Working Paper of the FFA No. 22

July 2018

Budgetary targets for growth in healthcare expenditure: selected experiences and findings for Switzerland

Thomas Brändle
Carsten Colombier
Martin Baur
Serge Gaillard

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Finance FDF
Federal Finance Administration FFA
Economic Analysis and Policy Advice EAPA

Studies published by the Economic Analysis and Policy Advice Division do not necessarily reflect the official positions of the Federal Finance Administration (FFA), the Federal Department of Finance (FDF) or the Federal Council. The authors assume full responsibility for the theses defended in these studies and for any errors they may contain.

Publishing information

Authors	Thomas Brändle, Carsten Colombier, Martin Baur und Serge Gaillard
Publisher	Federal Finance Administration FFA Economic Analysis and Policy Advice EAPA Bundesgasse 3 CH-3003 Berne, Schweiz
E-Mail	thomas.braendle@efv.admin.ch, carsten.colombier@efv.admin.ch
Internet	www.efv.admin.ch www.efv.admin.ch/workingpapers
Layout	Electronical media and publications
ISSN	1660-7937
Languages	Available in french and german

Contents

Abstract

Switzerland has a good, albeit expensive, healthcare system. Spending on mandatory health insurance (MHI) has risen by twice the rate of GDP in recent decades. This rise in costs is becoming an increasing burden on private households and the public sector. It is calling into question the ability to finance MHI and is jeopardising equal access to healthcare services. A group of experts engaged by the Swiss Confederation has proposed binding budgetary targets as a central measure aimed at containing the growth in expenditure. This paper evaluates international experiences from comparable countries with cost management mechanisms in their social health insurance systems, such as Germany and the Netherlands, and derives findings for Switzerland. Binding budgetary targets raise the cost responsibility of the decision-makers in competitively organised healthcare systems, thus contributing to containing expenditure growth. They prompt the service providers to give greater weight to cost-benefit considerations while at the same time allowing them comparatively broad decision-making scope. Key to successful implementation of the budgetary target is the involvement of all principal healthcare players and clear decision-making and negotiating structures. Fears of rationing of medically necessary services, lower quality incentives or conservation of existing structures by means of budgetary targets can be countered with the appropriate measures such as a consideration of age-related morbidity and advances in medical technology when setting the budgetary targets. Likewise, accompanying measures such as incentive-compatible remuneration tariffs and quality monitoring are of paramount importance.

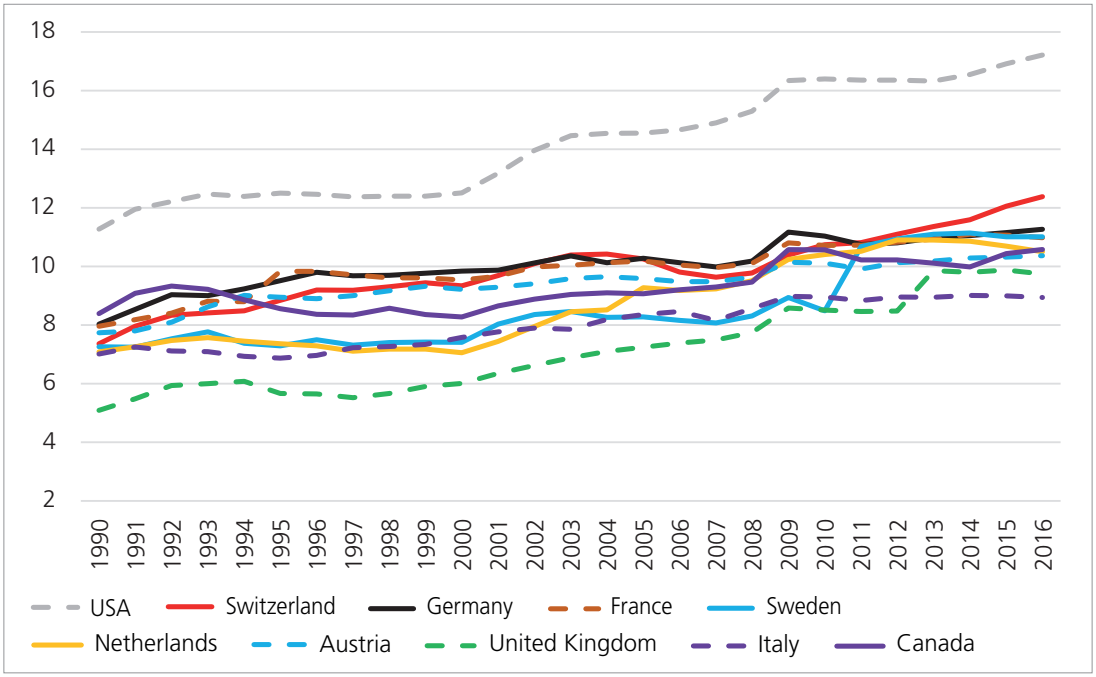
Key words: mandatory health insurance, cost growth, cost containment, global budget, budgetary target.

JEL code: H51, I13, I18

1 Introduction[1]

Switzerland has a comparatively good, albeit relatively expensive, healthcare system. Measured in terms of GDP, Switzerland currently ranks second among the OECD countries in spending on healthcare, behind the USA, and ahead of Germany and France (see Figure 1).[2] In particular in the field of mandatory health insurance (MHI), the annual premium increases of 4.5% on average are striking and far exceed per-capita increases in incomes and wages at 1.3% and 1.2% respectively (see Figure 2).[3] If premiums continue to rise at this rate, funding requirements would be comparable to a 1 percentage point rise in VAT every four years. The steep premium increases are not due solely to ageing and medical progress but are also being driven by a significant increase in volumes.

Figure 1: Healthcare expenditure for selected countries (in GDP-%)



Source: OECD.

The sharp rise in costs is resulting, on the one hand, in a greater burden on private households, especially those with low and average incomes. Approximately one-quarter on average of mean wage growth currently has to be used for the rise in premiums. If the momentum persists, this burden will continue to increase. On the other hand, the public sector is coming under pressure.

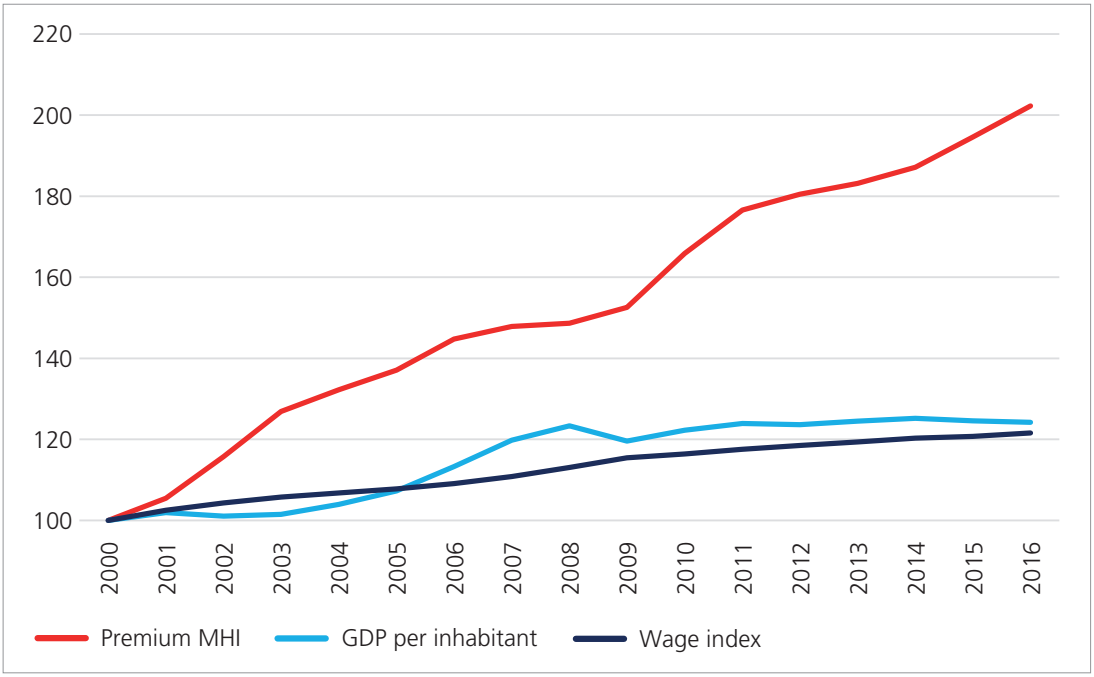
1 We would like to thank Marianne Widmer, Stefan Spycher, Vincent Koch, Karl Schwaar and Michael Eggler for their valuable comments and suggestions. Our special thanks are due to Klaus Meesters from the National Association of Statutory Health Insurance Funds for his willingness to participate in an expert interview on cost management in the German healthcare system.

2 For determinants of the growth in healthcare expenditure see Gerdtham and Jönsson (2000), Martin et al. (2011), Hartwig and Sturm (2014) in an international context, as well as Vatter and Ruefli (2003), Crivelli et al. (2006), Reich et al. (2012), Braendle and Colombier (2016) and Colombier (2018) for Switzerland and its cantons.

3 The figures refer to the increase in the standard premium of an adult with a deductible of CHF 300, free choice of doctor and accident cover, to GDP per inhabitant and to salary growth based on the wage index. Whereas the standard premium has gone up by 4.5% on average, total gross costs of MHI per inhabitant have increased by an average of 3.7%. This trend is reflected at the aggregate level: The annual growth rate of total MHI expenditure comes to 4.6% on average for the 2000–2016 period, while the wage bill and GDP rose by just 2.8% and 2.3% respectively (see Figure A1 in the Annex).

The cantons in particular are facing higher contributions to hospitals and healthcare and are increasingly tightening their belts with regard to individual premium reductions. The socio-political consequences of excessive rises in healthcare expenditure will also boost demands for greater financial involvement by the federal government. Unless it is possible to contain expenditure growth in the near future, the financeability of the healthcare system will be called seriously into question.

Figure 2: Development of standard MHI premium, GDP per inhabitant & wage index in Switzerland, 2000–2016



Source: FSO, FOPH, SECO; Index 2000=100.

Given the persistently high cost momentum, the call for effective instruments to keep costs in check is becoming increasingly important in terms of economic and fiscal policy. The range of measures that have been discussed include greater supply management, increased intervention in the prices of drugs and tariff structures, measures to boost competition, a systematic review of MHI coverage catalogue, an increase in patient co-payment and a call for clearer funding responsibilities. The autonomy of collective bargaining on tariffs for outpatient care has been largely blocked, and selective interventions by the government with regard to tariffs or specific behavioural regulations have always resulted in evasive tactics.

A complicating factor is the fact that economic-policy intervention in the healthcare system entails major uncertainties. In addition to an ageing population and advances in medical technology, other peculiarities of the healthcare system are also important in the discussion of rising healthcare costs. These include the difficulty in standardising services, incentives that increase spending as a result of insurance cover (moral hazard), and the asymmetric information between patients and doctors. Given the better level of information that doctors have, the latter may lead to a demand that exceeds the medically necessary extent of treatment, i.e. supplier-induced demand. This incentive may be increased, depending on the form of compensation. These pecu-

liarities of the healthcare system, together with a plethora of players and interests plus mixed responsibilities, result in a highly complex system.

The experts believe that Switzerland's mandatory health insurance entails considerable efficiency reserves and likewise significant potential for savings. In 2017, the government engaged a commission of experts to examine the topic of cost containment in mandatory health insurance. The experts consider an approach primarily on the supply side of the healthcare system as promising. One of the key proposals made by the group of experts was to introduce a binding budgetary target for expenditure growth with the possibility of corrective measures. Experience in neighbouring countries with similar systems shows that a budgetary target in competitively organised healthcare systems contributes to greater cost responsibility and can help to contain cost growth. There is a significant lack of any such element in the current system. In fact, mandatory health insurance is the only major area of social security without any explicit cost responsibility or budget restrictions (see report by the expert group in 2017).

As a contribution to the economic policy debate, this working paper focuses on the proposal of greater expenditure management through binding targets. It will concentrate on an analysis of the academic literature and selected experiences from other countries. On this basis, the requirements for this type of instrument will be formulated with a view to the Swiss healthcare system.

In a first step, a brief politico-economic analysis of the interests of the various players in the Swiss healthcare system under the current conditions will be provided. The analysis is in line with the initial reactions: a binding budgetary target for expenditure growth will face considerable resistance from the players involved, especially the service providers. Their arguments against any such budgetary target centre around budget-related service restrictions and a loss of quality at the patients' expense. At the same time they fear greater responsibility and poorer revenue prospects.[4]

In a second step, the fundamental advantages discussed in the literature and the reservations in respect of a binding budgetary target will be presented. A budgetary target allows for direct management of expenditure growth and introduces a previously lacking budget restriction into basic insurance which is funded by means of compulsory contributions. By jointly setting budgetary targets, the decision-makers – in particular the tariff partners – will be called upon to share in the financial responsibility, which has barely existed to date. The tariff partners would be obliged to cooperate to a greater extent, and this in turn would introduce more pressure to reform into the blocked system. A binding target provides a budgetary framework for agreement by the tariff partners and can steer them towards more objective and more moderate negotiation outcomes. A budgetary target would induce individual service providers to take greater account of cost-benefit considerations for each treatment. At the same time, a budgetary target would – in contrast to other measures – leave them the scope to save where they see savings as most feasible, i.e. ideally with treatments that are not medically necessary. Neither the health insurance funds or patients nor the federal government and the cantons could do this better. A budgetary target can therefore complement the competitively organised and decentralised healthcare system through explicit management of expenditure growth. Greater management of expendi-

4 The joint position of key players on the proposed measures provides an indication: http://www.santesuisse.ch/de/details/content/globalbudgets_sind_leichtfertige_experimente_zu_lasten_der_patientinnen_und_patienten_1349/

ture growth would ease the burden on premium payers and the public sector and also increase their planning certainty.

The possible disadvantages of a binding budgetary restriction could be a greater risk of limiting medically necessary services, which may manifest itself in the form of longer waiting times, for instance. This type of service restriction could also mean less equal access to healthcare services. There is also a fear that fewer available funds could result in doctors and hospitals not gearing their action so much to patients' needs, shifting services to areas not affected by the budgetary restriction or prioritising certain patients and treatment methods so as to safeguard their revenue. Another point put forward is that a binding target does not offer sufficient incentives to increase quality and efficiency, thus curbing innovation and resulting in overly rigid structures. For instance, the desirable shift from inpatient to outpatient services would become more difficult. Finally, budgetary targets in the healthcare system are often viewed as relatively bureaucratic and interventionist.

In a third step, the paper will address the experiences with comparable instruments in selected countries. The examples used are primarily Germany and the Netherlands, which have similarly structured healthcare systems. Experience shows that binding budgetary targets for expenditure growth – in the form of the principle of stable contribution rates in Germany and binding agreements in the Netherlands – serve mainly as an "anchor" for cost growth. Binding budgetary targets complement the existing range of instruments with a top-down approach and integrate the tariff partners more closely into cost responsibility as part of clear decision-making structures. When introducing budgetary targets, however, account must also be taken of technological and demographic trends in order to guarantee the provision of medically necessary services. Moreover, certain areas such as integrated care – which is to be promoted – or basic services such as vaccinations are partially excluded from the budgetary target. In terms of corrective measures, Germany has a clearly defined system of subsequent fee reductions. In the Netherlands, the present sanctions work more as a threat and increase pressure to reform. However, in the Netherlands, implementing sanctions – in particular prior to 2012 – proved difficult owing to a considerable delay in definitive figures on target attainment, lawsuits claiming a right to healthcare and other health policy priorities.

Finally, the focus will be on the requirements that could be derived from international experience for a binding budgetary target for expenditure growth in the Swiss healthcare system. Firstly, a binding budgetary target system can most easily be implemented if as many of the key healthcare players as possible are involved in establishing it and are represented in the corresponding boards and are thus co-responsible for the system. If the service providers in particular are also to get behind the budgetary targets, they must be shown that greater cost management or cost growth containment is inevitable in the medium term as – like in all other areas of social security – funding for basic insurance is not unlimited. It must also be made clear that a budgetary target involving all key players is a participative solution which, compared to other measures, still offers considerable decision-making scope. Secondly, a binding budgetary target will initially mean an accentuation of the distributional conflicts in the healthcare system. Not least for this reason, the definition and implementation of binding budgetary targets call for resilient negotiating and decision-making structures and clear sanction mechanisms. This applies to both the definition of the binding budgetary targets and to implementation of the budgetary targets by the cantons and tariff partners. It is particularly important that consensus on the budgetary target be reached within the relevant professional associations. A budgetary target must also be accompanied by parallel measures. Incentive-compatible remuneration systems leaning towards more flat-rate payments are especially important as they reduce incentives to increase volumes. Effective quality monitoring is also a

priority in order to avoid undesirable effects such as rationing of services, service shifts and lower efficiency incentives. A binding budgetary target system together with a comprehensive quality monitoring programme ultimately places higher demands in terms of cooperation and transparency on the players in the healthcare system.

2 Interests in the current framework conditions

If an implementation of binding budgetary targets becomes concrete, considerable resistance has to be expected from the service providers. Compared with the status quo, a budgetary target restricts expenditure growth and at the same time the possibilities for increasing service-providers' income. The service providers' argument will centre in particular around the risk inherent in a binding budgetary target of service rationing and of less equal access to healthcare services – and will claim that high-quality healthcare is being threatened by this type of drastic state intervention. From their point of view, the sharp rise in premiums is fundable, given the increase in revenue. They are most likely to call for greater tax funding with respect to the increased premiums, for instance more financial resources for individual premium reductions. The position of the service providers is also supported to some extent by the patients, who often place higher costs on a par with higher quality, but who only bear a small portion of these additional costs directly themselves, owing to insurance cover. As the healthcare system is a particularly visible and sensitive political area that is perceived as important, it is to be expected that political decision-makers and voters will be receptive to this point of criticism (see White 2013 and Katz et al., 1997).

Most of the health insurance funds can also accept the status quo: in view of the current lack of cost responsibility on their part they neither have to engage in difficult negotiations with the service providers nor set up and implement strict controls. It is easier for the health insurance funds to push through premium increases in respect of the politically less well organised, heterogeneous group of insured persons. Instruments for health insurers that would enable them to more easily carry out their role as an administrator of insured persons in terms of active cost controls vis-à-vis the service providers (e.g. easing selective contracting, greater systematic invoice controls) are avoided wherever possible. In case of doubt, the health insurers – together with the service providers – reject the proposed instrument, citing the priority of high-quality patient care.

The tariff partners prefer to leave political responsibility for and criticism of the annual premium increases to the Federal Council during the annual process of formally approving the premiums. However, its authority to intervene is limited. The cantons already have the option of global budgets in the inpatient sector but do not make much use of it. As regulators, funding providers and often also operators of hospital facilities, the cantons have multiple roles. The interests of the insured persons and thus implicitly also of the tax-payers in a sustainably fundable healthcare system are thus inadequately represented in the current political process.[5]

5 For a politico-economic consideration of the conduct of economic stakeholder groups in the current political process see e.g. Frey and Kirchgässner (2002).

3 Basic considerations

3.1 Arguments in favour of binding budgetary targets

A key argument in favour of a binding budgetary target for expenditure growth in the Swiss healthcare system is the barely extant cost responsibility and very lax cost management in the current system. In particular the area of MHI, which is financed via compulsory contributions, is the only major area of social security in Switzerland in which no political decisions with regard to costs are made.[6] As in all other areas of social security, however, mandatory health insurance does not have access to unlimited funding.

Introducing binding budgetary targets would serve as a "disciplinary" instrument. A budgetary target sets a binding (overall) cost growth goal, includes the healthcare decision-makers (service providers, health insurance funds, federal government and cantons) in the financial responsibility and builds up the necessary political pressure through the option of sanctions. Sanctions not only increase the binding nature of the budgetary targets but also transfer the financial risk (collectively) to the service providers for the case in which the budgetary target is exceeded (see Henke at al., 1994). A budgetary target could also make the discussion of how much should be spent on MHI more objective and more transparent.

Budgetary targets together with global budgeting act as a budget restriction which prompts the tariff partners, for example, to agree more moderate outcomes to their negotiations and motivates the individual service providers to take greater account of cost-benefit considerations. Budgetary targets can therefore – by means of joint cost accountability – result in greater coordination between the individual service provider groups, enhance mutual trust and increase pressure to reform on the blocked system. At the same time this also means higher requirements for information and more transparency on the part of the key players in the healthcare system.

A budgetary target allows the (well informed) tariff partners maximum scope to implement savings measures and efficiency improvements where this is best possible – ideally in the case of treatments that are medically not necessary. Accordingly, a budgetary target is also compatible with the self-perception of the free medical professions which, under an overall binding budgetary restriction, are still best able to decide, largely autonomously and decentrally, where treatment that is not necessary can be waived. From this standpoint, an budgetary target is more compatible with free professional autonomy than specific regulatory imperatives. A budgetary target can foster the solution-oriented culture within the service provider groups through participative co-responsibility for budget compliance.

In terms of the goal of cost containment, binding budgetary targets are a more direct instrument than other economic-policy measures which rely on greater competition or solely on remuneration or tariffs and which thus have only an indirect influence on the cost trend. Consequently, a budgetary target increases planning certainty for the public sector and tariff partners. It forces greater (cost) transparency (see Sutherland et al. 2012) and stabilisation of premium payments.

6 A survey of 29 countries conducted by the OECD (Paris et al. 2010 and Joumard et al. 2010) shows that Switzerland is one of the few countries without any type of politically determined, explicit budget restriction at the aggregate or sector-specific level. It should be pointed out that countries with tax-financed healthcare systems often set ceilings and global budgets as part of their regular budget process.

Although a budgetary target is foreign to the core elements of a model of regulated competition, it can constitute a meaningful complement to regulated competition. Firstly, it can deliver a corrective amendment in the form of explicit cost management to a competitively organised system that aims primarily to improve efficiency. Secondly, a system of binding budgetary targets raises regulation density at first sight. However, the better the top-down approach of a budgetary target is implemented, the fewer regulatory interventions are required to contain costs. A budgetary target should create incentives to contain costs at the decentralised level within the healthcare system (via the tariff partners). At the same time, the significance of additional measures and behavioural regulations to contain costs (from outside the healthcare system, by politics and public administration) should decline (see Hurley and Card 1996, and Grumbach and Bodenheimer 1990).[7]

3.2 Reservations with regard to binding budgetary targets

First of all, a budgetary target can give rise to strategic incentives for the service providers. The limited resources available under a budget to which the service providers have collectively committed themselves are a priori common-pool resources: the revenue of the individual service providers depends not only on their own service provision behaviour but also on that of all other service providers subject to the budgetary target. At the individual level of the service provider, a collective budgetary target creates a financial incentive to bill as many services as possible in order to raise its "market share" under the defined budget. Expressed in economic terms, there is an individual rational incentive to over-use the common-pool resource global budget. The costs of this extension in the form of a collective ex-post price-based or tariff-based discount (with flexible point values) affect all service providers, however, including those who acted frugally – as desired – under the budget system. This incentive problem is particularly pronounced in a fee-for-service system. In principle, a budgetary target requires greater cooperative coordination in terms of the service quantity, although the individual financial interests of a cooperation may be in conflict in the short term. Theoretically, a budgetary target broken down to the individual service provider can break this incentive constellation. Overall, volume increases that are thus motivated can go hand in hand with a loss in treatment quality and thus undermine the system of binding budgetary targets.[8]

A second argument against introducing a restriction by means of a binding budgetary target is the increased risk of limiting medically necessary services (rationing) by prioritising services or in the form of longer waiting times.[9] A service restriction also entails the risk of less equal access to healthcare services as, for instance, services that are covered by MHI would have to be cut and would only be covered by supplementary insurance or would have to be paid for out of pocket. It could also happen that the service providers – for revenue purposes – would give priority to patients or treatments in the global-budget service area in line with specific criteria ("cream

7 The OECD (Moreno-Serra 2013) rates the experience with budget ceilings as predominantly positive in a summary article on measures to contain healthcare costs. It is also pointed out, however, that there is a shortage of reliable empirical investigations.

8 See section 4, Benstetter and Wambach (2006) for global budgets for the outpatient sector of the statutory health insurance fund in Germany, Schut and Varkevisser (2013) for the Netherlands, Hurley et al. (1997), Hurley and Card (1996) for global budgets for the outpatient sector in Canada, and Cheng et al. (2009), Hsu (2014) and Chen and Fan (2015) for similar observations in Taiwan.

9 See Schwierz (2016) for the EU, Moreno-Serra (2013) for the OECD and Sutherland et al. (2012) for Canada.

skimming" or "cherry picking").[10] Fewer available resources under a budget restriction could also mean that the service providers would gear their actions less to the patients' needs and wishes.

If budgetary targets are set only in certain service areas, this could also prompt an (undesirable) shift of costs and services to the areas not subject to the budget restriction.

In addition to the undesirable strategic incentives, rationing and the problem of shifting services, another argument is that budget ceilings offer few financial incentives for raising quality or efficiency so that innovation tends to be halted and structures – including the existing inefficiencies – are retained (see UBC 2014, Sutherland et al. 2012). This could, for instance, make it more difficult to shift cost-saving and desirable services from inpatient to outpatient services, as the service providers in the outpatient sector fear an additional burden on their budget. At the same time it is claimed that sectoral budgetary targets reduce incentives to improve integrated care across a number of different treatment levels.[11] In this context, budgetary targets in the healthcare system are often also viewed as relatively bureaucratic and interventionist.

When breaking down the budgetary targets there is also the danger that particularly labour-intensive areas with fewer possibilities for productivity progress will be too heavily restricted while very technology-heavy areas will be given insufficiently restrictive budgets (see Kühn, 1999). Furthermore, an overly restrictive budgetary target can delay or prevent investments in infrastructure, which in the medium term may be reflected in higher additional funding requirements or poorer service quality (see Leidl 1997 and Schwierz 2016).

Finally, it is to be expected that the introduction of budgetary targets will accentuate competition for the limited funds between and within the various specialties. This can lead to discord and political in-fighting for allocation of resources and can tend to reduce the willingness of these specialties to cooperate and coordinate. However, this is inevitable in the face of efforts to step up cost containment (see Leidl 1997, Hurley et al. 1997).

Overall, the literature does a good job of illustrating the potential advantages and possible disadvantages of greater management of healthcare expenditure by means of budgetary instruments. Ultimately, however, the benefit of this type of measure has to be seen in comparison to the alternatives and to the health policy priority of cost containment and depends to a large extent on its specific design. It therefore makes sense to take a closer look at experiences in comparable countries with budgetary targets.

10 See e.g. UBC (2014), Hurley et al. (1997) and Hsueh et al. (2004).
11 See, e.g., Long and Marquis (1993), Hurley et al. (1997), Sutherland et al. (2012).

4 Experiences from selected countries

The focus is on Germany and the Netherlands, which have similar healthcare systems to Switzerland (see boxes 1 & 2 in the Annex for an overview). All three countries have a social health insurance system with regulated insurance competition. Like Switzerland, Germany offers a free choice of doctor, while in the Netherlands GPs act as gatekeepers to the healthcare system. As in Switzerland, Dutch insured persons pay a relatively high deductible; in Germany, the excess of private households is relatively low. The healthcare systems in both Germany and the Netherlands are much more centralised. This is why experience of global budgets from the outpatient sector of Canada's decentralised healthcare system has been included. Experience of global budgets in Taiwan is also referred to, as this case is very well documented in the literature.

Germany and the Netherlands are also in the group of countries with very high healthcare costs. In Germany, 11.3% of GDP is spent on healthcare (in 2015: Switzerland: 11.9%). This equates to EUR 344 billion or currently EUR 4,213 per inhabitant (Switzerland: CHF 9,384). In the Netherlands, the share of healthcare expenditure accounts for around 10.7% of GDP. Total spending comes to EUR 72 billion or EUR 4,269 per inhabitant. Whereas in Switzerland only around 35% (excluding insured persons' contributions 33.4%) of healthcare spending is financed by social health insurance, in Germany and the Netherlands the financing component – 58% (66% including nursing care) and 43% (2013) (72% including long-term care) – is much higher.[12]

4.1 Germany

Cost management and development of the principle of stable contribution rates

As early as the mid-1970s, efforts to reform the system were introduced in Germany in order to contain the costs of statutory health insurance (SHI) (see Gerlinger and Schönwälder 2012c). The principle of stable contribution rates was outlined for the first time in the Health Insurance Cost Containment Act of 1977 and thus instituted on a de jure basis as the benchmark for developing service remuneration in the statutory health insurance sector (see Peters 2017, p. 5p.).[13] However, this principle was not formulated in a binding manner in the law and thus conflicted with other benchmarks enshrined in law such as the development of practice costs.

Efforts have been made in the outpatient sector since 1987 to limit expenditure growth with global budgets (see Henke et al, 1994). This was initially done by means of expenditure ceilings. The Health Care Reform Act of 1989 aimed to define prospective global budgets in the tariff partners' negotiations which were to be geared to an estimate of revenues (see Leidl 1987). However, these endeavours were not overly successful as there were various cases of budgets being exceeded. Politicians reacted by introducing the Health Care Structure Act in 1993 which provided for a subsequent budget balancing measure as an ex-post sanction. The system of floating or flexible point values was used. The point values of the outpatient remuneration rate, the uniform value scale (UVS), were revised downward to the available budget if the global budget was exceeded. Measured against the stable contribution rates target, this system was

12 It is worth noting that a considerable portion of healthcare expenditure in Switzerland is financed by the public sector (around 28.4%). The share of mandatory health insurance and of the public sector came to 63.6% in 2015.

13 To be precise, the principle of stable contribution rates has existed since 2009, as an increase in both the general contribution rate and in the average supplementary contribution is to be excluded (see Peters 2017, p. 24; Art. 71 para. 1 p. 1 German Social Code, Book V). For reasons of simplicity, the term Principle of stable contribution rates is used synonymously with Principle of contribution stability.

successful as it required only one increase in the contribution rate of 0.02 points between 1992 and 1995.

In the inpatient sector, the introduction of the Health Care Structure Act in 1993 brought about a fundamental change in budgeting (see Gerlinger and Schönwälder 2012b). From 1996 on, the law meant that for the first time an attempt was made to orient remuneration more strictly to the principle of stable contribution rates. A combined system of case-based flat rates, procedural rates and daily rates was created for remuneration, although only around 25% of the services were billed via case-based flat rates. The incentive for hospitals to extend patient stays for revenue-related reasons thus persisted. The Health Care Reform Act of 2000 resulted in a complete and budget-neutral changeover in hospital remuneration to diagnosis-related flat-rate payments (G-DRG), which entered into force in 2003.[14]

The ongoing reform process that began in the 1990s aims to strengthen the financial responsibility of the health insurance funds, service providers and patients and also to create more competition between health insurance funds (free choice of health insurance fund for insured persons since 1994) and service providers (flat-rate payments in the inpatient sector since 2003) (see Gerlinger 2012b and Gerlinger and Schönwälder, 2012c). With the greater financial responsibility of the healthcare professionals, the principle of stable contribution rates has developed into a budgetary target for revenue-based cost management of the SHI system.

Expansion of the self-administered healthcare system

Both the expansion of regulated competition and the reinforcement of the principle of stable contribution rates are accompanied by the expanded management competencies of joint self-administration and the expanded competencies of the German Ministry of Health (see Gerlinger 2012b). Since the 1990s, the German lawmakers have greatly expanded joint self-administration, in particular by creating the Federal Joint Committee (FJC) by means of the SHI Health Insurance Modernization Act of 2004.[15] In SHI, the FJC was tasked with safeguarding adequate, purposeful and cost-efficient services for insured persons. The FJC has the authority to issue guidelines for virtually all areas of medical treatment in SHI. The FJC thus decides on the scope of the services and is tasked with subjecting all (new and existing) services in SHI to a cost-benefit assessment. Under the Act to Strengthen Competition in SHI of 2007, the FJC was given far-reaching powers to issue guidelines in the field of quality assurance. The FJC thus relies on the German Institute for Quality and Efficiency in Health Care (IQWiG) and the German Institute for Quality Assurance and Transparency in the Healthcare Sector (IQTiG), which were founded for this purpose. Further institutional changes comprise, among other things, strengthening the health insurance funds by means of a previously non-existent federal association, whose establishment was provided for by the lawmakers – the National Association of Statutory Health Insurance Funds – and transferring competencies for collective negotiations on remuneration in the inpatient sector to German Hospital Federation and the state (Bundesland) hospital associations.

14 In a transition phase, the aim was for the hospital-specific base rates to converge with a Bundesland-specific base rate by 2008 and for the latter to fall within a bandwidth around a national base rate by 2010.

15 The FJC took the place of the former federal committees of physicians/dentists and health insurance funds, the hospital committee and the coordination committee.

Principle of stable contribution rates as a budgetary target

It was only with the entry into force in 2000 of the Health Care Reform Act of 1999 that the principle of stable contribution rates became more legally binding (see Busse and Blümel, 2014, p. 237).[16] Art. 71 para. 1 of the German Social Code (GSC) Book V states that the tariff partners now have to structure negotiations on remuneration in such a way that contribution increases are excluded.[17] The law thus expressly states that the principle of stable contribution rates applies to remuneration agreements between the tariff partners in every sector e.g. outpatient and inpatient care as well as drugs (see Peters 2017, p. 30).[18] However, a general exception exists if medically necessary treatment is not guaranteed even after the cost-efficiency reserves have been exhausted. Medically necessary treatment by the SHI would no longer be guaranteed if, on the basis of morbidity-dependent changes, cost developments outside the area of responsibility of the SHI, medico-technical progress or an economically induced decline in contribution revenue, doctors' services to which SHI insured persons are entitled can no longer be provided (see Peters 2017, p. 36). Such cases constitute a "remuneration emergency". Cost-efficiency reserves include inefficiencies such as existing surplus care or a care shortfall in the SHI (see Peters 2017, p. 41). Moreover, the law cites preventive examinations and screening and structured treatment programmes for chronically ill patients as exceptions. In addition, statutory restrictions to the principle of stable contribution rates such as morbidity orientation for remuneration of registered doctors apply to the various areas of the SHI. Consequently, the lawmakers specifically link a revenue-oriented cost management system with the aims of exhausting efficiency reserves and preventing rationing.

The law provides for a clearly structured framework for implementing the principle of stable contribution rates in respect of service providers. The principle of stable contribution rates is to be observed in negotiations between service providers and health insurance funds (see Gerlinger 2012a; Gerlinger and Burkhardt 2012e). The services covered by the SHI and tariffs for each year are determined for both the outpatient and inpatient sectors at the federal level at the joint FJC, in which the federal associations of the tariff partners, independent members and patient representatives without voting rights participate.[19] Thereafter, the global budgets are determined at the state level in two stages down to the individual service providers, i.e. hospital and doctor's practice. In the outpatient sector, the health insurance fund associations and associations of statutory health insurance physicians (ASHIPs) agree on a global budget for the entire sector (morbidity-dependent overall reimbursement) which is broken down by the ASHIPs among the doctors. A separate global budget each is defined for GPs and specialists. Each health insurance scheme doctor is allocated a fixed global budget – a standard service volume – in advance per quarter, on the basis of patients' treatment needs. In the inpatient sector, the state health insurance fund associations and the state hospital associations determine the state base rates for the DRG services (see Gerlinger 2012d). The valuation ratios for flat-rate payments are determined at

16 Whereas previously the contractual partners were required by law to "observe" the principle of stable contribution rates, the Health Care Reform Act states that they have to "structure the remuneration agreements in such a way" to exclude contribution increases (see Peters 2017, p. 24).

17 The term „contribution increases" includes not only the statutorily defined general contribution rate for the SHI of currently 14.6% of the income subject to contributions, but also the supplementary contributions that vary according to the health insurance fund (see Peters 2017, p.24).

18 In addition to the above-mentioned sectors there are also the areas of dental care, dental technician services for dentures, provision of aids, prevention and rehabilitation services.

19 In addition to the so-called plenary session of the FJC there are nine sub-committees, which prepare the decisions for the plenary session (see http://www.english.g-ba.de/).

the national level by the tariff partners. Negotiations on the global budget of individual hospitals take place between the state associations of health insurance funds and the hospitals (or hospital owners).

If no agreement is reached between the tariff partners in the outpatient or inpatient sector, an arbitration board steps in (see Art. 18a Hospital Financing Act; Art. 89 German Social Code Book V; Art. 114 German Social Code Book V). The arbitration boards at the national and state level for both the registered doctors and the hospitals have an equal number of representatives from the health insurance fund associations (National Association of Statutory Health Insurance Funds, state health insurance fund associations) and the associations of the service providers (ASHIPs, hospital associations). Moreover, an independent chairman and two further independent members from the associations of health insurance funds and service providers are jointly appointed. In the event of a tie, the chairman casts the deciding vote. The agreements of the tariff partners and the decision of the arbitration board must be approved by the supervisory authorities, i.e. the federal and state ministries of health. If a doctor or hospital exceeds the global budget, sanctions with a gradual diminishing tariff reductions apply. In the outpatient sector, if a doctor exceeds 150% of the average standard service volume for the medical specialty, a diminishing graduated reduction of UVS points is applied (see Blankart and Busse 2017). The reduction is not applied automatically, however, but only after an individual performance audit by the health insurance medical service. In the inpatient sector, if they over- or undershoot the agreed global budget, the hospitals have to pay back 65% of the amount in excess of the budget to the SHI the following year and are reimbursed 25% if they undershoot the budget. Moreover, they are sanctioned if services are extended beyond the agreed scope. More stringent sanctions were introduced in 2017, which call for a reduction amounting to the fixed costs for the next three years to be imposed in the event of excess service provision, known as a fixed cost degression (Art. 10 para. 13 German Hospital Reimbursement Act). Exceptions are made possible in that deviations from the principle of stable contribution rates are allowed, in accordance with Art. 71 of the German Social Code Book V, if the medically necessary treatment is not guaranteed even after exhausting the cost-efficiency reserves (see box 3 in the Annex for a detailed description).

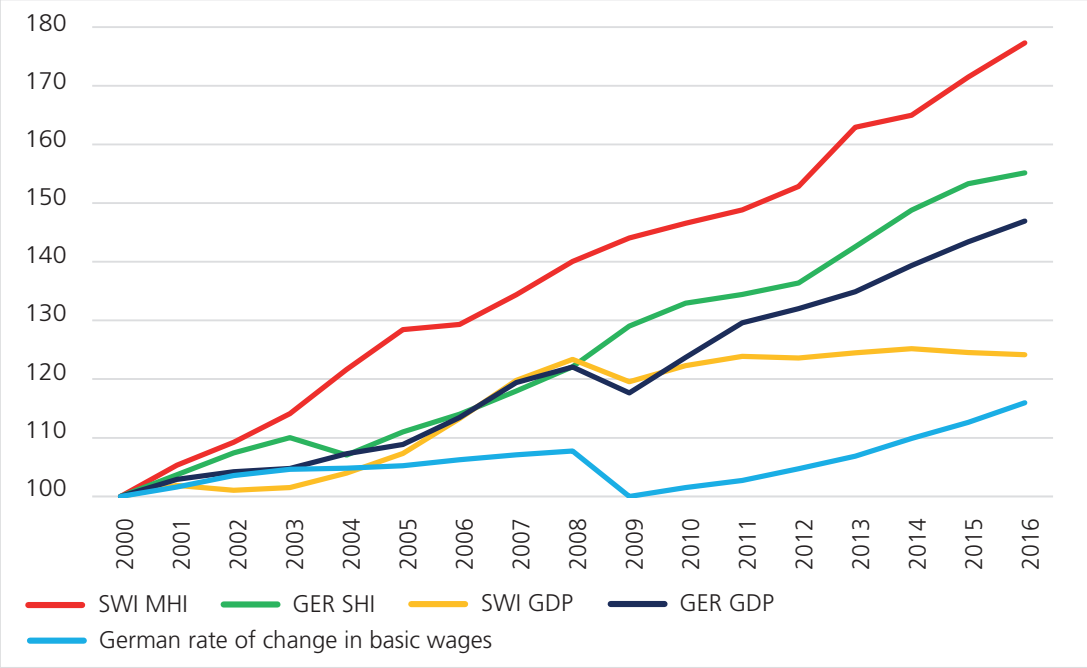
Expenditure development with a budgetary target

Figure 3 shows the development in the phase of more stringent cost management (since the entry into force of the Health Care Reform Act in 2000). The principle of stable contribution rates is decisive for the change in remuneration rates in SHI. For the purpose of comparison, the nominal economic trend and the Swiss case are included in per capita increments. At an average growth rate of 2.8% p.a., SHI expenditure for each contribution-paying member (contributor) has risen more sharply than the rate of change in basic wages (growth rate of total basic wage per contributor) at 1.5%. Strictly speaking, no stability in contribution rates was therefore achieved. However, growth in total basic salaries was relatively modest between 2000 and 2015. The difference between per-capita SHI spending momentum and growth in nominal per-capita GDP (2.5% p.a.) is correspondingly smaller. Factoring out the recession year of 2009, the per capita growth rate of nominal GDP is therefore 0.3 percentage points above that of SHI expenditure. By contrast, in Switzerland MHI expenditure growth per premium payer with an annual growth rate of 3.7% has, since 2000, clearly exceeded economic growth per inhabitant of 1.4% (even if 2009 is factored out, 3.7% vs. 1.7%).

If the budgetary target in SHI is understood as an anchor which serves to bind SHI expenditure momentum closely to the economic trend, revenue-oriented cost management can be deemed

effective. The principle of stable contribution rates is not strictly adhered to here, however. But the law provides for deviation from the principle of stable contribution rates (see Peters 2017, p. 31; Art. 71 para. 1 German Social Code Book V), if rationing can thus be avoided. Accordingly, there are exceptions and, depending on the area of SHI, various restrictions to the principle of stable contribution rates. From 2000 to 2016, the contribution rate rose from 13.5% to 14.6% of the basic salary with rates climbing even higher intermittently. Consequently, additional sources of funding for SHI were developed in addition to the cost-containing measures. In 2004, a tax-financed federal subsidy was introduced, for instance, which initially amounted to around 0.8% of SHI expenditure and currently finances just under 6% of the expenditure (see Gerlinger 2013). Employees pay a supplementary contribution rate, which varies according to the health insurance fund, and which currently accounts for 1.1% on average of their income subject to contributions (see SHI National Association of Statutory Health Insurance Funds 2017). By contrast, the employer's contribution to SHI was frozen in 2005.

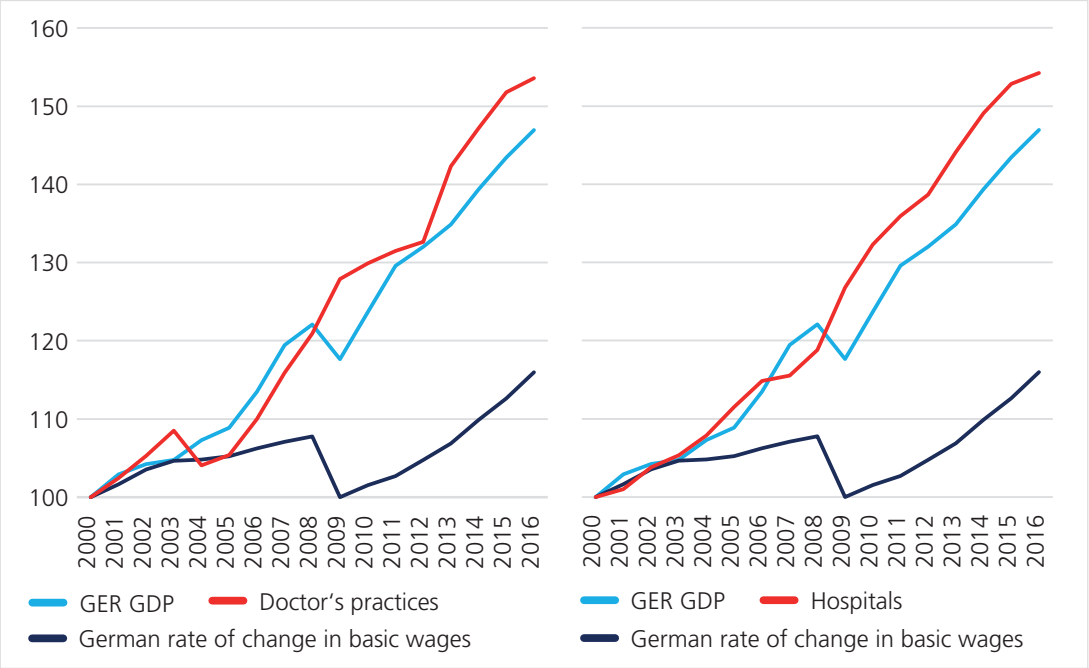
Figure 3: Development of social health insurance expenditure per contributor / premium payer, of GDP per inhabitant in Germany and Switzerland and the German rate of change in basic wages



Source: FOS, German Federal Statistical Office, SHI National Association of Statutory Health Insurance Funds; index 2000=100.

The expenditure trend in SHI broken down by outpatient and inpatient sectors shows that expenditure per contributor for both doctor's practices and hospitals rose by the same amount between 2000 and 2016 (see Figure 4). Consequently, the binding force of contribution rate stability in both segments can be deemed to be more or less equal. In the inpatient sector, the difference to GDP can be explained primarily with the rise in the number of cases (see Blankart and Busse 2017).

Figure 4: Development of SHI expenditure for doctor's practices and hospitals per contributor and the rate of change in basic wages



Source: German Federal Statistical Office, SHI National Association of Statutory Health Insurance Funds; index 2000=100.

Budgetary target and remuneration of service providers

The reinforcement of the principle of stable contribution rates was accompanied by remuneration reforms, in particular by the change in hospital remuneration to DRG (Hospital Reimbursement Act of 2003) and numerous reforms of the outpatient remuneration tariff (UVS), latterly in 2009 as part of the Act to Strengthen Competition in SHI through to an increase in flat rates (see Busse and Blümel, 2014, p. 151).[20]

Outpatient care: Since the global budgets were introduced, health insurance scheme doctors have been dissatisfied with the revenue trend and the distribution of the budgets among the various groups of doctors (see Gerlinger and Burkhardt 2012a). This is one reason for a reform of the remuneration system that has been more or less ongoing since the late 1990s, which aims to improve incentive compatibility between remuneration reform and global cost management. The system used since 1993 of "floating" point values created strong (strategic) incentives for the individual doctor to expand his services in order to secure his income. In the floating point system without further restrictions, the common-pool problem of global budgeting is particularly evident. The individual-rational service expansion results in the point values falling more sharply and those doctors who bill the most services generating higher incomes. Overall, however, doctors' incomes fall more sharply the more services are expanded, which is described as the "treadmill effect" in the literature. The treadmill effect was indeed observed in Germany between 1993

20 On the other hand, measures aimed at thinning out the range of services, which is generous in an international comparison, and at increasing patient excess amounts are of little relevance. The latter includes in particular the levying of a subsequently abolished consultation fee of EUR 10 per quarter and higher copayment for drugs (see Busse and Blümel, 2014, p. 239; ibid. p. 281).

and 1995 as a result of sharply falling point values and doctors' incomes (see Benstetter and Wamsbach 2006).

In order to deal with this problem, the FJC introduced practice budgets for health insurances scheme doctors for the first time in 1997 (see Gerlinger and Schönwälder 2012a). Each doctor was allocated a practice budget with a volume ceiling for each quarter, based on the multiplication of number of cases and number of points for the medical specialty. If the volume ceiling was exceeded, the point values were reduced or in some cases not paid. At the same time, certain services outside the practice budget were funded, such as vaccinations or care for seriously ill patients (see Blankart and Busse 2017). However, the system of flexible point values was retained. The reform served to reduce the incentive to expand the volume of services (see Schmitz 2013). Between 1996 and 2000 point values did stabilise, and there was a slight increase in doctors' incomes (see Benstetter and Wamsbach 2006). However, studies show certain evidence for a shift in doctors' appointments from health insurance fund patients from the end of one quarter to the beginning of the next quarter. Furthermore, Schmitz (2013) states that doctors tended to give preference to private patients over health insurance fund patients after the practice budget was introduced. Doctors shift part of their services outside the practice budget. According to Schmitz (2013), this supply-induced shift in favour of privately insured patients can be explained by doctors' income motives and can limit equal access to healthcare services for those with SHI.

To increase doctors' income stability, the doctor-specific standard service volume was introduced in 2009 which, in contrast to the practice budget, not only defines a certain volume ceiling but also guarantees remuneration of this volume with fixed point values and thus represents a fixed global budget (see Busse and Blankart 2017). Moreover, since 2009 the morbidity structure of the doctor's patients is taken into account for the purpose of remuneration. The threat of a performance audit if the standard service volume is exceeded with the possible consequence of reductions on regular remuneration serves to reduce the incentive to expand volumes. According to the experience of the SHI National Association of Statutory Health Insurance Funds, the standard service volume is exceeded by doctors only in rare cases. The threat of sanctions goes hand in hand with the revised UVS tariff, in force since 2009, with which services are basically reimbursed on a flat-rate basis. The ceiling for the standard service volume is relatively generous (150% of the number of cases for the medical specialty's average). Together with morbidity-dependent remuneration, the aim was therefore to reduce the risk of rationing over the system of floating point values. Nevertheless, with a fixed global budget the incentive to shift services from health insurance fund patients to private patients remains.

Inpatient sector: In the inpatient sector there has been a greater orientation to the principle of stable contribution rates since the Health Care Structure Act (1993) but this declined again somewhat with the introduction of the Hospital Financing Act of 2009 (see Gerlinger and Schönwälder 2012b, Gerlinger and Burkhardt 2012d). Since 2009, the orientation value, which is the basis for the actual cost trend of hospitals, has been decisive. However, if the rate of change in basic salaries is higher than the cost growth of hospitals, the changes in DRG tariffs are still geared to total basic salaries. As a result of closer links between hospital expenditure and the trend in basic salaries, there was a move away from covering "assumed self-costs" towards reimbursing "performance-based revenue" and thus to global budgeting for hospitals. Remuneration for hospitals was switched from a pure system of daily care rates to a mixed system of daily rates and performance-based flat rate payments. The introduction of flat-rate payments involved the expectation that greater incentives would be created for cost-efficient behaviour, so

as to ultimately comply with the defined revenue budgets, i.e. global budgets (see Gerlinger and Schönwälder, 2012b). In 2003 there was a complete changeover in hospital remuneration to diagnosis-related flat-rate payments (G-DRG) and thus a decoupling of the volume trend from the principle of stable contribution rates. In the context of the statutory requirements, the volume trend is thus to a greater extent the subject of negotiations between the health insurance fund associations and hospitals.

Ideally, global budgets combined with flat-rate payments should provide incentives to reduce medical services that are not necessary and to structure courses of treatment more cost-efficiently. The incentive for cost-effective provision of services can, however, also lead to hospitals lowering their costs at the expense of quality, discharging patients too early, giving preference to cases that can be well planned from a medical point of view and to revolving-door effects (see Kirchgässner and Gerritzen 2011). Performance controls by health insurance funds show, for example, that considerable efficiency reserves exist in the inpatient remuneration system (see Blankart and Busse 2017). The number of cases in German hospitals has risen sharply recently despite global budgets, by 8.4% from 2007 to 2012 (see Schreyögg et al. 2014; Busse and Blankart 2017). However, according to Schreyögg et al. (2014), the mix of cases has shifted owing to the DRG tariff more towards economically profitable cases such as medically well plannable cases and cases with unclear medical indications. The DRG system is therefore creating incentives that contradict the cost-containing goal of global budgeting. Moreover, studies show that the cost pressure of the DRG system often results in jobs being cut but not in more efficient courses of treatment (see Gerlinger 2012c). In this case there is a conflict between quality of treatment and cost pressure. The possible neglect of treatment quality in the DRG system goes hand in hand with the fear that a global budget does not create enough financial incentives for quality assurance (see section 3).

The quality and rationing considerations in inpatient treatment prompted legislators to correct the weaknesses of the DRG system in the form of the German Hospital Structure Act, which entered into force in 2016 (see Gerlinger 2016). The aim was to include treatment quality through premiums and deductions in the flat-rate payments as part of DRG remuneration. In addition, the tariff partners were bound by law to observe services which to a heightened degree expect to experience economically justified increases in case numbers, and to implement counter-measures. If these measures are not implemented the responsible arbitration board has to intervene at the subsidiary level.[21]

Finally, it is worth noting that greater dissatisfaction with working conditions, including a poorer work-life balance, has been observed since 2000 among doctors and nursing staff as a result of the stricter cost containment policy (see Hardy et al., 2015). This probably also led to a migration of doctors and nursing staff to other countries in Western Europe.[22]

Conclusion

Overall, the expenditure trend of statutory health insurance shows that implementation of the binding budgetary target, which is structured to a significant extent by law, and the assumption

21 The arbitration board took this decision e.g. in the case of intervertebral disc surgery and hip endoprosthetics by reducing flat-rate payments for these services.

22 One indication of this trend is the fact that between 2000 and 2015 the proportion of foreign doctors in the total number of doctors more than doubled, from 4% to 10% (see German Medical Association statistics 2016).

of financial responsibility by the tariff partners have proven effective. The expenditure trend in statutory health insurance has developed more or less proportionately to GDP growth. The increase in SHI expenditure has thus remained in line with the statutory requirements. The principle of stable contribution rates serves as a macro-economic target for developing remuneration rates in the statutory health insurance system and thus acts as an anchor, although exceptions and restrictions of the principle are explicitly permitted in certain areas for the purpose of guaranteeing medically necessary services. Cost management in Germany entails a large element of self-administration, with the tariff partners and the Federal Joint Committee bearing most of the responsibility. Successful implementation of the budgetary target is also closely linked to the structuring of the remuneration systems for service providers. The remuneration should create incentives in such a way that undesirable side effects such as the treadmill effect or loss of quality can be excluded as far as possible. Finally, experience shows that a budgetary target for healthcare expenditure is to be understood as a learning system that requires subsequent adjustment and accompanying measures.

4.2 Netherlands[23]

Compared with Switzerland, the Netherlands has a tradition of political cost management in the healthcare system. As early as 1974, after the oil crisis, the government issued a plan which for the first time provided for a budgetary target for healthcare spending growth from 7.3% to max. 8% in relation to GDP in 1980.

Budgetary targets as part of a rule-based budget process as of 1994

Healthcare expenditure, including contribution-financed spending by health insurance funds, has been an explicit part of the rule-based budget process since 1994 and subject to a type of budgetary target ("Budgetary Framework for Healthcare"). If these spending targets are exceeded, the Ministry of Health, Welfare and Sport is authorised to restrict volumes or to reduce tariffs ex-post. This system has been in place since 1994. The annual real budgetary targets for the healthcare system were 1.3% (1994–1998), 2.3% (1999–2002), 2.5% (2003-2007) and thereafter 2.7%. Whereas the budget situation in the Netherlands improved overall in the years before the financial crisis, the healthcare sector succeeded in complying with the budget targets only once – in 2006 – in the period from 1994 to 2012. The extent of the budgetary target overshoot often increased steadily in the course of the respective budgetary target period (see Schakel et al. 2016). In the first few years, the budgetary targets were accompanied by measures such as greater flat-rate compensation for independent specialists and a shift of services compensated for in basic insurance to the supplementary insurance segment.

Why were budgetary targets not adhered to between 1994–2012?

One reason is that the definitive figures and thus the extent of the failure to adhere to the budgetary target were often available only with a delay of up to 2 years. Implementing compensation reductions ex post proved to be politically impracticable if the time lag to the realised budget overshoots was up to 3 years.

23 This analysis focuses on the healthcare system; the long-term care sector is not discussed separately. The long-term care sector also entails comparatively high costs. A recent reform shifted the financing responsibility to the municipal level (see Kroneman et al. 2016 for a specific analysis).

Beginning in 1999, the government agreed multi-year budget agreements with the service provider groups in order to obtain more stability and support for the budgetary targets from the affected stakeholder groups. Besides the fact that the cost containment policy met with growing public rejection, the courts often confirmed – as a result of lawsuits – that a right to healthcare provision existed. This was not compatible with longer waiting times resulting from strict budgetary targets. The credibility of these budgetary targets was then undermined in the political process.

Over the last decade, the focus has been on the gradual reorganisation of the healthcare system from a heavily input-oriented, state-based supply plan to a regulated, decentralised competitive system. Following the introduction of compulsory health insurance with a free choice of insurance (2006), competing private health insurance funds can now increasingly negotiate freely with the service providers on prices and services. It was hoped that this reform would result in equal access and primarily also greater efficiency and quality of healthcare services as well as shorter waiting times in particular.[24] More efficient services were also expected to result in lower cost growth in the medium term. However, the continued increase in healthcare expenditure under the new system as a result of larger service volumes was less in the spotlight. It was in part consciously accepted by politicians or addressed with a dilution of the compulsory range of services and the introduction and gradual increase of deductibles (EUR 150 in 2008 to just under EUR 400 in 2016) (see Helderman and Jeurissen 2010, Batenburg et al. 2015). The health insurance funds – strengthened in this new competitive system – had little incentive to contain costs by means of selective contracting with service providers. This was due on the one hand to a generously structured ex-post equalization scheme for financial risks (as well as a morbidity-dependent ex-ante risk equalization), which largely protected them against budget overshoots. On the other hand, there were long-standing contractual relationships and increasingly concentrated market structures. According to Thewissen et al. (2015), an increasing concentration can be observed in the inpatient sector on the supply side, which reinforces the tendency towards regional monopolies. At the same time, the market for insurance is characterised by oligopolies: the four biggest health insurance funds cover 90% of the insured persons in the compulsory sector (see also Maarse et al. 2013 as well as Okma and Crivelli 2013). Moreover, given the lack of information about quality and costs, the health insurance funds also feared media reports of restrictions of access and a loss of quality for patients.

In 2005, a DRG remuneration system known as DBCs was introduced in the inpatient sector and thus also in the specialist sector, in which service providers and insurers were free to negotiate prices to an ever-increasing extent. The share of services subject to free price negotiations rose from 10% in 2005 to 34% in 2011 and to 70% from 2012. For the remaining services (involving tendentially more complex services), the government continued to apply a global budget. The DRG system did not succeed in containing costs: although waiting times were greatly reduced, there was a clear expansion in volumes, indications of systematic upcoding and a trend towards a lesser mix of cases (see Thewissen et al. 2015). The budgetary targets were clearly exceeded such that in 2009 a macro budget instrument was introduced with which the government was able to push through a budget reduction vis à vis service providers depending on their share of the costs incurred.

24 Schut and Varkevisser (2013) show that in the 1990s long waiting times in the inpatient sector – against the backdrop of global budgets – were common in the Netherlands.

The new competitive healthcare system succeeded in containing costs only in the drugs sector. The health insurance funds bore most of the financial risk and saved money by means of public tenders for generics and by motivating service providers to prescribe and insured persons to purchase generics.

Compliance with the multi-year agreements for expenditure growth since 2012

Under a new coalition (2012–2017), the Dutch government was able to formulate new and more stringent multi-year spending growth targets for the healthcare sector and – to date – to comply with them. What are the possible explanations?

In the wake of the financial and debt crisis, with declining tax revenues and social insurance contributions, austerity programmes were now able to attain a majority. The fiscal rules of the European Stability and Growth Pact, which are taken very seriously in the Netherlands and which could not be complied with in 2010, created additional pressure to save money. The healthcare system was not able to completely escape these austerity measures. Fundamental questions such as the generosity of the insured range of services and the breakdown of costs between the public sector and private households were discussed on several occasions (see Batenburg et al, 2015, Jeurissen 2017).

In contrast to earlier attempts to contain costs, a more corporatist-oriented approach was taken to reach specific agreements between the government, representatives of the insurance funds, the patient organisation and individual service areas (basic outpatient care, specialists, hospitals and psychiatric units).[25] For the 2012–2014 period, the target for specialists, psychiatrists and the inpatient sector was an annual real growth rate of 2.5% in terms of service volumes, and 3% for basic outpatient care. The 3% target in the outpatient sector was intended to take account of the desired shift from inpatient to outpatient service provision. Stricter budgetary targets were set for the 2015–2017 period (1.5% and 1% for specialists and psychiatrists; 2.5% for basic outpatient care, 1.5% of which for the substitution from inpatient to outpatient). For 2018, the sectoral agreement (between the Ministry of Health, insurance funds and umbrella association of specialists) was extended for the specialist sector and a real growth rate of 1.6% was set. The agreement (between the Ministry of Health, association of basic service providers, patient organisation and health insurance funds) was extended for the basic outpatient care sector as well, with a real growth rate of 2.5% and a flat rate (EUR 75 million) to promote the shift from specialist care to basic care. These agreements became an anchor for negotiations between the tariff partners. Each of these sector-specific agreements contains the possibility of sanctions as enshrined in law in the form of ex-post budget cuts in the event of an overshoot, depending on the service providers' "market share" of the overall services provided by this sector. The respective group of service providers is thus collectively responsible for compliance with the agreed budgets and bears responsibility for possible sanctions imposed by the Ministry of Health.

Although this more partnership-based approach towards joint cost responsibility does not necessarily suit a model of regulated, decentralised competition, it fits the Dutch tradition of corporatist decision-making structures. These corporatist agreements with the threat of sanctions were not intended for the government or the Ministry of Health to intervene directly in the healthcare system but instead served to promote mutual trust among all actors involved and to raise joint

25 See Jeurissen (2017), Schakel et al. (2016), Thewissen et al. (2015) and Batenburg et al. (2015).

responsibility for costs (see Batenburg et al. 2015). This type of intensive coordination of interests aimed at cost-containing agreements can also be viewed as an own contribution to the ongoing adaptation and improvement of the organisation and management of the healthcare system (see Leidl 1997).

The sanction mechanism provided for is very controversial. There is an individual rational incentive to expand volumes with the goal of safeguarding income (see common-pool problem in section 3). Furthermore, successful market players with a higher market share or market players with low profit margins in highly competitive sectors tend to be penalised. Schut and Varkevisser (2013) also argue that the (collective) agreement with the inpatient sector creates incentives at the level of individual hospitals to safeguard their financial situation by means of higher prices (in less competitive environments) and a supply-driven change towards a more attractive mix of cases in favour of simpler, more plannable and more profitable cases. In addition, uncertainty with regard to ex-post reductions can make it more difficult for new service providers to enter the market and thus reduce investment in innovation in the medium term (see Schut et al. 2013).

To date, the budgetary targets have been largely met, and the sanction mechanism has not had to be used. For the most recent minor overshoots in the specialist sector, agreement was reached that the macro-budget instrument would not be used.

However, the agreements include not only a budget target and a sanction mechanism in the form of ex-post reductions but also entail setting priorities in specific fields in order to reach the target. The bundles of measures are aimed at specific tariff reductions or efficiency increases (agreements to strengthen basic outpatient care, prescription practice, referral practice, greater compliance with guidelines, e-health and more precise quality monitoring, etc.). These broader-based agreements – in comparison with earlier budget targets, most of which were issued by the government alone – appear to have increased joint cost responsibility. As delayed budget-relevant information on costs and volumes remains a challenge, however, efforts are being made to speed up the settlement processes of the tariff partners by means of binding rules and to step up cost monitoring.[26]

In parallel to the budgetary targets, a number of other key measures to contain costs were implemented. These include i) a more restrictive range of compulsory services (e.g. in the fields of physiotherapy, nutritional services, some psychiatric services), ii) a further increase in cost participation (from EUR 170 in 2011 to the current amount of just under EUR 400) and iii) a further expansion of the area on which health insurance funds and service providers can negotiate freely and for which they thus bear a greater own financial risk. With regard to iii) it should in particular be mentioned that between 2012 and 2015 the relatively generous ex-post equalization scheme for health insurance funds that had largely protected them against the financial risks of budget overshoots expired. Hospitals now negotiate a good 70% (compared with a good 35% in 2011) of their service volume freely with the health insurance funds. The DRG remuneration system has also been simplified (from 30,000 to approx. 4,000 components in 2013).

One aspect that has made it easier to meet the target is the fact that the absolute spending level has stabilised in the drugs sector or was even reduced as a) this sector historically had very high

26 See Jeurissen (2017), Batenburg et al. (2015), Thewissen et al. (2015) and European Observatory on Health Systems and Policies (2017).

growth rates and b) in some core areas expensive drugs for chronic illnesses have come off patent.

Conclusion

Overall, the impression is that in the period from 1994–2012 target overshoots were simply accepted at the political level and it was not possible to make healthcare players sufficiently responsible for their respective budgets. A more corporatist approach that uses binding and broad-based agreements as a means of containing costs is proving more successful. There are, however, a number of favourable circumstances in respect of this phase: there is greater general budgetary pressure, parallel measures were implemented, and certain special factors such as the expiry of cost-intensive patents also play a role.

4.3 Other experience with the introduction of binding budgetary targets

Experience from Canada

In the 1990s, successive global, multi-year budget targets were introduced in Canada's decentralised, tax-financed healthcare system in the outpatient sector (with fee-for-service remuneration) in the ten provinces (see Hurley and Card 1996). The provinces set their own budget targets. These targets were implemented under increased general pressure to save as a result of a recession.

Hurley et al. (1997) elaborated on the differences in the introduction of these global budget targets in the outpatient sector between Nova Scotia and Alberta. The authors emphasise the high organisational and information-related requirements, the risk of internal distributional contests and individual strategic incentives to expand volumes under a budget target. A more ambitious budget was implemented in Nova Scotia with doctor-specific billing ceilings and a strict ex-post sanction mechanism in the form of tariff reductions and claims for reimbursement. The budget targets in Alberta were less ambitious, there was a lengthy transition phase, and no doctor-specific billing ceilings were agreed. A sanction mechanism was provided for but the exact measures were not precisely defined. For the observation period Hurley et al. (1997) found that the introduction of global budgets was more successful in Alberta than in Nova Scotia. A number of factors were given as explanations. The first was that the income situation of doctors in Nova Scotia was more critical at the beginning of the observation period than in Alberta so that it was easier to implement budgetary restrictions in Alberta. Secondly, they emphasise that the stricter budget target triggered a negative loss momentum among doctors in the first year in Nova Scotia (with a permitted rise of zero percent), thus increasing incentives to expand volumes with the aim of safeguarding incomes. Conversely, a more generous and lengthier transition phase in Alberta favoured the ability to reach a consensus on budget targets. Thirdly, the analysis shows that different negotiating structures between the provincial government and the association of physicians, and differences in decision-making structures within the physicians associations played a role in terms of acceptance of the targets. On the one hand, it is argued that Alberta already had more formalised and fewer informal, person-based negotiating structures between the government and the physicians association which proved more resilient under budget targets. On the other hand, it is pointed out that the physicians association in Alberta collectively approved and played a more participatory role in the budget targets, while in Nova Scotia only the board decided on the budget targets. No differences were observed in terms of the willingness of doctors to define the range of services more clearly and to step up invoice

controls under the budget target. The clearly defined budget also led to undesirable effects: doctors were reluctant to make the shift from inpatient to outpatient treatment as a result of budgetary targets.

In the early 1990s, a new board with representatives of the government and the relevant physicians association was set up in all provinces and tasked with reviewing the cost trend in respect of the budget targets and with implementing sanction mechanisms. Whereas Nova Scotia decided on linear tariff reductions, Alberta took a more flexible approach in its choice of instrument, and the members of the physicians association were able to be consulted in advance regarding their choice of instrument. Finally, it is pointed out that Alberta's government – thanks to its high popularity and more cleverly laid-out austerity programme – was more easily able to prevail over the physicians association.

Katz et al. (1997) studied the behaviour of the physicians associations in the provinces of Ontario, Alberta and British Columbia during the introduction of these global budgets. They observed that the tariff negotiations were more difficult in the face of budgetary restrictions and that distributional conflicts within the physicians associations increased. They also argue that the way in which the physicians associations reached a decision played an important role, as did the various interests (specialists vs. general practitioners, doctors in rural vs. urban regions, young vs. older doctors), in allowing for a consolidated and as uniform a negotiating position as possible vis-à-vis the provincial governments. This is especially important in a system in which the state side is the primary service financer and thus has per se a stronger negotiating position.

Experience from Taiwan

The introduction of global budget targets in Taiwan for the hospital sector in 2002 is very well documented. The entire global budget is financed by the uniform social insurance system and provides for a strict spending ceiling, whereby the billed services subject to fee-for-service tariffs are remunerated ex-post so as to just reach the maximum spending ceiling ("floating point value system"). The budget process includes negotiations between the state social insurance scheme, service provider associations, employer and employee associations and experts from science and practice. The thus-constituted committee negotiates and decides on an annual basis, under the aegis of the Ministry of Health, on the entire global budget and its breakdown by sector for the following year. The global budget is then divided between the six health regions. Compared with hospital-specific budgeting, it was assumed that budgeting for a treatment region would create greater incentives for cooperation between hospitals and for taking joint responsibility for an appropriate volume of total services provided.

The empirical analysis of Cheng et al. (2009), based on survey data for several central clinical pictures for the 2002–2004 period, shows that the introduction of global budgeting goes hand in hand with a 7% rise in average stays, a 15% increase in prescribed treatment per admitted patient, and a rise in total services billed of 14%. The study shows that the hospitals did not strive to cooperate more closely during the analysis period but attempted to increase their relative market shares by expanding volumes with the goal of safeguarding their revenue. This resulted in a "price collapse" for the services billed. Based on more comprehensive data for the 1997–2004 period and using a better empirical method, Chen and Fan (2015) arrive at a similar result. They also emphasise that the introduction of the global budget created incentives to provide more capital-intensive services at the expense of human capital-intensive services. This was exploited more successfully by larger hospitals at the beginning. Hsu (2014) also examined

the introduction of a global budget but for a longer period and with a focus on cardiac disorders (2000–2008). Hsu (2014) found that only the introduction of a monitoring mechanism in 2005 – after a rise of over 12% in services billed the previous year – was able to halt the sharp expansion in volumes. The monitoring mechanism consists of the state social insurance scheme concluding agreements with some hospitals on the volume of services while taking quality standards into account. If the hospitals reach the agreed quality standards, they receive advance compensation from the social insurance scheme.

5 Findings for Switzerland

Budgetary targets as an anchor

Based on the experience in Germany and the Netherlands, it can be concluded that binding budgetary targets for expenditure growth serve primarily as an "anchor" for cost growth. Binding budgetary targets complement the existing range of instruments with a top-down approach. They discipline the service providers, involve them more closely in cost responsibility and are thus a binding benchmark during tariff negotiations. When implementing budgetary targets, however, account is also taken of technological and demographic trends in order to guarantee the provision of medically necessary services. Moreover, certain areas such as integrated care – which is to be promoted – or basic services such as vaccinations are partially excluded from the budgetary requirement.

In terms of sanctions, Germany has a clearly defined system of subsequent fee reductions. In the Netherlands, the present sanctions work more as a threat and increase pressure to reform. However, in the Netherlands, implementing sanctions retroactively – in particular prior to 2012 – proved difficult owing to a considerable delay in definitive figures on target attainment, lawsuits claiming a right to healthcare and other health policy priorities. Experience of the introduction of global budgets in Canada shows that sanctions and possible solutions for savings measures, which are also accepted by the professional associations or proposed by the service providers' professional associations, have a greater chance of succeeding than tariff reductions implemented unilaterally by the government.

Requirements for a system of budgetary targets

Firstly, a binding budgetary targets system can be more easily implemented if all relevant healthcare players (e.g. federal government, cantons, health insurance funds, service providers, patient organisations) are involved in establishing it and are represented on the relevant boards. If the service provider groups in particular are also to get behind the budgetary targets, they must be shown that greater cost management or cost containment is inevitable in the medium term as funding for mandatory health insurance – like in all other areas of social security – is not unlimited. It must be made clear that a budgetary target that involves all key players constitutes a participative solution. In this type of more corporatist approach they can play an active role and at the same time achieve maximum room for manoeuvre compared with other forms of intervention and regulations. Having a budgetary target set unilaterally by the government does not appear to be particularly promising owing to a lack of acceptance.

Secondly, formula-based target growth rates can serve as essential input and thus as a benchmark within a broad-based target board. The formal process of defining meaningful budgetary targets must include a consideration of the medico-technical and demographic trends as well as exceptions for unexpected epidemics or certain services with higher priority of guaranteed healthcare provision. The more clearly the determination factors and exceptions can be defined in advance, the more objectively and transparently the budgetary targets can be set. At the same time, owing to possible incentives for shifts, budgetary targets should be used in all areas of basic insurance service as far as possible. This calls for a participative negotiation process that is supported by the involved healthcare players beyond the system and which is to be the goal within their relevant sectors in practice.

Thirdly, the introduction and implementation of budgetary targets call for formal negotiating and decision-making structures. This applies on the one hand to the board that decides on the

budgetary targets. On the other hand it applies to the professional associations of service providers, insurers and also to the cantons which implement the budgetary targets. In particular it is important for consensus to be reached within the professional associations and for the individual specialist groups to be able to make constructive contributions. Resilient and clearly regulated decision-making structures are particularly valuable in terms of the expected distributional conflicts under a binding budgetary target. Accordingly, arbitration mechanisms with subsidiary decision-making competencies in the event of non-agreement must be set up. Sanction mechanisms must be defined in advance so as to deal with non-compliance with budgets.[27]

Experience from the Netherlands shows that a parallel discussion should take place regarding the measures to use in order to reach the budgetary targets. This indicates that formulating a budgetary target with sanction mechanisms alone is not sufficient. In particular, it is very important that the service providers' compensation system can be reconciled with a budgetary target. Compensation systems that lean towards flat rates for services or capitation fees are more appropriate than fee-for-service tariffs if incentives to strategically expand volumes under a budgetary target are to be contained. This key measure can be seen very clearly in Germany where a de facto global budget per service provider with more flat-rate service compensation has been defined in the outpatient sector.

Experience in Canada shows that longer transition periods with more generous budgetary targets are preferable in the introductory phase. This increases political acceptance and prevents a possible loss momentum on the part of the service providers.

The reviewed literature also suggests that a budgetary target can be most easily implemented if relatively comparable sacrifices are demanded between the areas subject to the global budget. It is also important to communicate that no area of the healthcare system can have unlimited resources.

The reviewed experiences also show that budgetary targets with sanction mechanisms pose considerably greater coordination and cooperation demands on the players. And this in a situation in which the distributional conflicts and thus the tensions within the healthcare system are increasing as a result of introduction of a budgetary restriction. Moreover, increasing transparency is a necessary prerequisite for closer management of healthcare expenditure. Core elements consist on the one hand in timely cost monitoring to determine the budgetary targets and in implementation of corrective measures. On the other hand, accompanying quality monitoring is necessary in order to minimise any possible negative side effects such as rationing or service provision shifts. Closer monitoring will require more resources from the state and the tariff partners. However, this greater outlay must be seen in proportion to the outlay needed to implement alternative cost containment measures.

Differences to countries reviewed

Systems with global budget targets that are financed primarily through taxes, such as Canada, allow the state as a single payer to hold a much stronger negotiating position vis à vis the profes-

27 These primary requirements reflect parallels to the principles postulated by Ostrom (1990) for the successful handling of local common-pool resources. She emphasises the role of rules, the involvement of those affected by these rules in the rule-setting process, a clear definition of what falls under the rules, clear rule monitoring, and clear sanction and arbitration mechanisms.

sional associations. In a tax-financed system, spending limits in the healthcare sector can be implemented as part of the budget process especially against the backdrop of general budgetary pressure or rule-based fiscal policy. A similar situation applies in the Netherlands. On the one hand, the Netherlands has a budgetary framework for healthcare as part of a rule-based budget process. On the other hand, the requirements of the European Stability and Growth Pact create additional pressure and have contributed to containing cost growth in recent years in particular. This budgetary framework was complemented by decision-making structures of a more corporatist nature in the last few years. By contrast, in Germany the focus is on the principle of stable contribution rates, which is broken down and implemented by the tariff partners within scope for manoeuvre that is stipulated to a large extent by law.

A second key systemic difference between the Netherlands and Germany, on the one hand, and Switzerland, on the other, is the greater decentralisation of the Swiss healthcare system. In many areas the Swiss healthcare system is organised on a cantonal basis. This adds an additional element of complexity to a budgetary targets system – especially in terms of setting up decision-making structures and breaking down the budgetary targets.

A third key difference, especially with regard to the mainly contribution-financed systems in the Netherlands and Germany, is that the employer associations in Switzerland do not play a great role as a strong stakeholder group in the discussion of excessive growth in healthcare costs. The employer associations in Germany and the Netherlands do more to ensure that social insurance contributions for healthcare do not weigh excessively on the workforce. By contrast, it is difficult for a heterogeneous pool of insured persons in Switzerland to group their interests in a sustainably financeable healthcare system and to bring these to bear in the political arena.

Fourthly, the health insurance funds and service provider associations in Germany and the Netherlands play a more active role. In Germany, the association of health insurance funds acts as the bearer of cost responsibility and checks the services provided (e.g. Health Insurance Medical Service). The Association of Statutory Health Insurance Physicians also bears responsibility for costs, especially in terms of breaking down the budgets among the individual service providers. It is also ex officio responsible for outpatient care provision. In the Netherlands, the health insurance funds bear a greater financial risk and, with their instruments of extensive negotiating freedom and selective contracting, have a stronger negotiating position vis-à-vis the service providers. Both the health insurance funds and the service provider associations have committed to joint cost responsibility as part of binding negotiations with the Dutch government.

6 Concluding remarks

As in all other areas of social security, however, mandatory health insurance does not have access to unlimited funding. Previous measures aimed at containing spending growth have not produced the hoped-for result. There is a general lack of cost responsibility in basic insurance that is financed by compulsory contributions. Given the persistently high cost momentum, there is an urgent need for action at the economic policy level. The cost-containing measures being discussed include the prominent and controversial proposal of binding budgetary targets for expenditure growth.

This paper provides a basic contribution to this subject by evaluating the scientific literature and selected international experiences with a view to achieving greater cost management in the Swiss healthcare system.

In terms of the basic advantages of a binding budgetary target, the scientific literature states that budgetary targets permit direct management of expenditure growth, thus allowing a previously lacking budgetary restriction to be introduced into basic insurance. Commonly agreed budgetary targets will include the key healthcare players – in particular the tariff partners – in the financial responsibility, which has barely existed to date. Moreover, a budgetary target induces the individual service providers to take cost-benefit considerations into greater account. At the same time, a target would – in contrast to other measures – leave them the scope to save where they see savings as most appropriate, i.e. with treatments that are not medically necessary. Arguments against a budgetary target for expenditure growth emphasise the risk of restricting medically necessary services and of less equal access to healthcare services. Another fear is that a binding budget may not offer sufficient incentives to increase quality and efficiency, which means that innovation would be halted, and existing, possibly inefficient structures would become too rigid. While these are basically plausible objections, a well-structured institutional design that still allows expenditure growth and affords individual doctors substantial room for manoeuvre – hand in hand with greater financial responsibility – should be able to ensure a high-quality level of service provision.

The evaluated experiences with binding budgetary targets show that linking expenditure momentum in social health insurance with the overall economic trend can succeed. To achieve an effective budgetary targets system it is important to give some of the responsibility to the tariff partners in particular, adopting a more corporatist approach. This calls for resilient negotiating and decision-making structures and clear sanction mechanisms. Budgetary targets must also be accompanied by parallel measures. Of particular importance are incentive-compatible remuneration schemes and effective and comprehensive cost and quality monitoring in order to avoid undesirable effects such as rationing, lower efficiency incentives and strategic incentives to safeguard revenue.

A binding budgetary target should not replace the competitive and decentralised healthcare system in Switzerland but should complement it with better expenditure management while safeguarding sustainable financeability for private households and the public sector.

Generally speaking, the cost-benefit evaluation of this type of measure also in comparison with the alternatives and against the backdrop of health policy priorities still needs to be assessed. It also depends to a large extend on the design and the possibility of integrating it at the institutional level into the existing healthcare system.

Bibliography

AOK-Bundesverband 2017, Lexikon. http://aok-bv.de/lexikon/

AOK-Bundesverband 2017, Reformdatenbank. http://aok-bv.de/hintergrund/reformdatenbank/

Batenburg, R., M. Kroneman and A. Sagan (2015). The Impact of the Crisis on the Health System and Health in the Netherlands. In: A. Maresso, P. Mladovsky, S. Thomson, A. Sagan, M. Karanikolos, E. Richardson, J. Cylus, T. Evetovits, M. Jowett, J. Figueras and H. Kluge (eds). Economic Crisis, Health Systems and Health in Europe. WHO and European Observatory on Health Systems and Policies, Brussels: 249–281.

Benstetter, F. and A. Wambach (2006). The Treadmill Effect in a Fixed Budget System. Journal of Health Economics, 25(1): 146–169.

Blankart, R. and Busse, R. (2017), Erfahrungen aus Deutschland, Inputpapier für die Expertengruppe "Kostendämpfungsmassnahmen zur Entlastung der obligatorischen Krankenpflegeversicherung (OKP)" of the FDHA.

Bevan, G., J.K. Heldermann and D. Wilsford (2010). Changing Choices in Health Care: Implications for Equity, Efficiency and Cost. Health Economics, Policy and Law, 5: 251–267.

Brändle, T. and C. Colombier (2016). What Drives Public Health Care Expenditure Growth? Evidence from Swiss Cantons, 1970–2012. Health Policy, 120: 1051–1060.

Busse, R. and Blümel, M. (2014). Germany: Health System Review. Health Systems in Transition, 16(2): 1–296.

Chen, B. and V. Fan (2015). Strategic Provider Behavior Under Global Budget Payment with Price Adjustment in Taiwan. Health Economics, 24: 1422–1436.

Chen, B. and V. Fan (2016). Global Budget Payment: Proposing the CAP Framework. Inquiry, the Journal of Health Care, Organization, Provision and Financing, 53(1): 1–4.

Cheng, S.H., Chen, C.C., and W.L. Chang (2009). Hospital Responses to a Global Budget Program Under Universal Health Insurance in Taiwan. Health Policy, 92: 158–164.

Colombier, C. (2018). Population Ageing in Healthcare – A Minor Issue? Evidence from Switzerland, Applied Economics, 50(15): 1746–1760.

Crivelli, L., Filippini, M. and Mosca, I. (2006). Federalism and Regional Healthcare Expenditure: An Empirical Analysis for Swiss Cantons. Health Economics Letters, 15(5): 535–541.

Eastaugh, S. (2000). National Healthcare Spending and Fiscal Control: Comparisons among 15 Countries. Hospital Topics, 78(4): 9–13.

Group of experts commissioned by the Swiss Confederation (2017). Cost Containment Measures to Relieve the Burden on the Statutory Health Insurance System, Bern, Federal Office of Public Health.

Frey, B.S. and G. Kirchgässner (2002). Demokratische Wirtschaftspolitik. Theorie und Anwendung. Vahlens Handbücher der Wirtschafts- und Sozialwissenschaften. Verlag Vahlen, Munich.

Gerlinger, T. (2012a). Die Finanzierung der gesetzlichen Krankenversicherung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. (2012b). Die Bedeutung der gemeinsamen Selbstverwaltung im Steuerungssystem der gesetzlichen Krankenversicherung, *Jahrbuch für kritische Medizin und Gesundheitswissenschaft*, 47: 141–161.

Gerlinger, T. (2012c). Die Vergütung von Krankenhausleistungen, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. (2012d). Das Steuersystem in der stationären Versorgung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. (2013). Steuerfinanzierter Bundeszuschuss zur gesetzlichen Krankenversicherung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. (2016). Rückblick auf die Gesundheitspolitik im Jahr 2015, *Zeitschrift für Sozialreform*, 62(1): 35–47.

Gerlinger, T. and W. Burkhardt (2012a). Finanzierung und Vergütung vertragsärztlicher Leistungen in der gesetzlichen Krankenkasse, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and W. Burkhardt (2012b). Grundprobleme der Vergütung ärztlicher Leistungen. Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and W. Burkhardt (2012c). Bismarks Erbe und prägende Merkmale des deutschen Gesundheitswesens, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and W, Burkhardt (2012d). Finanzierung und Vergütung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and W, Burkhardt (2012e). Die wichtigsten Akteure im deutschen Gesundheitswesen. Part 2: Verbände und Körperschaften der gemeinsamen Selbstverwaltung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and W. Burkhardt (2014). Strukturen und Inanspruchnahme, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and T. Schönwälder (2012a). Ambulante Versorgung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and T. Schönwälder (2012b). Die stationäre Versorgung, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gerlinger, T. and T. Schönwälder (2012c). Etappen der Gesundheitspolitik 1975 bis 2012, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Gertham, U.G. and B. Jönsson (2000). International Comparisons of Health Expenditure in the OECD Countries: Theory, Data and Econometric Analysis. In: Cuyler, A. and J. Newhouse (eds.). Handbook of Health Economics Vol. 1, Elsevier, Amsterdam.

Gesetzliche Krankenversicherung – Spitzenverband Bund, Faktenblatt 2017. https://www.gkv-spitzenverband.de/krankenversicherung/krankenversicherung.jsp

Grumbacher, K. and T. Bodenheimer (1990). Reins or Fences: A Physicians's View of Cost Containment. Health Affairs, Winter 1990: 120–127.

Hardy, J., Calveley, M. and St. Shelley (2015). Arbeitsmigration im Gesundheitswesen: Trends und Auswirkungen, Bundeszentrale für politische Bildung (bpb), Bereich Politik, Berlin.

Hartwig, J. and Sturm, J.E. (2014). Robust Determinants of Health Care Expenditure Growth. Applied Economics, 46(36): 4455–4474.

Helderman, J.K. and P. Jeurissen (2010). No Pay – No Cure! The Evolution of Cost Containment Policies in Dutch Healthcare. In: Fifth Transatlantic Dialogue: The Future of Governance: 21-36.

Henke, K. D., M. Murray and C. Ade (1994). Global Budgeting in Germany: Lessons for the United States. Health Affairs, 1994: 7–21.

Hsu, P-F. (2014). Does a Global Budget Superimposed on Fee For Service Payments Mitigate Hospitals' Medical Claims in Taiwan? International Journal of Health Care Finance Economics, 14: 369–384.

Hsueh, Y.S., S.Y. Lee and Y.T. Huang (2004). Effects of Global Budgeting on the Distribution of Dentists and Use of Dental Care in Taiwan. Health Services Research, 39: 2135–2153.

Hurley, J. and R. Card (1996). Global Physician Budgets as Common-Property Resources: Some Implications for Physicians and Medical Associations. Canadian Medical Association, 154(8): 1161–1168.

Hurley, J., J. Lomas and L.J. Goldsmith (1997). Physician Responses to Global Physician Expenditure Budgets in Canada: A Common Property Perspective. Milbank Quarterly 75(3): 343–364.

Jeurissen, P. (2017). Regulated Competition and Cost Containment: The Case of The Netherlands. Input paper for the group of experts "Kostendämpfungsmassnahmen zur Entlastung der obligatorischen Krankenpflegeversicherung (OKP)" of the FDHA.

Joumard, Y., C. André and C. Nicq (2010). Health Care Systems: Efficiency and Institutions. OECD Economics Departmtent Working Papers, No. 769.

Katz, S., C. Charles, J. Lomas and H.G. Welch (1997). Physician Relations in Canada: Shooting Inward as the Circle Closes. Journal of Health Politics, Policy and Law, 22(6): 1413–1431.

Kassenärztliche Bundesvereinigung (KBV) (2009). Der Gemeinsame Bundesausschuss und seine Richtlinien zur ärztlichen Versorgung, KBV-Fortbildungsheft Nr. 10, Autor: P. Rheinberger.

Kassenärztliche Bundesvereinigung (KBV) (2012). Gesamtvertrag und Gesamtvergütung, KBV-Fortbildungsheft No. 6, Autor: Th. Kriedel.

Kassenärztliche Bundesvereinigung (KBV) (2014). Der Bundesmantelvertrag, KBV-Fortbildungsheft Nr. 5, Autoren: Schröder, J. and D. Röhrig.

Kirchgässner, G. and Gerritzen, B. (2011). Leistungsfähigkeit und Effizienz von Gesundheitssystemen: Die Schweiz im internationalen Vergleich, Bericht zuhanden des Staatssekretariats für Wirtschaft (Seco), Bern.

Kühn, H. (1999). Globalbudget und Beitragssatzstabilität. Jahrbuch für kritische Medizin, 32: 17–37.

Kroneman, M., W. Boerma, M. van den Berg, P. Groenewegen, J. de Jong and E. van Ginneken (2016). Netherlands: Health System Review. In: E. van Ginneken (Editor) and R. Busse (eds). Health Systems in Transition, 18(2). European Health Observatory on Health Systems and Policies, WHO, Brussels.

Leidl, R. (1997). Kostendämpfungspolitik in den Niederlanden und in Deutschland: Eine Untersuchung von Massnahmen in drei Leistungsbereichen. Zeitschrift für Gesundheitswissenschaften, 5(2): 101–122.

Long, S.H. and M. S. Marquis (1993). Toward a Global Budget for the U.S. Health System: Issues and Information Needs. RAND Report 21.

Maarse, H., P. Jeurissen and D. Ruwaard (2013). Concerns over the Financial Sustainability of the Dutch Healthcare System. CESifo DICE Report, 1/13: 32–36.

Martin, J.J., M., del Amo Gonzalez, M.P.L. and Garcia, D. C. (2011). Review of the Literature on the Determinants of Healthcare Expenditure. Applied Economics, 43(1): 19–46.

Moreno-Serra (2013). The Impact of Cost Containment Policies on Health Expenditure: Evidence from recent OECD Experiences. OECD Journal on Budgeting, 2013(3): 1–29.

Okma, K. and L. Crivelli (2013). Swiss and Dutch "Consumer Driven Health Care": Ideal Model or Reality? Health Policy, 109: 105–112.

Ostrom, E. (1990). Governing the Commons. The Evolution of Institutions for Collective Action. Cambridge University Press.

Paris, V., M. Devaux and L. Wei (2010). Health Systems Institutional Characteristics: A Survey of 29 OECD Countries. OECD Health Working Papers, No. 50.

Peters, S. (2017). Die vorrangige Bedeutung des Grundsatzes der Beitragssatzstabilität bei Vergütungsvereinbarungen nach SGB V – eine sozial- und verfassungsrechtliche Betrachtung, in: J. Heilmann, T. Aigner-Hof (ed.). Recht in der Arbeitswelt – Beiträge zum Arbeits- und Sozialrecht, LIT Verlag, Berlin.

Reich, O., Weins, C., Schusterschnitz, C. and Thöni, M. (2012). Exploring the Disparities of Regional Healthcare Expenditures in Switzerland: Some Empirical Evidence. European Journal of Health Economics, 13: 193–202.

Schakel, H.C., P. Jeurissen and S. Glied (2016). The Influence of Fiscal Rules on Healthcare Policy in the United States and Netherlands. Forthcoming in International Journal of Health Planning and Management.

Schmitz, H. (2013). Practice Budgets and the Patient Mix of Physicians: The Effect of a Remuneration System Reform on Health Care Utilisation. Journal of Health Economics, 32: 1240–1249.

Schreyögg, J., Bäuml, M., Krämer, J., Dette, T., Busse, R. and Geissler, A. (2014). Forschungsauftrag zur Mengenentwicklung nach § 17b Abs. 9 KHG, Hamburg Center for Health Economics, Universität Hamburg.

Schut, F.T. and M. Varkevisser (2013). Tackling Hospital Waiting Times: The Impact of Past and Current Policies in the Netherlands. Health Policy, 113: 127–133.

Schut, E., S. Sorbe and J. Hoi (2013). Health Care Reform and Long term Care in the Netherlands. OECD Economics Department Working Papers, No. 1010.

Schwierz, C. (2016). Cost Containment Policies in the Hospital Expenditure in the European Union. European Economy Discussion Paper Nr. 37, European Commission.

Sutherland, J., N. Repin and R. T. Crump (2012). Reviewing the Potential of Financial Incentives for Funding Healthcare in Canada. Canadian Foundation for Healthcare Improvement.

Thewissen, S., P. Jeurissen and G. Van der Vlugt (2015). Heath Care Budgeting in the Netherlands. In: Fiscal Sustainability of Health Systems. OECD Publishing.

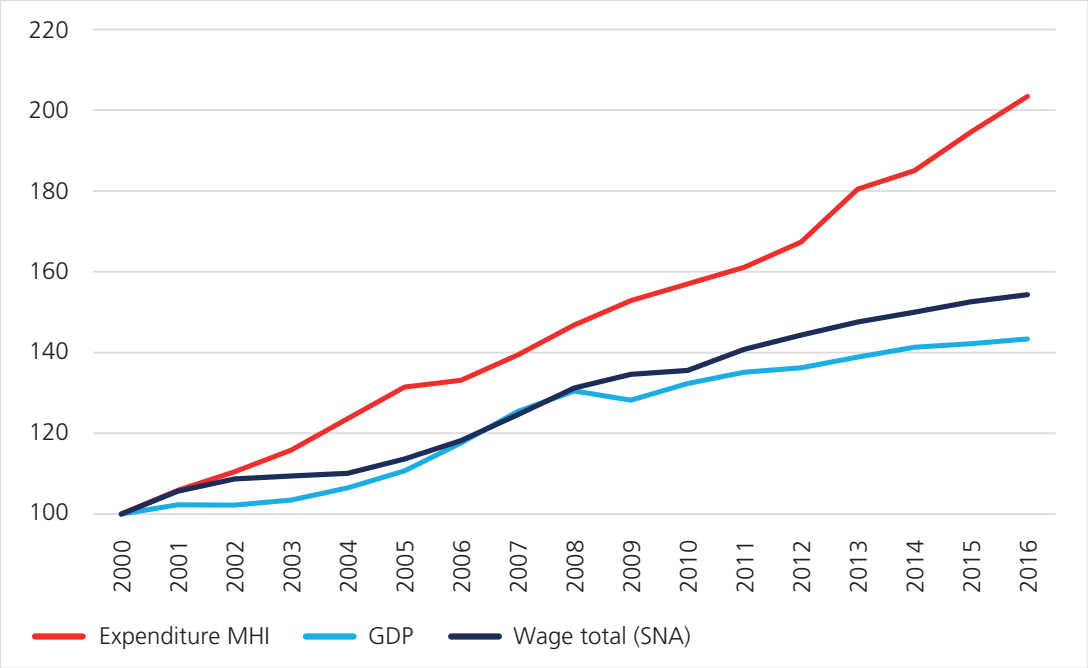
UBC Centre for Health Services and Policy Research (2014). Current Hospital Funding in Canada: The Limitations of Global Budgets. UBC Policy Brief, 1/2014.

Vatter, A. and Ruefli, C. (2003). Do Political Factors Matter for Healthcare Expenditure? A Comparative Study of Swiss Cantons. Journal of Public Policy, 23(3): 301–323.

White, J. (2013). Budget-makers and Health Care Systems. Health Policy, 112: 163–171.

Annex

Figure A1: Trend in MHI gross expenditure, nominal GDP and total wage costs



Source: FSO, FOPH, SECO; Index 2000=100.

Box 1: Brief overview of the German health system

Statutory health insurance is financed through social contributions and is a Bismarkian social security system (see Gerlinger and Burkhardt 2012c). All employees who earn an income of up to the limit for mandatory insurance are required to take out statutory health insurance. Around 85% of the population has insurance under the statutory health insurance scheme, including voluntary insurees. The rest of the population has private health insurance. With the Act to Strengthen Competition in SHI of 2007, a health fund was set up in early 2009 (see Blümel and Busse, 2014, Gerlinger 2013, Gesetzliche Krankenversicherung Spitzenverband Bund 2017). The health fund receives contribution revenue from employers and employees, until the end of 2014 the special contribution rate for employees of 0.9% of the income subject to contributions and an individual supplementary contribution, since the beginning of 2015 only an income-dependent additional contribution rate that varies by health insurance fund, and the tax-financed federal subsidy. In 2015 this came to EUR 11.5 billion, i.e. around 6% of SHI expenditure. As a central new element, the health fund receives morbidity-oriented risk structure compensation. Out of this each health insurance fund receives a standardised amount per insured person from the health fund, corrected for a risk premium or deduction, based on the age, sex and morbidity risk (based on 80 selected cost-intensive chronic or serious illnesses) of the insured persons. If the fund does not have sufficient resources to enable a health insurance fund to finance its expenditure, this health insurance fund must levy supplementary contributions from its members. By contrast, a surplus in the form of contribution reimbursements or service improvements must be paid back to the insured persons. There is regulated competition among the health insurance funds which takes place via the setting of supplementary contribution rates. The health insurance funds are obliged to contract with the health insurance scheme doctors and with the hospi-

tals. Since 2007, elective tariffs have existed under which insured persons e.g. with a deductible or special treatment models (e.g. family doctor scheme or integrated care) can make different contribution payments. These options are supplemented by the option for health insurance funds of concluding individual contracts with certain doctor's practices for specialised treatment models. Co-payment is demanded of insured persons for certain services such as for drugs, dentures and at-home care.

The German health system is characterised by a high degree of corporatism (see Gerlinger and Burkhardt 2012c). The primary responsibility for management (including cost management) of the health system was transferred to the associations of the statutory health insurance funds (National Association of Statutory Health Insurance Funds), the health insurance scheme doctors (National Association of Statutory Health Insurance Physicians), the health insurance scheme dentists (National Association of Statutory Health Insurance Dentists), and the hospitals (German Hospital Federation). The central management body of the self-administered health system is the Federal Joint Committee, comprising the national associations of tariff partners, an independent chairman, two other independent members and patient representatives without voting rights. The FJC specifies which inpatient and outpatient services are "sufficient, purposeful and cost-efficient" (Art. 92 German Social Code Book V). The main task of the FJC is to set out the range of services of the SHI in the form of guidelines and to ensure and continue development of the provision of healthcare (see Gerlinger and Burkhardt 2012e and Gerlinger 2012). Treatment and diagnostic methods as well as drugs are thus regularly reviewed in terms of their benefit and efficiency. Moreover, the FJC issues guidelines for treatment and diagnosis methods for quality assurance. The scale of charges for health insurance scheme doctors, the Uniform Value Scale (UVS), is also negotiated in the FJC between the National Association of Statutory Health Insurance Physicians, the National Association of Statutory Health Insurance Dentists and the National Association of Statutory Health Insurance Funds. Federal framework agreements for remuneration of service providers are also agreed in the FJC. The guidelines agreed by the FJC must be submitted to the Federal Ministry of Health (FMH) and can be contested by the FMH within two months. If no guidelines are agreed or are not implemented on time, the FMH can issue them itself ("substitute performance" or subsidiary competency). Another peculiarity in the outpatient sector is that the doctors of the National Association of SHI Physicians, i.e. the health insurance scheme doctors, have a statutory mandate to ensure the provision of health services. The associations of statutory health insurance physicians and state health insurance associations are therefore responsible for requirements planning. The Associations of SHI Physicians are also responsible for approving doctors who are permitted to bill via the SHI system. In the inpatient sector, on the other hand, the federal states are in charge of treatment and are responsible for planning requirements and approving hospitals (see Gerlinger and Schönwälder 2012b). Moreover, the federal states bear a financing responsibility as they have to fund hospital investments.

Box 2: Brief overview of the Dutch health system

With the introduction of the Health Insurance Act in 2006, the Dutch system is geared heavily to a regulated competition model. Since 2006 there has been uniform compulsory basic insurance with free choice of insurance and risk adjustment. The health insurance funds – usually private and not-for-profit companies – compete with each other for insured persons. The health system is largely financed 50% via health insurance fund-specific uniform premiums and 50% via income-dependent social insurance contributions. Premiums for young people are financed with state funds, and low-income households receive assistance in the form of individual health insurance fund allowances. The social insurance contributions are levied by the tax authorities and transferred to the Dutch health insurance fund, which pays the money on a risk-adjusted basis to the health insurance funds. The uniform premiums are paid directly by private households to the health insurance fund; a less expensive (up to 65%) insurance contract is often negotiated with the insurance funds via the employer. The Dutch government or the Ministry of Health thus plays more the role of a regulator. For example, it stipulates the compulsory range of services and determines the amount of private cost participation. Tariff autonomy exists in respect of politically well organised stakeholder groups. The service providers are basically in competition, which is accentuated through forms of remuneration such as the Dutch DRG version (DBC) for the inpatient sector and the specialist sector, and the extensive freedom to negotiate with the possibility of selective contracts between insurance funds and service providers (hospitals, specialists and certain areas of GP remuneration). The specialists are either employed by the hospital or are self-employed and charge the hospital fees to use the infrastructure. In the outpatient basic care sector the GPs take on a significant gatekeeper function. They are subject to i) a combination of fixed remuneration depending on the patient pool (capitation fee) and fee-for-service remuneration (together approx. 80% of the services subject to the obligation to contract), ii) a flat-rate remuneration for integrated care and iii) a pay-for-performance component. These latter two components account for approx. 20% of the services and can be negotiated between GPs and insurance funds (selectively). The cost participation, which has risen in recent years, now comes to just under EUR 400, excluding services for maternity, GP services and services for young people aged under 18. Private households are free to decide on a higher cost participation, and there is a large market for supplementary insurance (a good 90% of insured persons have supplementary insurance).[28]

28 See Thewissen et al. (2015) and European Observatory on Health Systems and Policies (Kroneman et al. 2016) for a compact system description and Okma and Crivelli (2013) for a comparison of the Swiss and Dutch health systems.

Box 3: Implementation of the German budgetary target, sanctions, exceptions and subsidiary competency

Outpatient care: The joint self-management of doctors and health insurance funds in the outpatient sector in SHI has its legal basis in Art. 72 para. 1 of the German Social Code Book V, which requires doctors and health insurance funds to work together to ensure treatment in accordance with the statutory health insurance scheme. Outpatient treatment and thus the global budgets are regulated by contract on three levels: at the federal level the framework conditions (tariffs and range of services) are defined, at the state level the global budget for all registered doctors (morbidity-dependent overall remuneration) is set in an initial step by negotiations between the associations of SHI physicians and the associations of SHI funds for the relevant state, before the associations of SHI physicians distribute the global budget to doctors in the form of practice global budgets (standard service volume) at the third level.

Agreement at the federal level: At the federal level, the national associations of physicians and health insurance funds in the FJC ensure that a uniform standard is guaranteed for outpatient care for the entire country (see Gerlinger and Burkhardt 2012c). A Federal Collective Agreement is agreed by the FJC which sets out the financial and content-related framework conditions for outpatient medical care. In this way, the quality standard for treatment and the range of services as well as the tariffs for outpatient care, i.e. the UVS, are given as a framework for treatment at the state level (see Gerlinger and Burkhardt 2012a). A new UVS has been in force since 2008, according to which medical services are basically to be remunerated by flat rates. Exceptions exist, e.g. for services that are particularly worthy of support, which can still be remunerated as individual services. The FJC defines a national benchmark for remuneration of a UVS service point in euros for negotiations between the associations of SHI physicians and the associations of SHI funds at the state level. The tariff partners at the state level can agree state-specific premiums and deductions, based on the benchmark, in order to take account of the regional peculiarities in the cost and treatment structure (see KBV-Fortbildungsheft 2012, no. 6).

Agreement at the state level: At the state level, the global budget for the outpatient sector, the so-called morbidity-dependent overall remuneration, is agreed in an initial stage between the associations of statutory health insurance physicians and the state health insurance associations in the state committee as part of the overall agreement (see KBV Fortbildungsheft 2012, no. 6). The Federal Collective Agreement is automatically part of the overall agreement at the state level. In accordance with Art. 71 para. 1 of the German Social Code Book V, the contractual parties are obliged to observe the principle of stable contribution rates when negotiating the global budget, unless medically necessary treatment is not guaranteed even after the cost-efficiency reserves have been exhausted. Exceptions exist, e.g. for preventive examinations and screening and structured treatments for chronically ill patients as well as restrictions of this principle for certain service areas such as in the outpatient sector (see section 4.1). Owing to the change in the morbidity structure, the principle of stable contribution rates may be modified as part of morbidity-dependent overall remuneration (see Peters 2017, p. 92f). The background to this is that the morbidity risk should be borne by the health insurance funds alone. Here, the principle of stable contribution rates is modified only in terms of the medically necessary service volume. Tariffs are still geared to the principle of stable contribution rates. From an economic point of view, this rule is efficient, as an increase in expenditure – resulting from the increased burden of illness (demographics, morbidity) and because of "genuine" medical progress – is to be borne by the health insurance funds and insured persons, whereas that resulting from inefficiencies and supply-induced demand is to be borne by the physicians (see Gerlinger and Bur-

khardt 2012b). Specifically, morbidity-dependent overall remuneration, which has been in force since 2009, is determined on the basis of the patients' treatment requirements, which are geared to the prior-year volume, the regionally adjusted UVS tariff, and the number and morbidity structure of the insured persons (see Blankart and Busse 2017).

Breakdown to the level of the service provider: After negotiating the global budget, it is the task of the respective state association of SHI physicians to distribute the global budget among the health insurance scheme doctors in line with the distribution benchmark negotiated between the association of SHI physicians and the association of SHI funds at the state level and with certain legal criteria (see Gerlinger and Burkhardt 2012a). A separate global budget is to be defined for both GPs and specialists. Each health insurance scheme doctor is allocated a fixed global budget – a standard service volume – in advance per quarter, on the basis of patients' treatment needs (see Blankart and Busse 2017 as well as Gerlinger and Burkhardt 2012a). The standard service volume is based on the medical specialty group remuneration for a case (case value), the number of cases based on the previous quarter and age as a morbidity-dependent weighting factor.

Sanctions: If a doctor exceeds 150% of the average of the standard service volume for the medical specialty group, the Health Insurance Medical Service conducts an audit of the doctor in question. On the basis of this audit, a decision is taken as to whether to impose sanctions in the form of a diminishing, graduated deduction of UVS point values. In addition to the exceptions from the morbidity-dependent overall remuneration agreed by the state association of SHI funds and the state association of SHI physicians, exceptions defined by law are also provided for with regard to the standard service volume. For example, there is no volume ceiling in underserved regions and for overshoots of the standard service volume owing to shifts from inpatient to outpatient treatment.

Inpatient sector: In the inpatient sector, the process of implementing the principle of stable contribution rates is also spread over three levels.

Agreement at the federal level: As part of the DRG remuneration system, at the federal level the National Association of Statutory Health Insurance Funds and the German Hospital Association negotiate the national base rate, the flat-rate payment catalogue and the valuation ratios between the services (see Art. 9 para. 1 German Hospital Reimbursement Act KHEntG). Moreover, additional remuneration is agreed for specific services. Since 2010, the change in the national base rate has no longer been geared solely to the change in total basic salary (see Gerlinger 2012c). By law, the change in the national base rate must fall in an interval between the rate of change in personnel and operating expenses of the hospital sector (benchmark) and the rate of change in total basic salary. If the benchmark is lower than the rate of change in total basic salary, no negotiations take place, and the rate of change in the national base rate is set at the rate of change in total basic salary (see Blankart and Busse 2017). The national base rate is a benchmark for negotiations on the state base rates, and the latter are supposed to fall in a bandwidth between +2.5% and -1.25% of the national base rate.

Agreement at the state level: At the second level, the state health insurance associations and the state hospital associations negotiate in the state committee on the amount of and change to the state base rate for all hospitals in a single state (see Art. 10 para. 1 KHEntG). The rate of change in the state base rate may not, as a rule, exceed the rate of change in the national base rate, although exceptions are permitted owing to technical reasons, corrections of inaccurate

estimates of the state base rate or temporary premiums (see Art. 10 para. 4 KHEntG). Since 2016, the rule has applied that the change in the state base rate can be increased by a specific amount if the hospital union wages increase by a greater amount than the base rate.

Agreement at the hospital level: In contrast to the outpatient sector, no global budget is stipulated for the whole inpatient sector; instead, the global budgets are negotiated at the hospital level by the health insurance funds and the service providers (see Blankart and Busse 2017). Stating the standard national evaluation ratios between the flat rate payments for various services, the additional remuneration for certain services and the state base rate, a case mix is negotiated, resulting in the main part of the global budget for the hospital (approx. 82%) – the revenue budget (see Art. 4 KHEntG). In addition to this, a budget for individual hospital services (revenue sum), comprising safeguarding allowances for underserved areas or additional remuneration for services that are particularly worthy of support, is agreed, which completes the global budget.

Sanctions: To balance out overshoots and shortfalls in the agreed global budget, the hospitals have to pay back 65% of the amount in excess of the budget to the SHI the next year and are reimbursed 25% if they undershoot the budget (see Blankard and Busse 2017). Moreover, they are sanctioned if services are extended beyond the agreed scope. More stringent sanctions were introduced in 2017, which call for a reduction amounting to the fixed costs for the next three years to be imposed in the event of excess service provision, known as a fixed cost degression (Art. 10 para. 13 German Hospital Reimbursement Act). The amount of the reduction is agreed at the state level. Some services such as transplants are exempt, and a reduction of 50% is provided for other services.

Arbitration board in the event of non-agreement: If the tariff partners at the federal or state level are unable to agree (in the outpatient or inpatient sector), an arbitration board has the subsidiary competency to determine the content of the contracts within three months. A judgement is made by simple majority of the members of the arbitration board. Regardless of whether the tariff partners reach agreement or an arbitration board stipulates the agreement, the contracts must be submitted to a supervisory authority (Federal Ministry or State Ministry of Health) for statutory review (see KBV-Fortbildungsheft 2012, no. 6). The supervisory authority may contest the contracts e.g. on global budgets, within two months, if a legal violation exists. This would be the case, for instance, if the authority were to determine a violation of the principle of stable contribution rates. The tariff partners can appeal to the social welfare court against the decision of the supervisory authority or the arbitration judgement. Otherwise, in the event of contestation, new negotiations must be held by the authority. In the inpatient sector there are also arbitration boards comprising representatives of the tariff partners and independent members at both the federal and state level (see Art. 18a Hospital Financing Act, KHG). They thus have subsidiary competency or the right to substitute performance in the event that the tariff partners do not reach agreement.

List of Working Papers and Notes FFA

New series

(ISSN 1660-8240 bzw. -7937 (Internet))

Nr. 21: Brändle, T., Colombier, C. (2017) Ausgabenprojektionen für das Gesundheitswesen bis 2045

Nr. 20: Brändle, T., Colombier, C. (2015) What Drives Public Health Care Expenditure Growth? Evidence from Swiss Cantons, 1970–2012

Nr. 19: Colombier, C. (2012) Ausgabenprojektionen für das Gesundheitswesen bis 2060.

Nr. 18: Bruchez, P-A. ,Schlaffer, B. (2012) Endettement public excessif: mieux vaut prévenir que guérir

Nr. 17: Geier, A. (2011) Konjunktur und Wachstum – Teil 2: Eine empirische Untersuchung für die Schweiz.

Nr. 16: Colombier, C. (2011) Konjunktur und Wachstum – Teil 1: Eine Betrachtung aus theoretischer Sicht.

Nr. 15: Geier, A. (2011) The debt brake – the Swiss fiscal rule at the federal level.

Nr. 14: Geier, A. (2010), Ökonomische Blasen: thematische Übersicht und gegenwärtige Lage in der Schweiz.

Nr. 13: Zeller, R., Geier, A. (2010), Auswirkung eines inflationsbedingten Zinsanstiegs auf die Altersvorsorge – Überlegungen im Zusammenhang mit der aktuellen Finanzkrise.

Nr. 12: Bruchez, P.A (2010), Quatre questions concernant la conception des subventions – Privé versus public, libre choix, politique de l'arrosoir, subventionner les bénéficiaires ou les institutions?

Nr. 11: Bruchez, P.A., Colombier, C., Geier, A., Schlaffer, B. et A. Rey (2009), Politique conjoncturelle de la Confédération.

Nr. 10: Colombier, C. und W. Weber (2008), Ausgabenprojektionen für das Gesundheitswesen bis 2050.

Nr. 9: Bruchez, P.A., Colombier, C. und W. Weber (2005), Bundeshaushalt und Inflation.

Nr. 8: Bruchez, P.A. et Ch. Schaltegger (2005), International Tax Competition and Trends in Tax Policy: Some Implications for Switzerland.

Nr. 7: Bruchez, P.A. et D.S Gerber (2004), Sensibilité du 2ème pilier aux chocs inflationnistes – Une discussion qualitative.

Nr. 6: Fischer, R. (2004), Die Unterschiede in der Steuerbelastung der Kantone – Eine Analyse auf der Basis eines mikröokonomischen Haushaltsmodells.

Nr. 5: Geier, A. (2004), Application of the Swiss Fiscal Rule to Artificial Data.

Nr. 4: Colombier, C. (2004), Government and Growth.

Nr. 3: Bruchez, P.A., Gisiger, M. und W. Weber (2004), Die Schweizer Finanzmarktinfrastruktur und die Rolle des Staates.

Nr. 2: Colombier, C. (2004), Eine Neubewertung der Schuldenbremse; unter Mitarbeit von: F. Bodmer, P. A. Bruchez, A. Geier, T. Haniotis, M. Himmel, U. Plavec, überarbeitete Version. (ursprüngliche Version: Nr. 1/2003)

Nr. 1: Weber, W. (2004), Der «Index of Deflation Vulnerability» des IWF – Eine Analyse für die Schweiz.

Old series

Nr. 7/2003: Bodmer, F., Eine Analyse der Einnahmenschwankungen.

Nr. 6/2003: Bodmer, F. and A. Geier, Estimates for the Structural Deficit in Switzerland 2002 to 2007.

Nr. 5/2003: Colombier, C., Der Zusammenhang zwischen dem Bruttoinlandsprodukt und den Schweizer Bundeseinnahmen.

Nr. 4/2003: Bruchez, P. A., Will the Swiss fiscal rule lead to stabilisation of the public debt?

Nr. 3/2003: Bruchez, P. A., A modification of the HP Filter aiming at reducing the end point bias.

Nr. 2/2003: Bruchez, P. A., Réexamen du calcul du coefficient k.

Nr. 1/2003: Colombier, C., Eine Neubewertung der Schuldenbremse; unter Mitarbeit von: F. Bodmer, P. A. Bruchez, A. Geier, T. Haniotis, M. Himmel, U. Plavec. (überarbeitete Version: Nr. 2, neue Reihe)

Nr. 3/2002: Colombier, C., Der «Elchtest» für den Sondersatz der Mehrwertsteuer in der Hotellerie.