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Designing Health Systems Based on Managed Competition

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Summary:

Managed competition is a theoretical concept for designing and regulating health insurance systems. Such systems can secure consumers' interests by managing diverging incentives, instituting uniform regulations, equipping consumers to make informed choices, and creating a competitive environment tailored to rewarding those organisations that improve services to consumers. In this paper, we draw lessons from the Netherlands, Israel, Germany, and Colombia that can inform policymakers considering health system reform for universal health coverage. Country experiences with managed competition in their health systems yield crucial lessons for adopting the concept in India beginning with experimentation in sub-systems that seek to cover the entire target population and ensure the provision of quality healthcare.

About Social Protection Initiative:

The Social Protection Initiative at Dvara Research is a policy initiative that aims to conduct research that will inform the design and implementation of a universal social security system. We believe a universal social security system is one that protects households and individuals against the vulnerabilities faced across the life cycle. At the same time, it is important to keep in mind India's unique demographic and economic realities. These vulnerabilities are the outcomes of complex interactions of being exposed to a threat, of a threat materializing, and of lacking the defences or resources to deal with a threat.

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1. Introduction

The healthcare system in India is heavily fragmented. Multiple subsystems characterise the delivery and financing of healthcare for different population groups (NITI Aayog, 2019). Despite multiple interventions, India is far from achieving the goal of universal health coverage for its population. Currently, only 41% of the population has some form of health insurance (International Institute for Population Sciences, 2021). Consumers heavily rely on out-of-pocket (OOP) payments at the point of care, evidenced by the high share of OOP at 53% of the current healthcare expenditure (National Health Systems Resource Centre, 2022). There is a clear need for increased pooling and prepayment for healthcare through insurance products designed to deliver both financial protection and good healthcare. The current offerings of voluntary health insurance in India take an indemnity route, requiring users to negotiate aspects of healthcare and financing separately, with providers and insurers respectively. The asymmetry in the information they hold puts users at a disadvantage in this ecosystem, making it difficult for them to make choices that would optimise outcomes. This results in a situation where they ultimately receive neither appropriate care nor sufficient financial protection for the care sought. For health insurance products to deliver better outcomes on both fronts, financial protection and healthcare, we argue that health insurance should shift away from indemnity models in favour of more complete managed care offerings that integrate healthcare and financing. In addition to offering a choice between more comprehensive products, such a shift to managed care models would also require insurers to coordinate care for policyholders and provide incentives to healthcare providers to prioritise the quality of care and efficiency of operation. In such a system of managed care entities, we need active and intelligent regulation to account for the information asymmetry inherent in healthcare, diverging interests of stakeholders and the consequent customer protection concerns that arise. Managed competition is one such strategy for regulating health insurers and providers, more specifically as part of managed care entities, to protect consumer interests.

Health economist Alain C. Enthoven conceptualised managed competition in the background of rising healthcare costs and poor health outcomes, which were consequences of the traditional health insurance system in the United States in the 1970s and '80s called the "guild free choice" model. The model was characterised by free choice of doctors, fee-for-service payments, direct negotiation of prices between consumers and providers, and passive reimbursement of treatment costs by health insurance companies (Enthoven, 1988). The information asymmetry inherent in the doctor-patient relationship enabled healthcare providers to unilaterally decide the quantum of healthcare treatment procedures and the rate of compensation for the same. Gradually, a new model of healthcare financing and delivery emerged called the managed care model offered by multispecialty group practices. Managed care plans included an annual prepayment cost



and offered limited groups of providers for consumers to choose from. In managed care organisations (MCOs), the insurers would contract providers into a network to provide care to their policyholders, a process called selective contracting (van den Broek-Altenburg & Atherly, 2020). The degree of integration in such models varied depending on the nature of contracts with providers, which could be entirely exclusive (in Health Maintenance Organisations or HMOs) or non-exclusive with penalties for accessing care outside the network (in Preferred Provider Insurance plans or PPIs) (Ashraf, 2021). Nevertheless, selective contracting with providers increased the insurer's say in the coordination of care across the spectrum and in the mode and pricing of provider compensation.

While MCOs addressed many of the flaws of the traditional FFS system, such integrated entities could still produce undesirable outcomes. Regardless of the model of insurance, insurers can enrol good health risks over bad ones (risk selection), product-differentiate to escape competition, discontinue coverage when the insured individual develops a health condition, and impose entry barriers to other players in the market (Enthoven, 1998). These profit-motivated behaviours are detrimental to consumer interests. Enthoven emphasised the need to actively "manage" the health insurance market or system to counter such tendencies. He proposed managed competition as a purchasing strategy that leverages the mechanism of price competition to ensure efficiency and quality in the healthcare system (Enthoven, 1993). Central to the model is a sponsor, who purchases health insurance from various plans on behalf of a group of people and then allows individuals to choose their preferred plan. Enthoven clarifies that when he uses the phrase "price competition", he is not merely talking about price but also includes quality and product features as factors influencing consumer choice. He, therefore, prefers to use the phrase "value-for-money" competition (Enthoven, 1993). The sponsor "manages" the market of competing MCOs by performing the following broad functions:

Establishing rules of equity: The sponsor sets certain rules in the system to ensure universal coverage by disallowing any exclusions. That is, Enthoven privileges the principle of equity by which he means that the sponsor should set rules to ensure equal access or equal opportunity. The rules mandate that every eligible person is covered and cannot be denied coverage due to any pre-existing diseases (risk selection) or the development of a disease condition while being covered (discontinuity of coverage). Insurers have to offer a basic product at an affordable rate, and consumers will be charged a community-rated premium, i.e., a standard premium for all individuals in a geographic location regardless of age, sex, or disease profile.



Selecting participating plans: The sponsor selects insurers/health plans that subscribers can then choose from. The degree of freedom in selecting plans to participate in the market depends on the nature of the sponsor and the market. A private sponsor such as a company may filter plans with more stringent criteria than a public sponsor such as a national body that regulates plans for a large population. As the scale of the market increases, the sponsor's knowledge of the insured population, their healthcare risks, and their experiences with plans becomes aggregated. Hence, sponsors that are national government bodies would introduce certification and quality requirements to determine the eligibility of plans to participate in the system. Whereas a company that has visibility over employee experiences may introduce more carefully specified criteria, closely monitor plans, and drop them as needed if they consistently perform in a dissatisfactory manner.

Managing enrolment process: The sponsor acts as a single point of entry by communicating consumers' choice of plans to the insurers and providing consumers with the option of switching plans annually. The sponsor also disseminates information to consumers on the benefits offered, the performance and quality of health plans and their network providers to inform their choice of plans.

Creating price elastic demand: Since the objective is not just price competition but value-for-money competition, insurers are induced to reduce prices and improve quality. Firstly, sponsors limit their contributions to the premium such that it does not exceed the price of the lowest-priced plan, thereby providing flexibility to the plan provider (of the lowest-priced plan) to cut prices and compete with other plans in the market. Secondly, the sponsor defines a standardised coverage contract to deter product differentiation by insurers and induce competition on price and quality rather than product features. Finally, they also provide choice of plans at the individual level (as opposed to group-level choice) and disseminate healthcare quality-related information to consumers for informing their choice.

Managing risk selection: Being the single point of entry for insurers, the sponsor can ensure the acceptance of all enrolees. The standardised coverage contract also precludes risk selection since insurers cannot restrict the package to benefits that may attract healthier low-risk members. The sponsor also monitors the enrolment pattern (such as reasons for switching) and the quality of tertiary care offered by plans to discern strategic quality skimping on services utilised by high-risk members. Such quality skimping may be adopted to reduce costs (at the cost of patient care) and induce high-risk high-cost members to switch plans. Finally, the sponsor sets risk-adjusted premiums that compensate insurers for high-risk members, minimising their incentive to select against risks.



Through the performance of these functions, managed competition seeks to fulfil two objectives. These are equity and value-for-money, i.e., improved quality of services and lower costs. Firstly, equal access to healthcare and health risk protection is ensured by mandating universal health coverage in the system. Since insurers can circumvent this mandate through covert selection strategies (discussed later in the paper), the functions of selecting plans and managing the enrolment process equip the sponsor with regular oversight of insurer behaviour to ensure compliance with the rules. The mechanism of risk adjustment (provided by the sponsor to insurers) complements the functions performed by the sponsor. Secondly, the system creates conditions favourable for value-for-money competition between insurers that incentivises reduction of prices and improvement in quality. The sponsor equips consumers with the choice of preferred insurer and the information required to make such choices. These objectives, of equal access to financial protection and good quality care, are closely associated with the universal health coverage aim of many countries. As we detail in the following section, many countries have adopted the principles of managed competition while designing their systems aimed at universal health coverage (UHC) for their populations. In doing so, they faithfully apply many of the functions of managed competition but deviate from or improvise on the rest.

2. Materials and Methods

In this paper, we summarise the experiences of countries that have adopted managed competition to elicit the most salient lessons for policymakers. For this study, we selected four countries – Germany, the Netherlands, Israel, and Colombia. These were purposefully sampled from global literature surrounding managed competition based on three criteria. Firstly, we selected countries whose health systems have been identified in the literature as closely resembling functions of managed competition. Secondly, we attempt to incorporate geographic diversity in our sample. The German and Dutch experiences were both included despite geographic similarity due to their marked differences in health system structure. Finally, we also decided to factor in differences in stages of development, selecting Colombia. Based on these and other practical considerations (time, availability of resources), we narrowed down these four countries.

For this paper, we relied on Google Scholar and PubMed to source peer-reviewed studies, institutional reports, and studies by international organisations. We also sourced information from the websites of the respective health ministries of the four countries to ascertain the current state and functioning of the health system. We searched titles using keywords such as "managed competition", "risk adjustment mechanisms", "managed care", and "health system reform" against each of the selected countries. For journal



publications and reports, we considered articles in English. While occasionally searching for information on government websites of countries, we relied on Google Translate to translate the content into English.

3. Results

The four countries selected have adopted managed competition in different forms by redesigning their health systems to improve outcomes of healthcare quality and efficiency. In the process, they have implemented some or all functions of managed competition in their national health insurance systems. In this section, we describe the precursors of these health system reforms based on managed competition, the different types of managed care arrangements each country has employed, and the forms in which functions of managed competition have been adopted to achieve better outcomes for their populations.

3.1. Adoption of Managed Competition

Health system reforms in the 1990s and 2000s introduced managed competition in Germany, Israel, the Netherlands, and Colombia. Multiple stakeholders were involved in aiding or delaying the concerned reform, which was prompted mainly by economic considerations such as cost control in the system. All systems instituted such reform through legislations and, in one case, as part of a new Constitution.

The German social health insurance (SHI) system was gradually reformed after the 1990 German reunification to address the rising economic, political, and social concerns at the time (Busse et al., 2017). Healthcare was financed by sickness funds which were long-standing structures similar to insurance companies serving specific occupation groups. The 1993 Health Care Structure Act allowed free choice of sickness funds to members thereby introducing competition in the system (Altenstetter & Busse, 2005). Following the Act, subsequent legislations broadened the scope of the system to ultimately create one that adhered to many of the functions of managed competition.

Israel, like Germany, had a long history of sickness funds that financed healthcare. In this case, funds were more closely involved in the organisation and delivery of care as well. The National Health Insurance Law passed in 1995 brought systemic reform and created a health system financed by health taxes, managed by sickness funds, and regulated by the Health Ministry (Rosen et al., 2015). The law providing universal health coverage was proposed and opposed over decades. However, the law finally passed only with the recommendation of the reputed Netanyahu Commission, rising financial troubles in the



health system, and persistent public dissatisfaction over the state of healthcare, creating a National Health Insurance (NHI) system that adopted most functions of managed competition (Cohen, 2012).

The adoption of managed competition in the Colombian healthcare system was one of many broad sweeping reforms guided by the new Constitution adopted in 1991. The reform aimed to introduce universal health coverage through a two-pronged health system with two regimes providing insurance to both formal (contributory regime) and informal (subsidised regime) populations (Hsiao & Shaw, 2007). Supply-side budgets to hospitals were discarded for demand-side subsidies through insurers or purchasing entities called *Entidadas Promotoras de Salud* or EPSs.

Managed competition was formally adopted in the Netherlands in 2006 through the Health Insurance Act which was preceded by decades of gradual changes to health financing in the country. Historically, the role of the government in financing healthcare had been minimal (Bertens & Vonk, 2020). This changed in the 1970s and '80s when the government imposed stringent supply-side regulations in the face of rising costs. The regulations curbed free prices or fee-for-service payments to providers and introduced regulated prices and volumes. However, these regulations were gradually recognised as being too complex, creating fragmentation in healthcare financing, and lacking proper incentives for consumers, providers and insurers (van Kleef, 2018). In 1987, dissatisfied with these supply-side cost controls, the Dekker committee report proposed universal health insurance based on the principles of regulated competition. The measures detailed in the Dekker committee report were gradually implemented, eventually leading to the National Health Insurance Act of 2006.

3.2. Managed Care Arrangements

Enthoven states that managed competition occurs "at the level of integrated financing and delivery plans" (Enthoven, 1993), also known as managed care levels. It is, therefore, helpful to understand whether and how these systems adopted managed care functions, including integration of insurance and provision, care coordination and gatekeeping, and incentive alignment (Sekhri, 2000).

All four systems have some form of integration between insurance and provision. In Israel, for instance, the four sickness funds in operation integrate financing and healthcare provision for their members, with the degree of integration varying across funds. *Clalit*, the leading sickness fund in operation, has complete vertical integration and the remaining funds rely on exclusive contracts with providers (Rosen, 2011). In the Netherlands, integration between insurers and providers takes the form of non-exclusive



contracts in which providers can contract with multiple insurers (Shmueli et al., 2015). In the German SHI system, efforts at greater integration were seen after selective contracting was introduced under the Statutory Health Insurance Reform Act of 2000. The reform actively encouraged the emergence of selective contracts between insurers and providers through additional programs (Amelung et al., 2012). In Colombia, the purchasing entities are free to contract with and create provider networks (Vargas et al., 2013).

Another element of such integrated managed care structures is gatekeeping and providing care at the appropriate level. The Netherlands has a very active gatekeeping system. Nearly 93% of all patient contact is handled at the primary care level, and only 7% of consults result in a referral to further care (Wammes et al., 2020). Similarly, EPSs in the Colombian health system also employ gatekeeping at the primary care level (Vargas et al., 2013). In Germany, gatekeeping was introduced into the system through more recent programmes, such as the General Physician-centred contracts and Disease Management Programs. In Israel, however, gatekeeping is only applied by one health fund, i.e., *Clalit* (Rosen, 2011).

Another key element critical to managed care is incentive alignment between providers and insurers, usually introduced through contract features like the provider reimbursement method. Selective contracts in Germany, originally introduced in 2000 and later consolidated in 2015, allow for adopting different payment mechanisms, including capitation² and pay-for-performance (P4P) payment³ methods, for paying providers (Milstein et al., 2016). These essentially transfer some risk from insurers to providers, holding the latter more accountable for performance. In Israel, incentive alignment is achieved through ownership of providers (as in the case of Clalit) and a combination of procedure-related-group (PRG) payments⁴ to network hospitals and capitated payments to physicians (Rosen & Waitzberg, 2018). Colombia has also seen the adoption of capitated payments to pay providers, especially for primary care, whereas FFS payments continue to be used for speciality care (Carranza et al., 2015). In the Netherlands, while insurers are free to decide the provider payment design, there has been a reluctance to apply innovative payment models such as P4P for hospitals primarily due to a lack of sufficient information regarding the quality of outcomes. Greater innovation of payments is seen at the primary care level where a mix of payments (capitation, FFS and bundled payment) is used to incentivise providers (Schut & Varkevisser, 2017).

² 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)

³ Pay-for-performance payment method links provider compensation to performance indicators and benchmarks.

⁴ Procedure-related-group payments are fixed rates of compensation for the procedures performed during treatment.



Essentially, all four systems have some form of managed care. In the subsequent sections, we describe the functions of managed competition as observed in national-level systems and their functional significance for the objectives of equity and value-for-money competition.

3.3. Functions Ensuring Equity and Value-for-Money Competition

These countries mandate universal health coverage through healthcare regulations or laws that disallow insurers from explicit denial of coverage to high-risk and high-cost patients. The functions of selecting participating plans in the system and managing the enrolment process can allow close monitoring of insurers to ensure compliance with the rules of equitable coverage. However, in such national-level systems, the sponsor or regulator refrains from such active regulation and instead relies on accreditation processes to certify insurers and grievance redress mechanisms to capture complaints regarding denial of coverage. The other functions of managed competition are implemented by setting universal coverage mandates, standard packages, income-based or community-rated contributions, risk adjustment mechanisms, the option to switch plans and information dissemination to support consumer choices. We look at these functions in this section, summarised in Table 1.

3.3.1. Standard and expansive benefit packages

All the health systems have clearly defined benefit packages which cover most basic healthcare services. The standard package counters product differentiation by insurers. Some countries have more comprehensive packages that cover care beyond primary care, inpatient treatment, and pharmaceuticals (see Table 1). The benefits covered under the package are regularly updated based on stakeholder discussions.

3.3.2. Source of financing

The main source of financing for all systems under consideration is mandatory contributions from the population, which are determined in different ways. Mostly, the contributions are linked to income levels which enables cross-subsidisation since higher-income individuals pay a higher premium than individuals with lower income. In Germany, income-based contributions are fixed at a particular rate (Bauhoff et al., 2018). Colombia also has fixed income-based contributions for funding the formal Contributory regime (Blümel et al., 2020) and 1% of these contributions are transferred to the enrolees of the informal Subsidised regime (Hsiao & Shaw, 2007). The Israeli system sets contribution rates for different income brackets instead of a fixed rate (Rosen et al., 2015). The Dutch system seeks two contributions from its citizens. In addition to an income-linked



contribution, it also levies a community-rated premium (Bauhoff et al., 2018). Insurers are free to set the community-rated premium which must be a standard offering to anyone who wishes to enrol with the insurer, regardless of their age, sex, or disease profile. To illustrate, an old-aged individual suffering from a chronic disease would be charged the same premium amount as a young healthy individual. Hence, the Dutch system ensures cross-subsidisation not only from the rich to the poor through income-based contributions (as in the other systems) but also from the healthy to the sick through community-rated premiums.

An additional form of payment secured from consumers is user charges or cost-sharing arrangements primarily employed to counter moral hazard. All systems cap these expenses for the consumer and exempt certain categories of patients from incurring these additional charges.

3.3.3. Information provision for choice of plans

A managed competition system depends, in theory, on the public availability of quality data to support user choice of insurer and provider and spur value-for-money competition. In Germany, providers are legally mandated to undertake and report quality checks. An open-access website curates this information in an easily understandable format for the members to assess providers (Weisse Liste, n.d.). Many sickness funds also independently publish hospital quality data (Pross et al., 2017). In Israel, the Ministry of Health has undertaken efforts to increase the availability of information on health plans' performance on its website and those of other research institutes (Rosen et al., 2015; Rosen & Waitzberg, 2018). In the Netherlands, comparative information on health plans is freely available through various websites endorsed by the government, health insurers, and hospitals and through newspaper and magazine publications. In the Colombian health system, information is collected and published by a public body on the supply and use of health services, quality of care, insurance status, financing, and health promotion (The World Bank and IFC, 2019).

3.3.4. Switching frequency and observed rates

The opportunity for citizens to switch health plans regularly constitutes the primary motivation for insurers to engage in value-for-money competition. The national health systems offer their populations this option at different periods. Members can switch their insurer or sickness fund every 18 months in Germany (Blümel et al., 2020), every 12 months in the Netherlands and Colombia and twice a year at six points in the year in Israel. However, switching rates remain low -6.5% in the Netherlands (Vektis, n.d.), 5% in Germany (Wasem et al., 2018), 1-2% in Israel (Brammli-Greenberg et al., 2018), and 1% in



Colombia (Bauhoff et al., 2018). Consumer mobility may be influenced by certain biases. For instance, the status quo bias which is associated with a preference for staying in the current situation and resisting change may prevent individuals from changing their insurance plan. Consumers may also consider other factors when deciding to switch. These could be transaction costs that include time and effort of switching or learning costs about new rules. Consumers may also be apprehensive due to the benefit lost with the previous insurer, the change in their preferred provider, the perception of sunk cost and the uncertainty around the new plan (Duijmelinck et al., 2015).

3.3.5. Risk adjustment mechanisms

All health systems studied here have some form of risk adjustment mechanism in place to minimise risk selection. The risk adjustment mechanisms counter implicit risk selection activities by trying to match insurer costs for high-risk members with additional compensation. The Dutch health system has one of the world's most sophisticated risk adjustment mechanisms with four risk equalisation models. The model has been constantly evolving and currently adjusts for age, gender, pharmacy-based cost groups (PCGs), diagnoses-based cost groups (DCGs), source of income, socioeconomic status and region, among others (Brammli-Greenberg et al., 2018; van Kleef et al., 2018). Risk adjustment mechanisms in the other health systems considered here account for lesser number of factors. This increases the likelihood of risk selection against groups whose health risks are unaccounted for in the compensation to insurers. For instance, the German system adjusts only for age, gender, and certain diseases (Bauhoff et al., 2018; Blümel et al., 2020). The Colombian health system, apart from age, gender, and disease categories, also compensates based on geographical region and allocates higher payments to remote regions and cities (Bauhoff et al., 2018). The Israeli risk adjustment scheme is relatively the least sophisticated as it relies only on age, sex and geographical location and disregards disease profiles (Rosen & Waitzberg, 2018).



Table 1: Health System Features of Managed Competition Systems

Preventive care, maternity care, disease screening	Primary care, hospital care,	Primary care,	Primary to tertiary
maternity care, disease screening	•	Primary care,	Primary to tertiary
& treatment, dental care, and emergency transport costs.	medicines, diagnosis, dental care for children and mental health.	maternity care, hospital care, home nursing care, pharmaceutical care, and mental healthcare.	care, diagnosis, prescription drugs, and mental health. Dental, palliative, home care, and indigenous medicines covered
			with exclusions.
Employer- employee contributions levied at a flat rate on income.	Health tax levied at two rates with a cap on taxable income.	Community-rated premiums set by insurers. Additional incomedependent premium paid by employers for employees.	Employer-employee contribution for contributory regime (CR). 1% of CR contributions directed to the subsidised regime (SR).
Independent bodies publish information on provider quality.	Health Ministry- run website displays health rights & benefits package across plans.	Various websites release information on plans available.	Performance indicators on quality of providers are released.
Every 12 months.	Up to twice a year at six points of time.	Once a year.	After one year for both regimes (CR & SR).
has been around 5%.	has been around 1-2% annually.	been around 6-7%.	Switching rate has been at 1%.
For age, sex, and 80 diseases.	For age, sex and geographical location.	For age, sex, pharmacy-based cost groups, diagnoses-based cost groups, sources of income, socioeconomic	For age, sex, and geographical location and some diseases.
	emergency transport costs. Employer- employee contributions levied at a flat rate on income. Independent bodies publish information on provider quality. Every 12 months. Switching rate has been around 5%. For age, sex, and	emergency transport costs. Employer- employee contributions levied at a flat rate on income. Independent bodies publish information on provider quality. Every 12 months. Every 12 months. Every 12 months. Switching rate has been around 5%. Switching rate has been around 5%. For age, sex, and 80 diseases. Health tax levied at two rates with a cap on taxable income. Health Ministry- run website displays health rights & benefits package across plans. Up to twice a year at six points of time. Switching rate has been around 1-2% annually. For age, sex, and geographical	emergency transport costs. Employer-employee at two rates with a cap on taxable income. Independent bedies publish information on provider quality. Every 12 months. Every 12 months. Every 12 months. Switching rate has been around 5%. Switching rate has been around 5%. For age, sex, and 80 diseases. Every 6 displays health rights & benefits package across plans. For age, sex, and geographical location. For age, sex, general six points of time. and mental healthcare. Community-rated premiums set by insurers. Additional incomedependent premium paid by employers for employees. Various websites release information on plans available. Once a year. Switching rate has been around 5%. For age, sex and geographical location. For age, sex, general pharmacy-based cost groups, diagnoses-based cost groups, sources of income,



4. Discussion

A comparative study of these managed competition-based health systems yields insights regarding certain limitations that arise in practice and what may be needed to make managed competition work in a health system.

4.1. Imperfect risk adjustment and switching

We have seen how different health systems have different levels of sophistication in their risk adjustment mechanisms. Less sophisticated risk adjustment mechanisms may produce inaccurate calculations of adjustment amounts. Where high-risk groups are undercompensated, i.e., adjustment is below their expected costs, insurers would be inadequately motivated to compete for their membership. An indicator of such deficiency in the adjustment mechanism is the concentration of switching behaviour among low-risk individuals. In Germany, switching behaviour is observed more among the young, white-collar workers and healthier members (Pilny et al., 2017). In the Israeli system, higher switching rates have been observed in Arab and orthodox Jewish localities (8% and 6%, respectively) compared to the national average of 2% in 2015 (Brammli-Greenberg et al., 2018). These localities usually have large families who are attractive consumers due to the system's generous rate of risk adjustment for children. In the Netherlands, most switchers in 2020 were from the central part of the country, which has a higher number of insurers as well as hospital networks (VWS, n.d.). Switching rates in the Netherlands also decrease with age and poor health status (Duijmelinck et al., 2015; Duijmelinck & Ven, 2016).

4.2. <u>Insufficient information provision</u>

All countries provide performance-related information to consumers to inform their switching choices. However, this information can either be lacking or too complex for consumers when available. In Germany, there is a lack of availability or dissemination of insurers' performance data. In Colombia, performance indicators are disclosed in an untimely manner and are not tailored to the needs of the enrolees (The World Bank and IFC, 2019). In the Netherlands, comparative information on health plans is freely available. However, such information is often incomplete and sometimes biased by commercial interests (Douven et al., 2017, p. 20). Moreover, current quality indicators on provider information are limited to the structure and process of care and do not include the outcomes of care (Sekhri, 2000). In Israel's case, public information on the performance of players is still nascent (Shmueli et al., 2015).



4.3. <u>Equity-related concerns</u>

The switching trends discussed in section 4.1 indicate the possible persistence of risk selection despite robust risk adjustment mechanisms suggesting a deficiency in the system's quest for equitable coverage. Additionally, some health systems have design features that lend themselves to inequitable outcomes. For instance, the German social health insurance (SHI) system has a peculiar feature wherein members can opt out of the universal social security system and opt for private health insurance (PHI) if their income crosses the set threshold, or they belong to specific occupation categories (civil servants and unemployed). Since private insurance employs risk rating, high-risk individuals are directed towards the social insurance system. Studies have documented significantly lower waiting times and more consultation time for the PHI-insured compared to SHI members (Schmid & Doetter, 2020). A similar trend is noted in Israel, where the rise of private insurance resulted from a lack of public funding for the social insurance system and a subsequent drop in the quantity and quality of healthcare services. The Netherlands also has been experiencing a case of increasing private health insurance with risk selection in the case of supplementary packages (Kroneman et al., 2016). Differences in access to healthcare can further exacerbate equity-related concerns.

4.4. Limited cost control

Cost control is often one of the stated goals for transitioning to managed competition models in health systems that make the shift. However, evidence suggests that market mechanisms of managed competition have had a limited impact on controlling costs. In the health systems studied, health expenditure accounts for 7 to 12% of GDP, among some of the highest across OECD countries (The World Bank Group, 2022). These health systems have instead had to rely on supply-side measures to impose control over costs. For instance, the Netherlands had removed supply-side controls with the adoption of the managed competition system. However, the introduction of competition in the system had little impact on overall costs. Within six years of implementing the reforms, policymakers had to reintroduce some supply-side cost control mechanisms, an example of which is consensus-based agreements on prices between representatives of insurers and providers (Schäfer et al., 2010; Stolper et al., 2019). In Israel, the Ministry of Health capped payments to providers and set price lists for pharmaceuticals to control costs (Rosen et al., 2009).



5. Conclusion

Systems that have implemented managed competition have done so in varied forms. There are certain commonalities in the form of adoption across the health systems considered in this paper. The sponsor in national health insurance systems, usually a public body or the health ministry itself, is primarily tasked with enforcing legislation defining the system's contours. Aspects such as directly selecting plans and monitoring insurers are substituted by other mechanisms such as accreditation mechanisms and grievance redress processes. All systems employ common functions such as standard benefits packages, risk adjustment mechanisms, and the option to switch plans regularly.

Certain factors are essential enablers for the achievement of managed competition objectives. Countering risk selection requires risk adjustment mechanisms based on exhaustive risk adjusters and their periodic revision. Notably, the system requires consumers to be able to choose to create value-for-money competition between insurers. Accordingly, good quality information on insurer and provider performance needs to be provided to consumers in simple formats and regularly updated on public websites.

We acknowledge that the concept's application may be met with hurdles in implementation. However, the concept has worked sufficiently well in other countries in enabling the realisation of UHC and merits experimentation in the Indian context. The pan-India formal sector scheme providing social health insurance - Employees' State Insurance Scheme (ESIS) offers one such avenue. Managed competition is one of many possible pathways to reform the ESIS system to deliver better outcomes (Prasad & Ghosh, 2020). Additionally, many state governments have introduced schemes to provide universal health coverage to their residents. While most are run on state finances, a few have been partially funded by citizen contributions. Some examples are the Chiranjeevi scheme in Rajasthan and the Arogya Raksha scheme in Andhra Pradesh. These provide further avenues for testing functions of managed competition to move towards more equitable and efficient ways to attain UHC. Such an effort requires an iterative approach wherein, after implementation, the impact and performance of the system are evaluated, and calibrations are introduced as needed. This approach could also create a demonstration effect for other states that aim to provide UHC to their populations and prompt them to adopt some or all functions of managed competition in their health systems.



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