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INCREMENTAL ADOPTION OF MANAGED COMPETITION IN GERMANY

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Incremental Adoption of Managed Competition in Germany

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Abstract

The statutory health insurance system ensures health coverage to the majority of the German population. Founded on the value of solidarity, it pioneered the Bismarckian social health insurance model of health systems. Its structure is characterised by self-governance of stakeholders, collective negotiations and joint decision making. While socio-political factors were involved in the genesis of the system and informed its underlying structure, economic considerations necessitated the introduction of competition-based principles. In the process, regulatory reforms gradually introduced health system features that closely resemble the functions of managed competition as conceptualised by health economist, Alain C. Enthoven. The introduction and implementation of these regulatory reforms have faced several limitations and challenges. The incremental adoption of managed competition in the system exhibits the conflict between long-standing systems of governance and reforms aimed at addressing efficiency concerns.

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1 Introduction

Germany has achieved universal health coverage through a combination of mandatory statutory health insurance (SHI), private health insurance (PHI)[1] and additional schemes for certain occupation groups (e.g., soldiers). However, it is also one of the most expensive health systems in the European region. The high healthcare costs can be attributed to the lack of competition among providers and the fractured nature of the provision landscape (Amelung et al., 2012). The ambulatory and inpatient sectors operate separately from one another with the minimal presence of gatekeeping in the system.[2] This has resulted in poor information exchange between providers, thereby generating avoidable costs such as repeated diagnostic tests (Amelung et al., 2012). The total health expenditure in 2019 was 11.9% of GDP (Statistisches Bundesamt, 2021). The persistently high healthcare expenditure has prompted reforms aimed at increasing the system's efficiency and instituting cost control mechanisms. Such attempts have been met with opposition by providers empowered by the corporatist nature of the system.

Multiple reforms in the past have attempted to introduce competition in the otherwise rigid structure of the SHI to incentivise cost control and improve the quality of healthcare. In the process, Germany has adopted some of the principles of Enthoven's theory of managed competition wherein a "sponsor" regulates the health insurance market to produce cost-efficient outcomes and ensure equity. In this paper, we document the experience of Germany's SHI system with managed competition and the challenges faced by this sub-system in faithfully implementing the principles of managed competition as originally envisioned by Enthoven.

In the next section, we provide a brief background of the SHI system's origin, its founding principles, and its fundamental structure. In section 3, we map the financing flow and the actors involved in the various health financing functions in the SHI system. In sections 4 and 5, we trace the adoption and evolution of managed competition and examine the implementation of the features of the concept (managed care, sponsor, principles) in the system. We highlight some prominent challenges faced by the system in section 6 and conclude the paper in section 7.

[1] 11% of the population is covered by private health insurance and there are special programmes (such as for soldiers) and 67,000 are uninsured (Blümel et al., 2020)

[2] Gatekeeping is an attribute of heath systems wherein the patient is assigned a general physician for their care and can access specialists only through the physician's referral. In Germany, gatekeeping is limited to the general physician-centered programs.

2 The Statutory Health Insurance System

The Statutory Health Insurance (SHI) system covers around 87% of the German population (Blümel et al., 2020). Referred to as the Bismarck model of healthcare systems[3], it was established in 1883 by Otto von Bismarck, the then Chancellor of Germany. He replicated sickness funds[4] which were earlier limited to white-collar workers and decreed the establishment of such funds for the coverage of blue-collar workers as well. This reform has been speculated as being politically motivated considering the workers' movement brewing at the time and the introduction of SHI directed towards the appeasement of the protesting workers' unions (Tulchinsky, 2018).

Since its genesis, the system has undergone periodic reform (Busse et al., 2017). However, the core features of the system have prevailed and continue to inform its functioning. The system is characterised by three underlying features - the solidarity principle, self-governance/corporatist structure and subsidiarity principle (Altenstetter & Busse, 2005; Gilbert Center at UC Berkeley, 2020)

The solidarity principle forms the core of social health insurance systems whereby individuals pay contributions according to their means and receive healthcare benefits according to their needs. Regardless of their contribution amount to the system, everyone is entitled to the standard basket of services and has access to all the providers in the system.

The corporatist structure enables self-governance in the system and allows negotiations between collective associations of the stakeholders in the system (see Figure 1). All 16 regions/federal states in the country have associations of sickness funds, physicians, dentists and hospitals which are then represented at the national level by the four federal associations of the same. The Federal Joint Committee (GBA) comprises the four umbrella organisations and is under the statutory supervision of the Federal Ministry of Health.

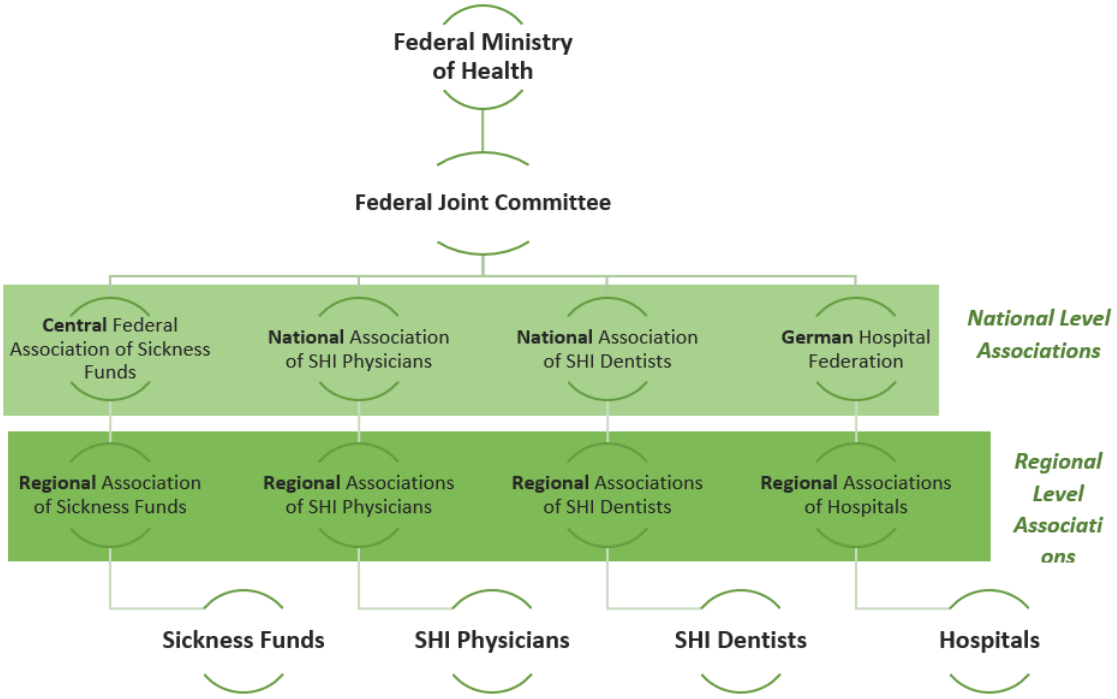
The subsidiarity principle entails leaving decisions to the smallest capable unit

[3]The Bismarck model is one of four models as categorised by T.R. Reid in his book "We're number 37" (referring to the US) (PNHP, 2010). The Bismarck and Beveridge models refer to the systems which resemble those established by Otto von Bismarck and William Beveridge in Germany (SHI system) and United Kingdom (National Health Service) respectively. The National Health Insurance model combines features from the Bismarck and Beveridge models while the fourth type, Out-of-pocket model has a disorganised system where the individuals are responsible for purchasing care for themselves.

[4]Sickness funds are the entities that provide health insurance to their members. In Germany, sickness funds were established based on occupation groups.

(Altenstetter & Busse, 2005). It is closely related to the corporatist structure which enables regional representation in decision making.

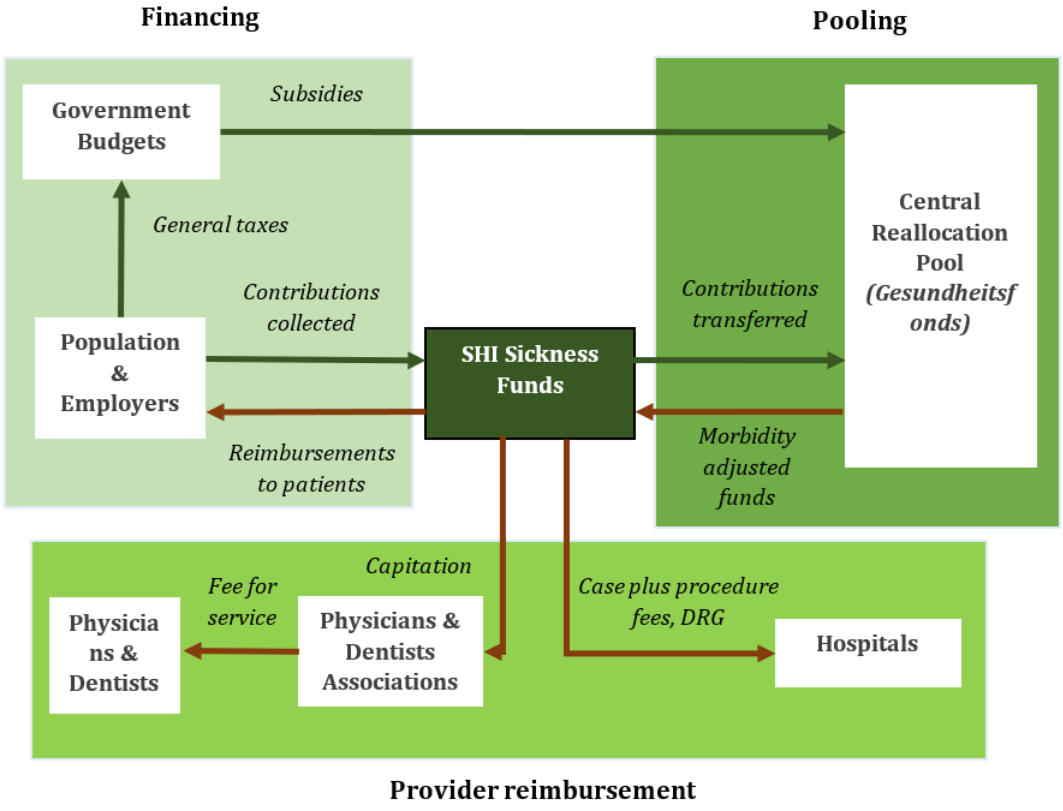
Figure 1: The Corporatist Structure of the SHI System



3 Health Financing Actors, Functions and Fund Flow

The health financing functions are performed by different actors in the SHI system (see Figure 2). The primary source of financing is the mandatory[5] income-based contributions from employers and employees. The contributions are collected directly by the sickness funds. There are 105 sickness funds in operation as of 2020. These are a result of mergers among the 1221 sickness funds in 1993 (Busse et al., 2017). The sickness funds in Germany are not-for-profit entities that provide health insurance to their members (Panthöfer, 2016).

Figure 2: Health Financing of the SHI System



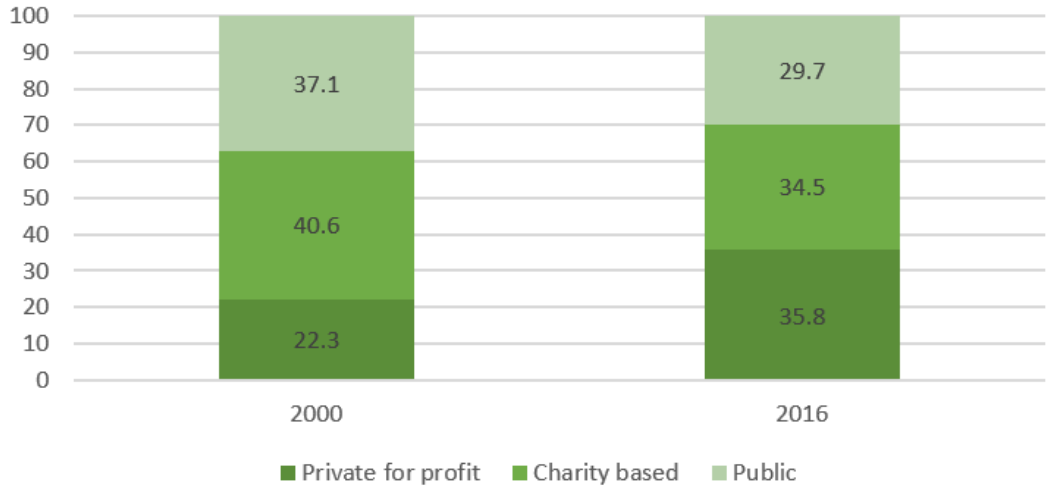
The sickness funds transfer the collected contributions to the Central Reallocation Pool (Gesundheitsfonds) where these are pooled along with subsidies from gov-

[5]Those earning above the threshold of €62550 (in 2020) or engaged in certain occupation categories (civil servants and self-employed) can opt out of the SHI system and choose private health insurance instead.

ernment budgets. Once pooled, funds are then allocated to sickness funds based on a morbidity-based risk adjustment system which compensates plans for the number of enrolled members (capitation) and the high-risk members they cover (risk adjustment). The Federal Office for Social Security (Bundesamt für Soziale Sicherung or BAS)[6] carries out the legal supervision of health insurance institutions and the budgets of social insurance providers under direct federal control. It is also responsible for the implementation of the Morbi-RSA scheme and the administration of the Central Reallocation Pool (Bundesamt für Soziale Sicherung, 2022).

The sickness funds pay the collective associations of hospitals, physicians and dentists who further allocate funds to their constituents. One of the peculiar features of the provider landscape in Germany is the fracturing of inpatient care from outpatient care which has impaired coordination of care in the system. The inpatient-care provider landscape is characterised by the presence of public, charity-based and private hospitals. Their share over the years has changed with an increase in the share of private for-profit hospitals accompanied by a decline in the share of charity-based and public hospitals (see Figure 3). The physicians in the system are either salaried by hospitals or run independent practices.

Figure 3: Change in share of hospitals by ownership



Source: German Hospital Society or DKG (Deutsche Krankenhausgesellschaft, n.d.)

[6]It was called the German Federal Social Insurance Authority (Bundesversicherungsamt or BVA) before January 2020.

4 Adoption and Evolution of Managed Competition in the System

While the SHI system was established in 1883, the principles of managed competition were gradually adopted in the 1990s. The German reunification in 1990 led to the integration of the East German health care system into the West German system thereby retaining the Bismarckian model in the unified country (von der Schulenburg, 2005).[7] Civil servants led the superimposition of the West German hospital laws on the East German system while proposals for continuing the pre-existing system of the East were dismissed (Altenstetter & Busse, 2005). Along with the expansion of the population to be served by the health system, there were economic, political and social factors associated with the adoption and evolution of managed competition in the system.

4.1 Economic factors - Expensive health system and efforts of cost containment

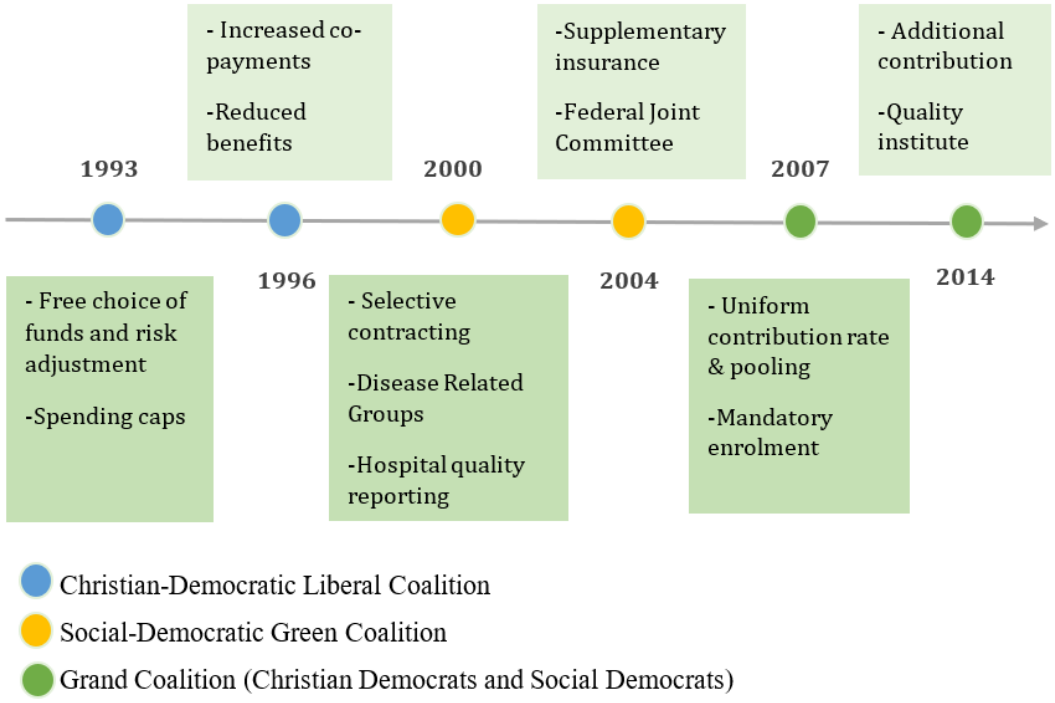
Following the reunification, Germany was dealing with an ageing population, increasing healthcare demand, and technological improvements which resulted in escalating costs in the system (Busse et al., 2017). Multiple regulations were introduced to control costs, increase efficiency and address inequity in the system (see Figure 4). The introduction of free choice of sickness funds to members opened up choices for the population which was previously captive to their occupation group related sickness funds. Sickness funds now had to compete for members and hence bring down their premium rates (Busse et al., 2017; Gilbert Center at UC Berkeley, 2020). Subsequently, risk adjustment was introduced to disincentivise risk selection by sickness funds.

4.2 Political factors - Path dependency of long-standing structures

The 1993 Health Care Structure Act marked a shift in the path dependency of previous reforms. This is attributed to the Ministry of Health and its ability to secure its policy goals despite opposition by powerful stakeholders which were the sickness funds and the provider organisations. The Health Ministry was able to

[7]The sickness fund structure was established in erstwhile East Germany and the provision landscape was transformed through hospital constructions and renovations. The government-financed national health service in East Germany was abandoned and the West German model was implemented within a year (von der Schulenburg, 2005)

Figure 4: Pathway of reforms



Source: Author's illustration based on (Busse et al., 2017)

achieve the same due to a threefold strategy: achieving a prior vague consensus among the coalitions, leveraging deals with the potential veto players, and largely controlling the debate surrounding the reform (Altenstetter & Busse, 2005). Subsequently, both conservative (Christian-Democratic Liberal Coalition) and liberal governments (Social-Democratic Green Coalition) brought about reforms aimed at curtailing costs, which continued with the Grand Coalition (Figure 4).

Physician associations have relentlessly curtailed the introduction and implementation of radical SHI reforms. While the 1993 Act introduced elements of competition, selective contracting was left out of the legislation given the vehement opposition of physicians to the proposed reform (Brown, 2021). To date, political actors have refrained from implementing radical reform and selective contracting, albeit present, is limited in extent (Brown, 2021).

4.3 Social factors - The underlying principle of solidarity

The SHI system was founded on the principle of solidarity whereby employers contributed to premiums and members of a sickness fund were covered from the pooled premium amounts based on healthcare needs. However, there were wide disparities among different sickness funds and their membership was restricted based on occupation categories. As a result, premium amounts varied widely between the sickness funds for the blue-collar and white-collar workers. To bring about convergence in premium rates, the Health Care Structure Act introduced free choice of sickness funds to members (Gilbert Center at UC Berkeley, 2020). As a result, the sickness funds brought down their premium rates to attract members. In 2009, a uniform contribution rate was fixed by the government along with the introduction of a risk adjustment scheme (Busse et al., 2017).

5 Principles of Managed Competition in the System

Alain C. Enthoven coined and defined the phrase "managed competition" as a purchasing strategy used by employers in the US who create and manage health insurance markets for their employees (Enthoven, 1993). Called the "sponsor" in a managed competition system, employers establish rules of participation for insurers, define a basic package to be provided by all insurers, disincentivise risk selection, monitor the enrolment process and provide information to their employees on plan performance to spur informed choices and switching behaviour. Scholars have noted the application of these functions in the context of social health insurance systems at the national scale where the functions of the sponsor are undertaken by the government itself or a public body (Nambiar, 2021). Among the nations which adopted managed competition, Germany is considered to be in the group of "incrementalists" that adopted some, though not all, features of the concept (Brown, 2021).

The sponsor's role is played by the Federal Joint Committee (Gemeinsamer Bundesausschuss or GBA). The corporatist and self-governance structure of the system provides a platform for negotiations among the associations representing the various stakeholders in the health system (Figure 1). The GBA is under the statutory supervision of the Federal Ministry of Health which supervises all its directives and regulations. It has a decision-making body called the plenum which comprises 13 members representing the physicians, dentists, hospitals, sickness funds and patients. All the members, except the patients' representatives, hold voting powers. The plenum meets once or twice a month in a public session to decide on various matters. The powers and responsibilities of the GBA account for many of the sponsor's functions such as (Gemeinsamer Bundesausschuss, 2022b):

- Defining the basic benefits package of the SHI.
- Setting quality standards.
- Setting rules in the market by passing legally binding directives.
- Mandating self-reporting for providers on performance indicators.

Hence, the GBA acts as the regulator of both the provision as well as insurance functions in the SHI system. The representation of the stakeholders within this body allows for decisions to be made based on negotiations, resulting in collective contracts governing the system.

Enthoven laid out the core principles of managed competition which are implemented by establishing certain rules in the health insurance market and then maintained with the active management of the market by a sponsor (Enthoven, 1993). In Germany, like other social health insurance systems, many of these functions have been implemented through legislations. However, there is a lack of active regulation on the part of the sponsor (Nambiar, 2021). In this section, we examine the extent of application of Enthoven's principles in the SHI system.

5.1 Elements of managed care

Enthoven describes managed competition as a strategy applied to integrated entities which have combined financing and provision. By segmenting the providers through such selective contracts, competition between such entities would be more effective (Enthoven, 1993). Selective contracting entails direct contracts between insurers and providers which can facilitate the introduction of some features of managed care. The common principles of managed care across its different manifestations include an emphasis on preventive care, coordination of care, incentive alignment between payers and providers, and the provision of appropriate care (Sekhri, 2000). In essence, managed care allows insurers greater say in the quality and quantum of care provided, mainly through their choice of provider payment mechanisms.

In the German SHI system, insurers and providers are distinct entities without any exclusive contracts between them. Their relationship is primarily governed through the collective contracts signed at the regional and federal levels. Hence, all contracting of care, and finalising of the benefits package and the reimbursement rates are decided through negotiations between the insurer and provider associations at the regional and national levels. These decisions then inform the quality and quantity of care provided and the rates of provider reimbursement throughout the system. However, the Statutory Health Insurance Reform Act of 2000 introduced the option of selective contracting in the system in the form of additional contracts for some health programs. Since providers and insurers are part of the larger collective contract and receive guaranteed payments under the same, the government had to propose incentives for their participation in such programs and to spur innovation in healthcare treatment. Consequently, the German government actively encouraged the emergence of such programs in the SHI system by providing start-up funding to such initiatives. While this reform brought about more than 6000 such contracts, the withdrawal of start-up funding in 2008 led to the dissolution of 20% of these programs (Amelung et al., 2012).

The selective contracting option gave rise to programs like integrated care pro-

grams (ICPs), general physician (GP)-centered contracts and disease-management programs (DMPs). ICPs are led by providers that come together to form a network and then sign a contract with a sickness fund. The payers and providers in ICPs have the freedom to set the payment scheme, type of care provision and evaluation methods (Milstein & Blankart, 2016). The GP-centered contracts introduced gatekeeping in the system wherein the physician guides the patient through the fragmented health system for which physicians get compensated by sickness funds based on negotiated reimbursement forms and rates. In DMPs, the physician (often a general practitioner) directs patients suffering from chronic diseases through a structured pathway and manages their care by referring them to specialists when needed. For these programs as well, physicians receive additional payments from sickness funds. Being voluntary programs, they all offer financial or non-financial incentives for patients to enrol (Milstein et al., 2016). These programs have brought in coordination of care in the otherwise fragmented healthcare system.

Such programs have also allowed for different payment mechanisms to be employed apart from the fee-for-service (FFS) payments to physicians. Sickness funds have adopted capitation, and pay-for-performance (P4P) payment methods in such selective contracts (Milstein et al., 2016). Capitation is a method of payment in which providers are paid a fixed sum for the persons in their care for a fixed period (monthly or annual payments) (Berwick, 1996). This method is employed to control the overprovision incentive that fee-for-service creates.[8] Moreover, it incentivises providers to deliver good quality of care to attract and retain more members, hence acting as an implicit performance-linked payment mechanism. On the other hand, the pay-for-performance method provides explicit financial incentives to physicians for improvement in performance which can be assessed through improvement in quality of care and/or quality of outcomes (Petersen et al., 2006).[9] The managed care models in the SHI system employ P4P by assessing performance improvement primarily through process indicators in such programs (Milstein et al., 2016). For example, the adherence of patients to monthly check-ups leads to bonus payments for physicians in such programs (Llano et al., 2013).

[8]It transfers some of the risk to the provider since they are liable to treat the patient by optimally utilising the assigned funds. However, it can also allow denial or withholding of care in the absence of quality (process or outcome) reporting requirements (Brent C. James & Poulsen, 2016).

[9]Assessment of quality improvement which combines process related improvement as well as improvement of outcomes is best suited to provide the right incentives and avoid the unintended effect these can create if employed solely, viz., physicians gaming the system (to report increased processes) and adverse selection (to report good outcomes) (Petersen et al., 2006).

Selective contracting can help reduce the high costs and inefficiency of the SHI system due to the fragmented provider landscape and lack of competition among providers. Such programs allow for insurers to negotiate volumes and prices of services and hence lower their costs. However, increased uptake of such programs would require the stakeholders to recognise a business case for insurers, additional benefits for providers and overall healthcare benefit for patients; all of which are realised in the long-term (Amelung et al., 2012). Moreover, given the complexities of budgeted reimbursement for all SHI physicians, concluding selective contracts requires that the overall budgeted reimbursement is reduced by an appropriate amount corresponding to the selective contract. This system is extremely complex and does not provide strong incentives for selective contracts. (W. Quentin, personal communication, March 4, 2022). Hence, the participation of providers in managed care programs is contingent on realising profits through these programs (Amelung et al., 2012).

5.2 Establishing rules of equity

The sponsor establishes rules to ensure equity through universal enrolment, affordable premiums and access to a basic benefits package for all members in the system. Some of these are affected through the Social Code V and some through subsequent regulations.

5.2.1 Universal enrolment

The SHI system expanded gradually to include all blue-collar workers, white-collar workers, unemployed workers, students and dependents which increased coverage from 10% of the population in 1885 to 76% by 1987 (Busse et al., 2017). The 2007 Act to Strengthen Competition in Statutory Health Insurance made universal coverage mandatory which could be either through enrolment in SHI or PHI (Busse et al., 2017). The German model allows for opting out of the mandatory SHI system to opt for PHI if one exceeds the income threshold or on account of their professional standing (civil servants and self-employed) (Blümel et al., 2020). This feature of the SHI system is contrary to its core principle of solidarity (W. Quentin, personal communication, March 4, 2022).

5.2.2 Standard benefits package

While the system is financed through income-based contributions, all members and their dependents are entitled to a uniform basket of benefits. The benefit basket defined in the Social Code chapter V covers preventive care, maternity

and delivery, disease screening, disease treatment, dental care, transport costs for emergency care and additional benefits (Blümel et al., 2020).

5.2.3 Affordability of member contributions and subsidies

The mandatory contributions are income-based and fixed at 14.6% by law since 2011. Sickness funds can also charge a supplementary contribution if their expenditures exceed the allocations received from the central reallocation pool. The mandatory contribution and the supplementary contribution are shared equally between the employer and the employee. Additionally, the government subsidises self-employed artists, journalists and writers (Blümel et al., 2020).

Co-payments, also called user charges have been introduced to raise revenue and prevent moral hazard. Patients incur user charges for prescription pharmaceuticals and inpatient transportation. Specific population groups such as children under 18 years, women requiring maternity care and the poor are exempted from co-payment charges. There is also an upper cap on members' expenditure incurred on user charges at 2% of their annual income (Blümel et al., 2020).

5.3 Selecting participating plans

Managed competition in a company allows the employer (sponsor) considerable power to choose the universe of plans which the subscribers can then choose from. Additionally, the sponsor closely monitors the performance of such plans to ascertain whether they can continue to access the subscribers. On the other hand, the sponsor (regulator or public body) in social health insurance systems sets quality standards, and coverage mandates and provides information to members to inform their choices.

5.3.1 Mandate to accept all applicants

The 1993 Health Care Structure Act instituted free choice of sickness funds to members who were previously assigned to occupation-based funds (Busse et al., 2017). Consequently, sickness funds cannot reject applicants but engage in other mechanisms of selection against high risks (Wasem et al., 2018). These are explored in detail under risk adjustment schemes (section 7.5).

5.3.2 Setting quality standards

The GBA defines the basic benefits package and the technological innovations to be adopted in the same. It is also responsible for quality assurance and monitoring. The GBA is supported by two independent scientific bodies called the Institute

for Quality and Efficiency in Health Care (IQWiG) and the Institute for Quality Assurance and Transparency in Healthcare (IQTIG) (Gemeinsamer Bundesausschuss, 2022a). The IQWiG undertakes a scientific review of the current state of medical knowledge and provides evidence-based recommendations to the GBA for quality improvements (IQWiG, n.d.). The IQTIG develops the risk adjustment indicators, publishes quality assurance measures and publishes healthcare quality of inpatient and outpatient procedures (IQTIG, 2022). Depending on the performance of risk adjusters, the risk adjustment models are regularly revised and updated. While there are many avenues for the monitoring and reporting of quality of care[10], the rewarding of quality is limited to the selective contract-based programs that employ pay-for-performance to pay providers (Pross et al., 2017).

5.3.3 Performance information provided to members

The sponsor is also instrumental in providing regular performance-related information to members so they can make judicious choices. While providers are legally mandated to undertake and report quality checks, the White List (Weisse Liste)[11] curates this information in an easily understandable format for the members to assess the providers they should seek. They assess the quality of providers (hospitals and medical centres) based on the resourcefulness of the hospital/medical centre, the customer experience (in terms of cost, friendly atmosphere, data protection, distance from the provider) and the chances of receiving good treatment (patient's opinions on the quality of care) (Weisse Liste, n.d.-b). Their portal enables the search for hospitals in states or throughout the country based on the treatment being sought. Search results show the experience of patients, treatment quality and fitness level by scoring them as below average, average and above average, which can be compared across the providers listed (Weisse Liste, n.d.-a). Many sickness funds also independently publish hospital quality data (Pross et al., 2017). There is a lack of availability or dissemination of insurers' performance data.

[10]Provider quality can be measured through one or a combination of multiple variables such as structural, process, outcome and risk adjusted outcome variables (Pross et al., 2017). Hence, these variables are used to measure quality both in input (structural or process variables) and output (outcome variables).

[11]Weisse Liste is an independent body which publishes information on provider quality in the interest of the consumers. It is a joint project by the Bertelsmann Foundation, a not-for-profit, and the largest patient and consumer organisations (Weisse Liste, n.d.-c). It is supported by the Federation of German Consumer Organisations (Verbraucherzentrale Bundesverband or vzbz) (Weisse Liste, n.d.-c)

5.4 Managing the enrolment process

Enthoven envisioned the sponsor's active management of the enrolment process as the safeguard against risk selection. Hence, the sponsor ensures the acceptance of all members and provides them with the option to switch plans periodically.

5.4.1 Universal acceptance of members

The system does not allow risk rating by insurers and prohibits the rejection of any member who wishes to enrol with a sickness fund. Additionally, the risk adjustment scheme compensates plans for enrolling high-risk members to make such members equally attractive consumers despite their predictably higher cost to the insurer (Blümel et al., 2020). However, studies have reported the use of ex-ante mechanisms of risk selection which indirectly select against bad risks through targeted marketing, misleading consumers and longer waiting times for high-risk members (Wasem et al., 2018).

5.4.2 Switching rates

The members have the option of switching their sickness fund every 18 months with two months' notice (Blümel et al., 2020). Members can switch funds earlier than this minimum waiting period if the sickness fund raises its additional contribution rate (Wasem et al., 2018). The system has seen relatively higher switching rates which gradually increased from 6% immediately following the reform (allowing switching) to 25% eight years after the reform (Pilny et al., 2017). Currently, switching rates remain low at around 5% (Wasem et al., 2018).

5.5 Creating price elastic demand

In his conception of managed competition, Enthoven underlines the importance of creating price elastic demand. He clarifies that the term "price competition" in practice alludes to "value-for-money competition" since consumers' choices are also influenced by quality and product features in addition to price (Enthoven, 1993). Hence, the sponsor attempts to create price elastic demand so insurers compete on price and quality to retain and gain more subscribers. Mandating a basic benefits package, providing individual choice of plans, giving information to consumers, disincentivising risk selection and limiting sponsor contributions to the premium are some ways of achieving the same (Enthoven, 1993). Many of these factors are associated with ensuring equity and management of the enrolment process. Since members do not pay differentiated premiums to sickness funds, the sponsor contributions to the same are not observed in social health insurance systems (Nambiar, 2021). Disincentives to risk selection are instituted through the

risk adjustment mechanism detailed in the next section. However, supplementary contributions by members directly to the sickness funds form the primary basis of competition in the system since they can differ among funds (W. Quentin, personal communication, March 4, 2022).

5.6 Managing risk selection

Apart from the mandate to accept all applicants, the sponsor institutes risk adjustment schemes to prevent indirect risk selection.

5.6.1 Risk Adjustment Scheme

In the German SHI system, the Morbi-RSA scheme compensates sickness funds for the high-risk patients they serve. The scheme has evolved through a series of reforms that increased its scope from addressing risk factors of age and sex to one based on 80 diseases in 2009.[12] The accuracy of the risk adjustment scheme can be inferred from the ratio of the compensation amounts provided for certain groups relative to the spending incurred for such groups. The scheme has expanded its ambit to include a wide range of diagnoses. However, it can also create perverse incentives for providers to overcode patients' conditions for additional reimbursement through risk adjustment (W. Quentin, personal communication, March 4, 2022). Additionally, the switching rates and the characteristics of the switchers indicate the possible presence/absence of risk selection.

5.6.2 Imperfect Risk Adjustment

Despite improvement in the distribution of funds, first experiences with the model reported deficiencies in the methodology leading to under-compensation of the sick and over-compensation of the young and healthy (Buchner et al., 2013). The differences in compensation were also observed regionally. A study of the performance of the risk adjustment scheme in Germany found that insurers are underpaid by more than €87,000 for one in a thousand people and overpaid by at least €28,000 for one in a thousand members (McGuire et al., 2021). The weak risk adjustment scheme creates the unintended incentive for insurers to select against consumers belonging to the undercompensated groups and attract those from the overcompensated group. This is because they will receive greater compensation from the risk adjustment fund for bearing the risks of the latter. McGuire et al. (2021) find that members tend to stay in these undercompensated and overcom-

[12]The 80 diseases were selected based on their severity or chronic nature and entailing costly treatments (Buchner et al., 2013)

pensated groups, allowing insurers to predict which members would be unprofitable for them. This information empowers insurers to engage in risk selection.

5.6.3 Switching Rates

The extent of switching in the system is an indicator of the level of competition in the market. Moreover, the composition of the switching population can also demonstrate whether the risk adjustment mechanism accurately compensates insurers for the high-risk groups. If insurers are undercompensated for certain high-risk groups, they are unlikely to compete for their membership and can also engage in risk selection. As a result, those belonging to high-risk groups would tend to stay with their current plan. In Germany, switching behaviour is observed more in the young, white-collar workers and healthier members (Pilny et al., 2017).

5.6.4 Reinsurance

Reinsurance is a form of risk sharing which compensates insurers if their expenditure exceeds a certain threshold. While reinsurance was introduced in 2002 to complement the risk adjustment scheme, it was abandoned in 2009 with the introduction of the Morbi-RSA scheme. Under the previous reinsurance component, sickness funds were reimbursed 60% of their spending if it exceeded a certain threshold (€20,450 p.a. in 2000) through a high-expenditure pool ((Buchner et al., 2013). There has been a recent proposal to reintroduce the reinsurance scheme to reimburse funds at 80 per cent if spending exceeds the threshold of €100,000 (McGuire et al., 2020). Providing reinsurance can dilute the incentives for cost control but can reduce the variation in healthcare costs not accounted for by risk adjustment.

6 Limitations and Challenges

The adoption and implementation of managed competition were aimed at reducing costs in the system, increasing equitable access and spurring competition in the system. In this section, we assess whether the reforms have been able to achieve the stated objectives and the limitations they have faced in the same.

6.1 High Health Expenditure

All reforms corresponding to managed competition principles were introduced in the SHI system to address the cost escalation in the system. Among other European countries, Germany had the second-highest total health expenditure as a share of GDP in 2018 (Blümel et al., 2020). Statutory health insurance contributed 57% of the total funding in the German health system in 2019 (Statistisches Bundesamt, 2021). The total health expenditure from government sources and compulsory insurance as a percentage of its GDP is higher than that of other European countries that have adopted managed competition in their social health insurance systems (Nambiar, 2021).

6.2 Equity Related Concerns

The German SHI system like many other social health insurance schemes relies on risk adjustment to disincentive risk selection and ensure coverage to all, irrespective of their health risk or contribution level. However, achieving equity in the system through managed competition has been a challenge. Studies have reported deficiencies in even well-developed risk adjustment schemes and the incentives they can leave unaddressed.

Additionally, a peculiar feature of the German SHI system is the option to opt out of SHI and opt for PHI if members' income crosses the set threshold or they belong to certain occupation categories (civil servants and self-employed). Unlike SHI, private insurance conducts risk rating wherein mandatory health questionnaires are collected from applicants. Subsequently, members may be asked to pay higher premiums or be denied enrolment due to pre-existing diseases (Panthöfer, 2016). The two-tiered system has in effect divided the German population into the rich and healthy for the PHI and the rest covered by SHI. Studies have documented the phenomenon of significantly lower waiting times and more consultation time for the PHI-insured compared to SHI members (Schmid & Doetter, 2020).

6.3 Limited Competition

Providing information to members on the performance of insurers on price, beneficiary satisfaction and outcome indicators can facilitate consumer choice and inform switching behaviour. As a result, insurers would compete to retain and gain members by performing better on these metrics. The extent of switching behaviour is hence an indicator of the level of competition in the market. In the larger SHI system, performance information is limited to self-reporting by providers on quality. Moreover, providers are rewarded for improvement in performance only in the managed care programs that employ a pay-for-performance mechanism for provider payments. The government does not provide information on the performance of insurers to members. The low switching rates and the low-risk profile of the switching population are concerning and could be a result of the lack of information and the inaccurate compensation through the risk adjustment scheme.

Moreover, the absence of selective contracting as the dominant form of payer-provider relationship acts as a drawback in the system. Providers do not compete with one another for contracts with insurers and are assured of payments from the sickness funds since SHI members, regardless of the sickness fund they belong to, have free access to all providers. Recently some limited competition has been introduced in the provider landscape by allowing hospitals to offer ambulatory care and specialist physicians to conduct outpatient surgeries (Kifmann, 2017). While the option for selective contracting exists, these programs are limited and have been declining since the removal of start-up funding by the government.

7 Conclusion

The trajectory of the SHI system and the partial adoption of managed competition highlights the conflict between the social and political structures in Germany and the economic consideration of high healthcare costs in the system. The collective contracts between insurers and providers at the national level continue to define the range of benefits provided and the rates of provider reimbursement. Selective contracting has been introduced through regulation in the system but remains limited to certain programs. While these are minuscule programs in the larger corporatist SHI system, they address many of the core challenges associated with high costs such as the fragmented structure of the provider landscape.

Despite the limited presence of managed care, principles of managed competition have been applied in the SHI through the provision of a basic benefits package, mandatory enrolment, and the risk adjustment scheme. The prominent challenges are associated with the persistence of high costs, risk selection and low switching behaviour. Moreover, the interaction of SHI with the PHI system generates equity-related considerations by segmenting the population based on income and health profiles. Hence, the incrementalist approach adopted by Germany in its SHI model depicts a system striving to achieve a balance between its long-standing self-governance nature and the real consideration of high costs.

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