredients or with different active ingredients, but equivalent therapeutic value. This been quite successful in containing prices for medications to which they apply. However, their market share decreased substantially in the late 1990s, especially after the possibility to assign new patented medicines with little or no therapeutic value added (analogous compounds or me-too innovations) to reference-priced groups was abolished in 1996. This had led to sharp increases in costs for pharmaceuticals. In 2004 the possibility to assign patented analogous compounds to reference-priced groups has been re-instituted, helping to counteract the trend of a declining market of pharmaceuticals to which a price ceiling applies.

Regional target agreements between insurers and physicians' associations, which are mapped to the individual physician through **practice-specific indication-specific targets** set limits on expenditures on pharmaceutical prescriptions. The practice-specific targets are supposed to be enforced by control committees, a joint body formed by insurers and physicians' associations. They perform preliminary efficiency controls, when a physician overshoots the target by more than 15%, to establish whether the overshoot can be justified by specific practice circumstances. If the overshoot is larger than 25% and cannot be justified, the physician has to reimburse it to insurers. The insurers can also pay bonuses to doctors' associations if their members have prescribed less than foreseen in the target agreements. The recourse procedure usually took years, although it was limited through the 2007 reform to a maximum period of two years, and sanctions are applied only rarely. It cannot be excluded, though, that the threat alone helps induce physicians to aim for more efficiency, although it may also lead to a reduction of necessary prescriptions.

A *bonus-malus* rule is intended to control prescription overshoots based on defined daily doses for groups of medicines which are significant for overall expenditures. If a physician prescribes more, he or she has to reimburse 20 to 50% depending on the extent of the overshoot. If expenses prescribed by physicians of a doctors' association are below the target, a bonus will be paid to their association which will be supposed to forward these payments to its most efficient members. Doctors' associations can replace the rules with other arrangements that can reach the same goal. Medications that are subject to a *bonus-malus* rule are not subject to practice-specific targets or efficiency controls. The *bonus-malus* rule is not applied to medicines for which there are rebate agreements and the recent spread of these agreements has made the rule redundant.

The ***aut-idem* rule** introduced in 2002 requires pharmacists to substitute prescribed medications with a cheaper alternative with the same active ingredient, unless the prescription precludes this. Yet, the rules had to be adjusted several times, because market actors reacted strategically and there were weak and distorted incentives for pharmacists to comply. The government reacted by obliging the pharmacist to substitute prescribed medications with one of the three cheapest drugs in the reference group and set reference prices in the lower third of the price range which is now calculated excluding expensive medications with a low market share. Another problem was that pharmacists used to receive degressive percentage margins on medications they sold, which still increased with the prices of the drug, however, creating strong incentives to sell expensive medicines. To address this problem, the government introduced a lump-sum fixed margin along with a smaller percentage margin instead. A third problem hampering the functioning of the *aut-idem* rule consisted in big generics producers granting large rebates to pharmacists, including benefits in kinds, which pharmacists did not forward to insurers.

Imported medicines: Pharmacies are required to give patients (re-) imported medicines, if they are 15% below the prescribed medicine or €15 cheaper.

Rebates: Pharmacies have to give a rebate of € 2.30 to insurers for all prescription drugs. Pharmaceutical companies have to grant a 6% rebate to insurers. Insurers can negotiate further rebates with pharmaceutical companies for medicines that they have to reimburse.

Cost sharing: Patients pay 10% of the price for pharmaceuticals out of pocket, with a minimum of € 5 and a maximum of €10. Cost-sharing is limited to a maximum of 2% of gross earnings per annum and to 1% for patients with chronic diseases.

Recent reforms have been successful in containing pharmaceutical spending through further administrative measures. Prior efforts to encourage price competition in the generics market through the *aut idem* rule (see Box 4), which obliges pharmacists to replace medicines with cheaper generics, had partly been undermined by large generics companies competing through benefit-in-kind rebates to pharmacists, rather than through lower prices that would benefit insurers and their members. Rebates of 15%-20% were not rare, making it very difficult for smaller companies to compete, even if they offered significantly lower prices (*Sachverständigenrat Gesundheit*, 2005; *Deutscher Generikaverband*, 2004), mainly because they were not able to produce large quantities to the same degree as larger competitors. In

response, a reform law in 2006 has made these benefits-in-kind illegal and forced pharmaceutical companies to offer pharmaceuticals for which generics are available at a 10% rebate. Together with a lowering of reference prices and an effective price moratorium for re-imbursable medications for 2 years, this has contributed to containing spending on pharmaceuticals in 2006 and 2007.

But the government has also been successful with setting marked-based incentives recently

Recently, market-based incentives for patients to join in savings efforts seem to have revived price competition in the generics market and have thereby contributed to substantial savings. The reform allowed insurers to abolish co-payments for patients who chose medications with a price that is 30% below the reference price, leading many producers to lower their prices. Overall the increase in expenditure on pharmaceuticals has been very modest in 2006 with an increase of 1.8% and average prices of medicines in the social health insurance market have decreased by 2.3% (Schwabe and Pfaffrath, 2007; BKK, 2007).

There may be a lesson to be learned from the success with exempting cheap medicines from co-payments, thus using them more as an allocative instrument. The containment of public expenditure on health in recent years has been achieved partly through higher co-payments for medicines and doctor visits, but in most cases these have been used as a purely fiscal measure. There may be a case for trying to make better use of the potentially allocative function of co-payments in other areas, as well. However, it should not be overlooked that it is difficult to shape the design of co-payments so that they help reap cost savings without leading individuals to renounce cost-effective treatments that they need (Goldman *et al*., 2007).

Enhanced possibilities for rebate agreements could reshape the market

Opportunities for insurers to involve pharmacies, physicians and patients in their rebate arrangements with pharmaceutical companies and incentives for them to comply have been improved with the recent reform. Insurers were allowed to engage in rebate agreements before, but because of their obligation to contract and reimburse any medicine, they had no possibilities to guarantee quantities and not many rebate agreements emerged. Since the 2007 reform, pharmacists now have to privilege medicines with a rebate when substituting medications with a generic, unless the prescribing physician has precluded this. Insurers can abolish or reduce co-payments for medicines with rebates and they can engage physicians in target agreements to encourage them to privilege medications with rebates. Information about existing rebate agreements has to be included in practice and pharmacy software.

Rebate contracts have spread rapidly since April and this seems to have lead to noticeable changes in market shares (IMS Health, 2007), although it is too early to say whether this will lead to substantial savings. There also seem to have been some initial difficulties: some smaller generics producers that had made rebate agreements with large insurers experienced supply difficulties in the beginning and some of the rebate contracts are under investigation by the Federal Cartel Office (FCO) and courts, as they have been challenged by producers. On the other hand, some of the larger insurers claim that they could reap substantial savings through rebate agreements. Yet, there is still some legal uncertainty, because the reform law stipulates that competition law should apply to rebate agreements, but there is now a debate whether the FCO and corresponding courts would be responsible for review and enforcement or social courts which are responsible for social insurers in general. Another problem is that some insurers are regulated by state regulators, whereas others are regulated by a federal regulator (*Bundesversicherungsamt).* The government should make clear which authorities are responsible for reviewing and enforcing competition law applying to rebate agreements, while centralising regulation of insurers to ensure that the same rules apply to all. The outcomes of rebate agreements should be monitored closely.

If successful, the instrument could be developed further

If rebate agreements turn out to be a successful tool to enhance price competition, the government should consider developing this instrument further. A possibility, which has been put forward repeatedly in the recent discussion (Glaeske *et al*., 2006; Häussler *et al*., 2006; Klauber and Schleert, 2006; Sachverständigenrat Gesundheit, 2005) would consist in relaxing insurers' obligation to contract, by allowing them to reimburse only one or two medicines out of each group with the same active ingredient or, going a step further, of equivalent therapeutic value. Effectively, this would amount to insurers writing positive lists of medications that they reimburse. Physicians and pharmacists would need software containing up-to-date positive lists and physicians would deviate from this only exceptionally if there are good medical reasons for this.

If such a system could revive price competition below reference prices, it may also be possible to abandon some of the more cumbersome instruments with no allocative function in order to curb expenditure on pharmaceuticals that is not cost-effective. This could make pharmaceutical regulation lighter and more transparent than it is today.

Following other countries, Germany is introducing cost-benefit analysis for patented medicines

To avoid that patented medicines with limited therapeutic value added are sold at prices that are not cost-effective, the government has extended the remit of the IQWiG from performing benefit analysis for new medicines to cost-benefit analysis, following similar arrangements in many other OECD countries (see Coca *et al*., 2006, for a selection). This is intended to help determine the maximum reimbursement prices for new medicines. However, the method is still being developed and this will take time, given that it is not a trivial task to determine the therapeutic value of a medicine in monetary terms. The regulation will remain lighter than in other OECD countries, as the cost-benefit analysis and subsequent determination of a maximum reimbursement price will not be a prerequisite for reimbursement. Therefore, the price ceiling will apply only with a lag. A second opinion will be required for the prescription of a new and highly costly medication.

More competition in pharmaceutical distribution would be helpful

Competition in distribution should be enhanced to exploit untapped potential to lower prices. Margins in the pharmaceutical sector are high by international standards (Häussler *et al*., 2006; Glaeske *et al.*, 2006; *Österreichisches Bundesinstitut für Gesundheitswesen*, 2001) and regulation has prevented more efficient forms of distribution from emerging. Pharmaceutical companies can choose their prices freely, but they then have to be sold at the same price to all wholesalers. Pharmacies receive a fixed margin of € 8.10 per prescribed medication for privately insured, € 5.80 for socially insured (SHIF rebate) patients and a 3% margin on the wholesale price. Wholesalers, as well, receive a percentage margin fixed by the law. By implication, prices of prescribed pharmaceuticals are the same in every pharmacy and price competition in distribution is limited to over the counter pharmaceuticals. Pharmacists have only recently been allowed to own up to four pharmacies, but this remains quite restrictive. They have to be in geographical proximity and the pharmacist has to work in one of them. Direct distribution through the internet has only been allowed recently. The density of pharmacies remains high by international standards (Nink and Schneider, 2006).

Moving from fixed to maximum reimbursable prices and margins could do much to stimulate competition in distribution and help reduce expenditures on pharmaceuticals. Pharmacies could then undercut maximum prices in an effort to attract more clients through lower co-payments. In the original outline of the reform the government planned to move from fixed to maximum prices in pharmaceutical distribution, but this was scrapped in the lawmaking process. In addition, separate margins for wholesalers

could be abolished. Instead, pharmacists could make arrangements with wholesalers on how to share their margins. This is likely to lead to new and cheaper forms of distribution, provided that effective competition oversight prevents dominant market positions from arising (Glaeske *et al*., 2003: Cassel and Wille, 2006, Häussler *et al*., 2006).

To allow more efficient forms of distribution to emerge, including chains, the ban on owning more than four pharmacies should be lifted. Similar arrangements in other countries are currently under revision at the European Court of Justice and the result could well be that Germany will have to allow pharmacy chains, too. There will need to be effective competition policy, however, to avoid vertical and horizontal integration leading to dominant market positions. This has become a problem in Iceland and Norway after liberalisation (Anell, 2005) which has not led to lower prices, although it did improve availability of pharmacies.

Box 5. Recommendations how to make healthcare financing more sustainable

Healthcare financing

- Make sure that surcharges are flat and not income-dependent to avoid distorting competition.
- To the extent that additional subsidies for low income earners are needed, make sure that they are tax-financed as opposed to being financed exclusively by higher income earners in the same insurance.
- Consider whether the contribution of flat surcharges to the health system's revenues can be increased to strengthen the price signal and decouple healthcare financing from labour income a bit more. For consistency with the policy goal of shifting some of the burden of healthcare financing from labour to other bases, consider higher budget contributions to partly compensate social insurers for the VAT on medications.
- Strive to find a financing solution for higher budget contributions to social health insurance.
- Reconsider free co-insurance of spouses to avoid low- income traps for second earners. Address possible affordability issues with direct payments from the budget which could be financed from savings on payments which compensate SHIFs for non-contributing members.
- Include private insurers in the new financing system based on the central health fund.

Enhancing competition based on healthcare provision

- Monitor closely whether new forms of care based on selective contracts are financed as add-ons to collective contract payments. If they are, strengthen the position of insurers in collective negotiations, possibly by lifting the legal requirement to negotiate collectively.
- Make sure that the quality of new forms of care is evaluated systematically and independently. Work on a set of reliable and comparable quality indicators that providers will eventually have to publish.
- Monitor closely whether new tariffs, including deductibles and repayments for limited use of healthcare, actually generate the desired savings or else whether they are used primarily to attract high-income earners with low-morbidity risk.

Enhancing competition in the pharmaceutical sector

- Closely monitor outcomes of enhanced possibilities for insurers to engage in rebate agreements and make clear which authorities are responsible for reviewing and enforcing competition law applying to rebate agreements, while centralising regulation of insurers to ensure that the same rules apply to all. If successful, consider extending the measure by relaxing the obligation for insurers to reimburse any medicine and limiting it to one or two medicines out of each group with the same active ingredient or equivalent therapeutic value.
- Replace fixed with maximum prices and margins in pharmaceutical distribution.
- Relax the requirement that pharmacies can only be owned by a pharmacist who has to work personally in one out of a maximum of four branches he or she is allowed to own.

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