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## Budgetary targets as cost-containment measure in the Swiss healthcare system? Lessons from abroad\*

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### ABSTRACT

Growing healthcare expenditure is a major concern for policy makers and calls for effective cost containment measures. For the decentralized Swiss healthcare system, ranking second among OECD countries in healthcare spending, a group of experts has proposed budgetary targets as key measure. In order to substantiate this proposal, we review the literature and analyse experiences with budgetary targets in comparable social health insurance systems, such as Germany and the Netherlands. Budgetary targets raise the cost responsibility and prompt providers to give greater weight to cost-benefit considerations. Our analysis suggests that the involvement of all principal healthcare players and clear decision-making and negotiating structures are key to successful implementation. Risks of rationing, lower quality incentives or conservation of structures have to be countered with taking into account age-related morbidity and medical progress when setting the budgetary targets. Accompanying measures such as incentive-compatible remuneration schemes and quality monitoring are of paramount importance.

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## 1. Introduction

Switzerland ranks second among OECD countries in spending on healthcare (see Fig. 1). The annual increases in mandatory lump-sum health insurance (MHI) premiums of around 4% on average far exceed per-capita increases in incomes and wages at 1.3% and 1.2% respectively (see Fig. 2). This observation is particularly striking if one takes into account that the median age of the Swiss population is often younger than in comparable countries like Germany

or Austria. 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. On the other hand, public budgets are coming under pressure. In particular, the cantons – the key health policy players being responsible for securing provision – are facing higher contributions for the co-financing of inpatient care. Cantons are increasingly tightening their belts with regard to premium reductions for low income households. The excessive rises in health expenditure boost demands for greater financial involvement by the federal government and put the fiscal sustainability of the healthcare system into question [1].

Switzerland's highly decentralized healthcare system with a MHI is based on regulated competition between private not-for-profit insurance funds which can reduce premium by offering higher deductibles. MHI, the government (primarily via co-financing of inpatient care and premium reductions by the cantons and the federation) and private households finance each around 30% of total healthcare costs [1]. Thus, private cost sharing is relatively high.

Switzerland is one of a few OECD countries that does not have politically-determined budget restrictions in healthcare [2,3]. In 2017, the government engaged a group of experts who reach the conclusion that the Swiss healthcare system entails considerable

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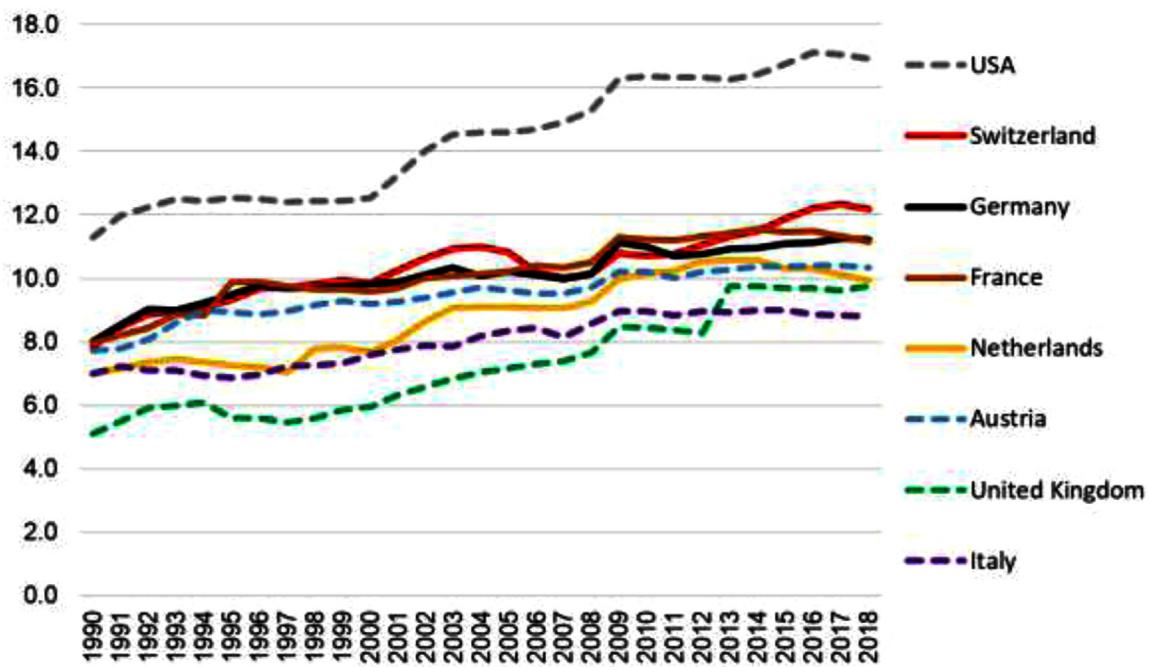


Fig. 1. Healthcare expenditure for selected countries (as % of GDP).

Source: OECD; values of 2018 are estimates.

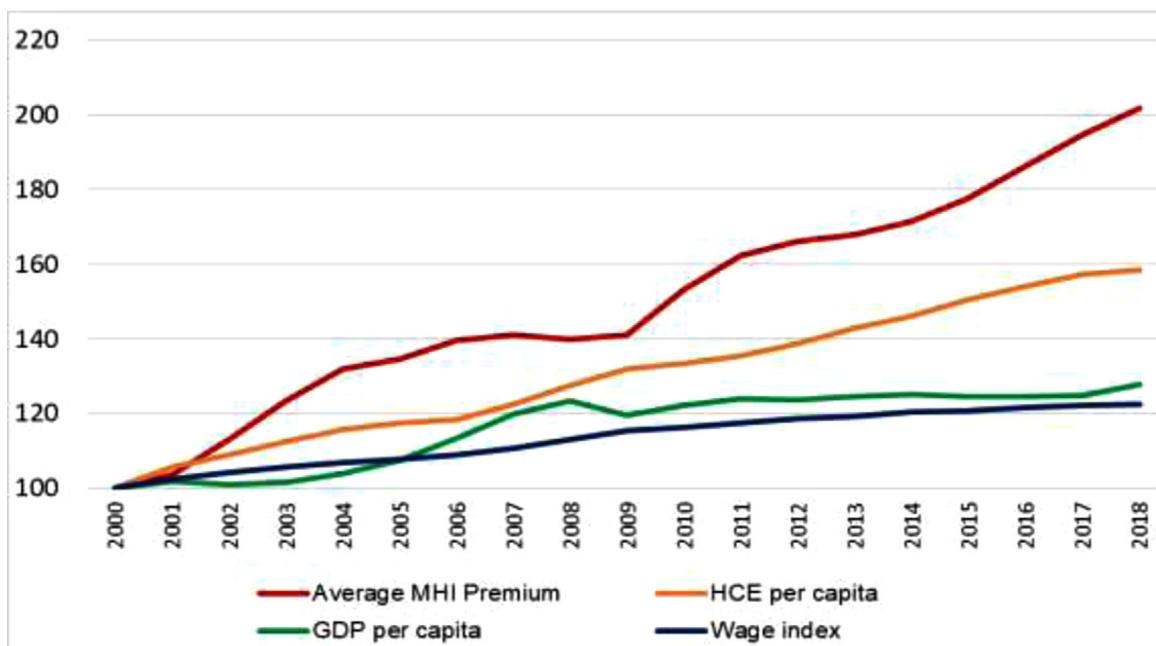


Fig. 2. Development of average MHI premium, healthcare expenditure (HCE) per capita, GDP per inhabitant & wage index in Switzerland, 2000–2018.

Source: FSO, FOPH, SECO; Index 2000 = 100; HCE per capita of 2018 is an OECD estimate.

efficiency reserves and likewise significant potential for savings. They recommend to focus primarily on supply-side measures. Taking account of European countries' experience with budgetary instruments, the expert group's key proposal for cost containment in the MHI is to introduce binding budgetary targets for expenditure growth with the possibility of sanctions in case of budget overruns [4]. While recent reviews rate the experience with budgetary targets as rather positive, there is a lack of robust empirical evidence [5–7]. In fact, budgetary instruments as policy measures tend to be understudied and their impact is likely to critically depend on their institutional design [7].

In order to substantiate the proposal of the expert group, we carry out a comparative analysis of selected country experiences with budgetary targets (caps/ceilings). On this basis, we carve out the requirements for a successful design of budgetary targets with a view to the Swiss healthcare system. We provide guidance for the design and implementation of budgetary targets in Bismarckian healthcare systems. The paper contributes to the discussion on instruments for containing healthcare cost growth which are often categorized into policy interventions aiming at regulating prices, volumes, market structure and the financing mechanisms [5–11].

In Section 2, we review the literature on the advantages of and the reservations against budgetary targets. Most importantly, budgetary targets raise the cost responsibility of decision-makers. However, a budgetary target could entail a greater risk of limiting medically necessary services and result in providers shifting services to areas not affected by the budgetary target. In addition, we highlight the politico-economic interests of the key players in Swiss healthcare. Service providers, in particular, are expected to strongly oppose budgetary targets and to emphasize possible shortcomings. In Section 3, we study the experiences with budgetary instruments in comparable countries, in particular, in Germany and the Netherlands. Experience shows that budgetary targets for expenditure growth – in the form of the principle of stable contribution rates in Germany and binding sectoral agreements in the Netherlands – serve as an “anchor” for cost growth. Binding budgetary targets complement the existing range of instruments with a top-down approach. In Section 4, we summarize key findings and formulate the requirements derived from our comparative analysis of international experience for designing budgetary targets in Switzerland. Binding budgetary targets can most easily be implemented if as many of the key players as possible are involved. The targets can accentuate the distributional conflicts in healthcare. Not least for this reason, budgetary targets call for resilient negotiating and decision-making structures and clear sanction mechanisms in the case of budget overruns, particularly, at the level of cantons and tariff partners, i.e., the association of insurance funds and service providers. When defining budgetary targets, account must be taken of technological and demographic trends to guarantee the provision of medically necessary services. Accompanying measures to increase transparency, particularly, incentive compatible remuneration systems and quality monitoring to avoid rationing and losses in therapy quality have to be introduced simultaneously. We offer concluding remarks in Section 5.

## 2. Theoretical considerations

### 2.1. Arguments in favour of budgetary targets

A key argument in favour of budgetary targets for expenditure growth in the Swiss healthcare system is the barely existent cost responsibility and very lax cost management. By setting a binding cost growth goal, budgetary targets directly contribute to cost-containment and enable in comparison to other economic policy measures direct cost control [12]. They increase planning certainty for the public sector and tariff partners and make the discussion of how much should be spent on MHI more objective and transparent [12,13].

Budgetary targets include the healthcare decision-makers (service providers, health insurance companies, federal government and cantons) in the financial responsibility and provide incentives not to overrun the targets. Budgetary targets can by means of joint cost accountability result in greater coordination between provider groups, enhance mutual trust and increase reform pressure. Potential sanctions not only increase the binding nature of targets but also transfer the financial risk to providers in case of budget overruns [14].

Binding budgetary targets prompt the tariff partners to agree more moderate outcomes to their negotiations. A budgetary restriction incentivizes the individual service providers to take greater account of cost-benefit considerations, e.g., in terms of more conservative treatments, avoidance of over-treatment and more efficient medical and organisational procedures [12]. Budgetary targets allow the (well-informed) tariff partners maximum scope to implement savings measures and efficiency improvements where this is best possible, ideally, medically unnecessary treatments.

Compared to specific regulatory imperatives, budgetary targets are thus also compatible with the self-perception of the free medical professions [15,16].

Budgetary targets impacting the remuneration scheme may also have a long-run effect on the incentives for innovation. On the one hand, with budgetary targets in place, innovations by pharmaceutical and medical device manufacturers are more likely to be adopted if a money-saving effect can be shown. Manufacturers will adjust their innovation pipeline according to the remuneration schemes they expect to face in the medium term. On the other hand, service providers are more likely to adopt innovative and, at the same time, less costly technologies compared to the current, largely cost-based reimbursement, where primarily revenue considerations incentivize to prefer more costly procedures [17].

Regulated competition aims primarily at improving efficiency. However, evidence that provider competition is an effective instrument to contain healthcare cost growth is mixed [4]. In this sense, budgetary targets can provide an additional instrument in the form of explicit cost management for a competitively organized system. By means of more cost-responsibility budgetary targets should create incentives to contain costs at the decentralized level within the health system (via tariff partners) [15,16].

### 2.2. Reservations with regard to budgetary targets

A central argument against introducing binding budgetary targets is the increased risk of limiting medically necessary services (rationing) by prioritising services or in the form of longer waiting times that exceed a medically justified term [5,6,18]. (Sectoral) budgetary targets may also entail the risk of budget shifting, for instance, service providers are incentivized to cut services in MHI, prioritize services only covered by supplementary insurance (without budgetary restrictions) or would have to be paid for out of pocket. 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 [19]. For revenue purposes providers may focus on specific patients or treatments under budgetary restrictions (“cream skimming” or “cherry picking”) [13,20,21]. For instance, budgetary targets could also provide incentives to shift towards easier case mixes [22].

Contrary to the reasoning above, there is also the argument that budget restrictions decrease efficiency by reducing financial incentives for raising quality so that innovation tends to be halted and structures – including the existing inefficiencies – are retained. For instance, sectoral budgetary targets could make it more difficult to shift cost-saving services from inpatient to outpatient services, as the providers in the outpatient sector fear an additional burden on their budget [18,21,23]. Budgetary targets in healthcare are also often viewed as relatively bureaucratic and interventionist.

When breaking down the budgetary targets, there is also the risk that labour-intensive areas with fewer possibilities for productivity progress will be too heavily restricted while technology-heavy areas will be given insufficiently restrictive budgets [24]. This could, in turn, create incentives to provide more capital-intensive services at the expense of human capital-intensive services [25]. Furthermore, an overly restrictive budgetary target can delay investments in infrastructure, which in the medium term may be reflected in higher additional funding requirements or poorer quality [6,26].

Budgetary targets combined with linear tariff-reductions as sanctioning device can give rise to strategic incentives. The limited resources under a budget to which the service providers have collectively – though not individually – committed themselves are a priori common-pool resources. At the individual level, a collective budgetary target creates an incentive to over-use the common pool resource global budget and bill as many services

as possible in order to raise the “market share”. The costs of this extension in the form of a collective ex-post tariff-based reduction affect all service providers including those who acted frugally – as desired – under the budget system. Volume increases that are thus motivated can go hand in hand with a loss in treatment quality. The incentive problem is particularly pronounced in a fee-for-service system. Theoretically, a budgetary target broken down to the individual service provider can break this incentive structure [15,21,27–31].

Finally, it is to be expected that 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 resource allocation and can tend to reduce the willingness of these specialties to cooperate. However, this is inevitable in the face of efforts to step up cost containment [21,26].

### 2.3. The politico-economic interests of key healthcare players

Considerable resistance against budgetary targets has to be expected from the service providers. Compared to the status quo, budgetary targets restrict expenditure growth and thus the possibilities for increasing service-providers' income. They also limit the service providers' autonomy in service provision. The service providers' ostensible argument focuses in all likelihood on the risk of service rationing, the potential loss of service quality and of less equal access to healthcare. From their point of view, the sharp rise in mandatory health insurance premiums is fundable, given the increase in revenue. Depending on the ideology, it is argued that more revenues for healthcare can be achieved through either higher funding from general taxation or higher cost sharing by private households. In the Swiss context, service providers tend to call for greater tax funding to increase overall funding for healthcare, e.g., more financial resources for premium reductions for low-income households. Patients may also support the position of the service providers to some extent: They are likely to equate high costs with high quality, and they only bear a portion of their additional costs directly themselves, owing to insurance cover. As the healthcare system is a particularly visible and sensitive policy area, many polit-

ical decision-makers and voters are likely to be receptive to these points of criticism [32,33].

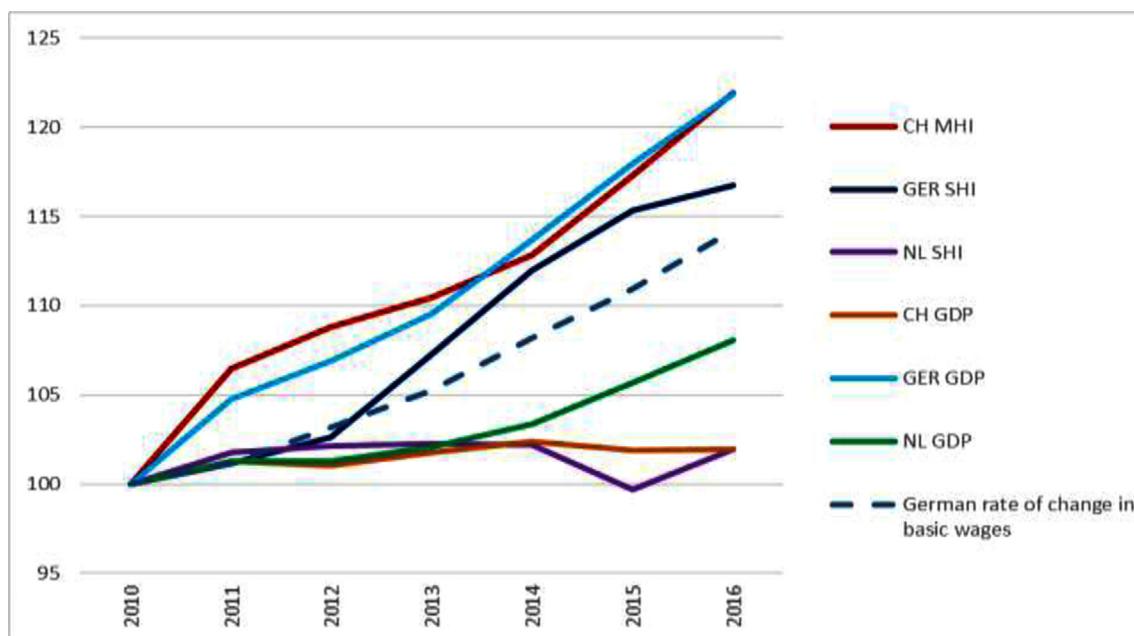
Most of the health insurance funds can accept the status quo: in view of the current lack of cost responsibility on their part, they neither have to engage in difficult negotiations with the service providers nor implement strict controls. It is easier for the health insurance funds to push through premium increases in respect of the politically less well-organized, heterogeneous group of insured persons. In case of doubt, the health insurers – together with the service providers – tend to reject the instrument, citing the priority of high-quality care.

The tariff partners prefer to leave political responsibility for and criticism of the premium increases to the Federal Council who formally approves the premiums annually. However, its authority to intervene is limited.

The cantons 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 hospitals, the cantons have multiple roles. Moreover, regulating the suppliers by means of budgetary targets may prove to be politically more difficult than changing the financing of the health insurance scheme. Overall, compared to the powerful service providers' interest groups, the interests of the heterogeneous group of insured persons and implicitly also of the tax-payers are inadequately represented in the political process.

## 3. Comparative institutional analysis

We focus on Germany (GER) and the Netherlands (NL), which have similar healthcare systems to Switzerland (CH). All three countries have a social health insurance system with regulated insurance competition, belong to the group of countries with high healthcare expenditure (HCE) and share cultural similarities. For a meaningful comparison, we focus on the period where both countries, the Netherlands and Germany, had binding budgetary targets and a social health insurance with regulated competition in place (see section 3).



**Fig. 3.** Development of compulsory health insurance expenditure per payer, and of GDP per inhabitant in CH, GER and NL, and German basic wages from 2010 to 2016 in nominal terms (index 2010 = 100).

Sources: FSO (CH), Statistisches Bundesamt (GER), and OECD.

The annual average per-payer-expenditure growth of the social health insurance in Germany (2.7%) and the Netherlands (1.1%) lags behind their per inhabitant economic development (3.2% and 1.4% respectively) (see Fig. 3). The guiding principle in setting budgetary targets for German statutory health insurance (SHI) (i.e. insurance funds are public not-for-profit entities) is the stabilization of contribution rates. However, to avoid rationing the law provides deviations from the principle of stable contribution rates (PSCR). Given that SHI expenditure merely increases faster than basic wages (2.1%), the revenue-oriented cost management can be deemed successful. In contrast, the per-payer expenditure of Swiss MHI without binding budgetary targets outgrows GDP per inhabitant enormously (average annual growth: 3.1% vs 0.6%). The gap between the annual average growth rate of German SHI and Swiss MHI even widens if the years since the introduction of PSCR as a binding principle in 2000 are included (2.8% vs. 3.7%; GDP per capita 2.5% vs. 1.4%).

As there are relevant studies on the introduction of global budgets in the outpatient sector of Canada's decentralized healthcare system in the 1990s, we briefly refer to the Canadian experiences.

### *3.1. Analysis of budgetary targets in Germany*

#### *3.1.1. Cost management and development of the principle of stable contribution rates (PSCR)*

The PSCR was outlined for the first time for the SHI in 1977, however, in a none-binding manner [34]. With the strengthening of the financial responsibility in the health system in the 1990s, the PSCR has developed into a budgetary target of the SHI. Since the 1990s also more competition has been allowed between insurance funds (free choice of health insurance fund for insured persons since 1994) and providers (flat-rate payments in the inpatient sector since 2003) [35,36]. This reform process has been accompanied by the expanded management competencies of joint self-administration and the expanded competencies of the German Ministry of Health [35]. This development is particularly reflected in creating the Federal Joint Committee (FJC) in 2004. The FJC decides on the scope of the services, is tasked with subjecting all (new and existing) services in SHI to an assessment and has since 2007 far-reaching powers to issue guidelines in the field of quality assurance.

#### *3.1.2. Principle of stable contribution rates as a budgetary target*

With the entry into force of the Health Care Reform Act in 2000, the PSCR became more legally binding [34,37]. According to the German Social Code Book V, Art 71 § 1, it is stated that the PSCR applies to remuneration agreements between the tariff partners. However, a general exception exists if medically necessary treatment is not guaranteed even after inefficiencies such as overtreatment or overuse of health services have been reduced [34]. This can be due to morbidity changes or financial developments that are outside the scope of the SHI such as severe recessions that subdue wage growth. 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 provisions of the SHI link a revenue-oriented cost management system with the aims of reducing inefficiencies and preventing rationing.

Accordingly, the PSCR is not strictly adhered to. From 2000 to 2016, the contribution rate rose from 13.5% to 15.5% of the basic salary. This is partly due to sluggish annual average growth of basic wages that lagged behind GDP per capita by 1PP, 1.5% vs 2.5%. Since 2005 the contribution rate is composed of the standard contribution rate paid equally by employers and employees and

a supplementary contribution rate paid by employees [38]. From 2009, the supplementary rate is set by the insurer funds, first as a lump-sum contribution, from 2015 dependent on the income of the employees. From 2010 to 2015, the contribution rate (standard and supplementary rate) was stable at 15.5%, and has been since 2016 at 15.7% due to an increase of the supplementary rate. Additionally, a tax-financed federal subsidy was introduced in 2004, which initially amounted to around 0.8% of SHI expenditure, stood at almost 10% in 2010, and finances just under 7% of the expenditure in 2016 [38,39]. If the revenue-oriented budgetary target (PSCR) is understood as an anchor that serves to bind SHI expenditure momentum closely to the economic trend, it can be deemed successful.

The law provides for a clearly structured framework for implementing the PSCR in respect of service providers [40,41]. 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. 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. The latter aims at assigning cost-responsibility to individual providers. 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 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 [42]. The weights for flat-rate payments are determined at the national level by the tariff partners. Negotiations on the global budget of individual hospitals take place between the individual health insurance funds and the hospitals.

If no agreement is reached between the tariff partners in the outpatient or inpatient sector, an arbitration board steps in. This board has an equal representation of the associations of the insurer funds and the service providers who additionally appoint an independent chairman and two further independent members. 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 the uniform-value-scale points is applied [43]. 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.

#### *3.1.3. Budgetary target and remuneration of service providers*

The reinforcement of the PSCR was accompanied by remuneration reforms, in particular by the change in hospital remuneration to DRG in 2003 and numerous reforms of the outpatient remuneration scheme [37]. These reforms have aimed to improve incentive compatibility between remuneration systems and global cost management.

Since the first introduction of budgetary ceilings for practicing doctors in the late 1990s, there have been several reforms of

the remuneration scheme to incentivize cost containment, to tackle the common-pool problem of global budgets (“treadmill effect”), to prevent rationing and to satisfy doctors’ expectations in terms of income and working conditions [27,44]. This ongoing reform-process led to the introduction of the doctor-specific standard service volume in 2009, which, in contrast to the preceding 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 [43]. To prevent rationing the morbidity structure of the patients is taken into account in the physician’s global budget and budget ceilings are set relatively generously (150% of the cases of the medical speciality’s average). To reduce the incentives for an expansion of services, flat-rate tariffs were introduced in the formerly complete fee-for-service system. According to the experience of the SHI National Association of Statutory Health Insurance Funds, the performance audit in case of a budget overrun that can cause a reduction of regular remuneration is effective. It is seen as a threat due to potential reputational damage within the provider association. However, as under practice budgets, incentives to shift services from SHI patients to privately insured patients remain under standard service volumes [45].

In the inpatient sector, there has been a greater orientation to the PSCR since 1992 but this is modified somewhat with a reform in 2009 [46,47]. 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. In 2003, there was a complete changeover in hospital remuneration from an original system of daily care rates to diagnosis-related flat-rate payments (G-DRG) [46]. 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. Therefore, the DRG system was expected to comply with budgetary targets [46]. However, the DRG system is creating incentives that contradict the cost-containing goal of global budgeting, for example, a shift towards and an expansion of medically well plannable cases [48]. Performance controls by health insurance funds show, for example, that considerable efficiency reserves exist in the inpatient remuneration system [43]. The number of cases in German hospitals has risen sharply recently despite global budgets, by 8.4% from 2007 to 2012 [43,48]. 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 [49,50]. To address these problems in DRG in 2016 a reform was introduced that includes treatment quality through premiums and deductions in DRG tariff [51]. Tariff partners are obliged to monitor whether increases in cases are purely economically motivated and to counteract.

### *3.2. Analysis of budgetary targets in the Netherlands*

#### *3.2.1. 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. 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 2011.

#### *3.2.2. Why were budgetary targets not adhered to between 1994–2011?*

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 proved to be politically unfeasible with such substantial time lags.

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 equal healthcare provision existed. This was not compatible with longer waiting times resulting from strict budgetary targets.

Moreover, over the last decade, the policy focus has been on the gradual reorganisation of the healthcare system from an input-oriented, state-based supply plan to a regulated, 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 services as well as shorter waiting times in particular. 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) [52,53]. The health insurance funds – strengthened in this new competitive system – had, however, 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 – phasing out in 2015 only (in addition to 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 with the tendency towards regional monopolies in the inpatient sector [22] and, at the same time, a strongly oligopolistic market for insurance in the compulsory sector [54,55]. 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 including the specialist sector, in which service providers and insurers were free to negotiate prices to an ever-increasing extent. For the remaining services (involving by trend more complex services), the government continued to apply a global budget. The DRG system did not succeed in containing costs: waiting times were reduced, however, there was an expansion in volumes, indications of systematic upcoding and a trend towards an easier case mix [22]. 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.

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

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

Under a new coalition (2012–2017), the government formulated new and more stringent multi-year spending growth targets for the healthcare sector and – to date – complied with them.

In the wake of the economic 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 could not be complied with in 2010, created additional pressure [53,56].

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) [22,53,56,57]. 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). These agreements became an anchor for tariff partner negotiations. 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.

The sanction mechanism provided for is controversial due to the common-pool incentives problem to individually expand volumes with the goal of safeguarding income. Furthermore, successful market players with a higher market share or market players with low profit margins in competitive sectors tend to be penalised. It is also argued 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 case mix 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 [28]. To date, the budgetary targets have been largely met, and the sanction mechanism has not had to be used.

Although this more partnership-based approach towards joint cost responsibility does not necessarily suit a model of regulated competition, it fits the Dutch tradition of corporatist decision-making. 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 cost responsibility [53]. 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. 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 [22,53,56,58].

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), 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, and iv) a simplified DRG remuneration system (from 30,000 to approx. 4000 components in 2013). One additional aspect conducive to meet the target is the fact that the absolute drug spending level has stabilised or was even reduced as this sector historically had very high growth rates and in some core areas expensive drugs for chronic illnesses have come off patent.

### 3.3. Analysis of the introduction of budgetary targets in Canadian provinces

In the 1990s, multi-year budget targets set by the provinces were introduced in Canada's decentralized healthcare system in the outpatient sector [15]. Although the Canadian system is tax-financed and even more decentralized than the Swiss healthcare system, valuable insights can be gained from the introduction of budgetary targets in the outpatient sector.

Hurley et al. [21] qualitatively elaborated on the differences in the introduction of the global budget targets between Nova Scotia and Alberta. They emphasize the high organisational and information-related requirements, the risk of distributional conflicts 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. Alberta was overall in a better economic situation. A sanction mechanism was provided for but the exact measures were not precisely defined. It was argued 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 initial income situation of doctors in Nova Scotia was more critical than in Alberta so that it was easier to implement budgetary restrictions in Alberta. Secondly, the stricter budget target incurred losses among doctors in the first year in Nova Scotia. This triggered a treadmill effect among doctors as in Germany [27]. Conversely, a lengthier transition phase in Alberta favoured the ability to reach 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 political acceptance. 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. 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, Alberta's government, due to its popularity, was more easily able to prevail over the physicians association.

## 4. Results and discussion

Based on the comparative analysis, we summarize the key results and formulate the requirements for successful implementation in the Bismarckian-type Swiss healthcare system. We also point to the differences with the countries reviewed.

### 4.1. Results

We conclude that binding budgetary targets for expenditure growth serve primarily as an "anchor" for cost growth and help bind

it more or less proportionally to GDP growth. Binding budgetary targets complement the existing range of instruments with a top-down budgetary framework. They discipline the service providers, involve tariff partners by means of self-administration and corporatism 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 or basic services such as vaccinations are partially excluded from the budgetary target. The political feasibility of introducing budgetary cost-containment measures seems to benefit from general fiscal pressure. In terms of sanctions, Germany has a clearly defined system of subsequent degressive tariff reductions. In the Netherlands, the present sanctions work more as a threat and increase pressure to reform. Experience of the introduction of global budgets in Canada shows that sanctions and possible solutions for savings measures, which are also accepted or even proposed by the service providers' associations, have a greater chance of succeeding than tariff reductions implemented unilaterally by the government. Finally, experience shows that budgetary targets for healthcare are to be understood as a learning system that requires subsequent adjustment and accompanying measures.

#### *4.2. Discussion of requirements for budgetary targets for Switzerland*

Firstly, budgetary targets 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 them and are represented on the relevant boards. If the service provider groups are also to get behind the budgetary targets, they must be shown that greater cost management 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 contribute their first-hand expertise and, at the same time, achieve maximum room for manoeuvre compared with other forms of state regulations. Having a budgetary target set unilaterally by the government does not appear to be particularly promising owing to a lack of acceptance and insufficient use of tariff partners' expert knowledge.

Secondly, the implementation of budgetary targets calls for formal negotiating and decision-making structures that clearly allocate cost-responsibility. This applies on the one hand to the board that advises or decides on the budgetary targets. On the other hand, it applies to the associations of service providers, insurers and also to the cantons which implement the budgetary targets. In particular, the German experience shows that service provider associations can assume budgetary responsibility and distribute negotiated funds among their members. In addition, it is important for consensus to be reached within the professional associations to be able to make constructive contributions to the discussion on where cost reductions are feasible. Clearly regulated decision-making structures are particularly valuable in terms of the expected distributional conflicts. 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. These primary requirements reflect parallels to the principles postulated by Ostrom [59] for the successful handling of local common-pool resources.

Thirdly, the process of defining meaningful budgetary targets must include a consideration of the medico-technical and demographic trends as well as exceptions for unexpected epidemics

and pandemics respectively (e.g. COVID-19) 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.

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' remuneration scheme can be reconciled with a budgetary target. Remuneration schemes 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 suggests that longer transition periods with more generous budgetary targets seem preferable in the introductory phase. This increases political acceptance and prevents a possible loss momentum on the part of the service providers.

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 within the system are increasing. Moreover, increasing transparency is a prerequisite for closer cost control. 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.

#### *4.3. 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 professional 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. 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 PSCR, 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 to the Netherlands and Germany is the greater decentralisation of the Swiss healthcare system along cantonal borders. This adds an element of complexity to a budgetary targets system – especially in terms of setting up decision-making structures and breaking down the budgetary targets. It implies leaving more room for manoeuvre for deviating cantonal institutional solutions.

A third key difference 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. This puts more political pressure on the tariff partners to contain SHI costs than in the Swiss lump-sum-financed MHI.

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 actively the services provided (e.g. Health Insurance Medical Service). The ASHIP 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 position vis-à-vis the providers. Both the health insurance funds and the service provider associations have committed to joint cost responsibility as part of binding covenants with the Dutch government.

## 5. Conclusions

This paper informs the discussion about budgetary targets as a cost-containment measure and applies it to the particularly interesting case of the decentralized Swiss healthcare system. We evaluate the scientific literature and carry out a comparative analysis of country experience with binding budgetary targets. Our paper shows that linking expenditure momentum in social health insurance with the overall economic trend can succeed without rationing and loss of quality if certain requirements for implementation are met. A binding budgetary target can provide an effective instrument for better cost control while safeguarding sustainable financeability for private households and the public sector in a Bismarckian-type health insurance system. Altogether, the institutional requirements for a well-designed budgetary target are high, particularly in a decentralized and competitively organized healthcare system like Switzerland. While we define important requirements for implementation of such type of measure, strong political resistance by well-organized service provider associations is to be expected.

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