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Comparative Health Systems

A new framework

Federico Toth

Chapter 1

Seven Financing Models

In this chapter, we shall focus on how financial resources that are destined to the payment of healthcare costs are collected and utilized. To this purpose, we shall present seven different models based on how healthcare services can be financed. For each model discussed in the following sections, it is essential to pay attention to the following dimensions:
(1) who pays and who benefits from the system;
(2) the number and legal status of the insurers;
(3) the methods by which users contribute financially;
(4) the freedom of choice granted to citizens;
(5) the relationships between insurers and providers;
(6) the level of public intervention (i.e., the role played by the State).

1.1 The direct market model

The *direct market* system (which can also be referred to as the *simple* market) differs from other models in that it does not envisage the figure of insurers. The 'healthcare triangle' is therefore left with only two vertices: providers and users.
In this model, providers and users of healthcare services interact with each other directly, without the intermediation of third parties. Providers set the price of their services without restrictions; users are free to select their provider of preference, and each time they avail themselves of a service, they pay the provider directly, out of their own pocket.
In such a system, the role of the State is limited to regulating the providers. Public authorities, for instance, must verify compliance with given quality standards by hospitals and outpatient facilities as well as the possession of adequate qualifications to practice healthcare professions.
The market system - at least in theory - offers some advantages. Firstly, it should grant citizens a broad choice: users have no insurance or contribution obligations and they are free to choose any provider. Under conditions of free competition, providers should not only strive

to organize themselves efficiently, but also to achieve high levels of service quality while offering competitive prices. Secondly, patients pay for only the services they actually use. In this model, there are no incentives to request unnecessary procedures.

One of the major limitations of the simple market lies in the fact that unhealthy individuals end up paying more than those who are healthy since one pays depending on the actual use of healthcare services. Indeed, the risk of illness involves the individual (or the household) and is not shared with others. Patients with fewer economic means may also be unable to afford certain healthcare professionals or treatments because they are too expensive. Therefore, the greatest flaw attributed to the market system is that it is not equitable.

In the direct market system, there is a perfect correspondence between those who pay and those who benefit from healthcare. The individual who avails himself of a healthcare service is required to bear the relative costs. One only pays for the services received. If no healthcare services are used, there are no charges.

1.1.1 Dental care in Italy and in Spain

The direct market system is very widespread. As we shall see in Chapter Two, in almost all countries some healthcare services are purchased under market conditions. It is, however, difficult to find countries that finance healthcare by depending solely on the market model. At least in OECD countries, the simple market usually plays an ancillary role in the overall architecture of the healthcare system, focusing on forms of care that are either excluded or not adequately covered by the prevailing insurance schemes.

Two concrete examples of this are found in the countries of Italy and Spain, where the highest percentage of adult dental care is funded and provided within a market system in which patients can freely choose their dentist from all practicing dentists based on reputation, treatment prices and location, paying out of their own pocket for the dental work and procedures. Those who are not satisfied with the care they have received may contact another professional for future treatments. Of course, it may occur that some citizens give up certain dental treatments or get treated by specific professionals because others are too expensive. The state limits itself to setting quality standards that providers must respect.

1.2 Voluntary health insurance

Falling ill and having to undergo medical treatment has always been an unforeseeable event capable of giving rise to very unpleasant circumstances – also in terms of economic impact (Blomqvist, 2011). But, as with other types of risk, (consider life or theft insurance), one can take out a policy against the financial risks of illness. Hence, in the second financing model, namely voluntary insurance, insurers come into play, in addition to users and providers.

The voluntary insurance model does not envisage the obligation to obtain insurance coverage against health risks. Tax or cash incentives may be provided to those who opt for insurance, whereas penalties may be imposed on those who, despite having the economic means, decide against insurance. In any event, citizens are basically free to choose whether or not to sign up for insurance (OECD, 2004).

Those who decide against health insurance, and those who cannot afford it, fall under the foregoing direct market system: they directly bear the costs of the medical treatments that they have undergone. Conversely, those wishing to take out a health insurance policy can choose from a number of private insurers, who are in competition with each other.

Insurers may be for-profit insurance companies or non-profit institutions (Mossialos and Thomson, 2004). In the former case, the premium will probably be risk-rated, i.e., calculated on the basis of the individual risk of each subscriber (Mossialos and Dixon, 2002; OECD, 2004; Rothgang *et al*., 2005): elderly people, individuals suffering from severe or chronic disease and those with lifestyle risks face higher premiums. Nothing prevents non-profit insurance entities from calculating premiums based on individual risk, but they often prefer community-rated or group-rated insurance premiums. Premiums (or contribution rates) are defined as *group-rated* when they are uniform for all workers belonging to the same company or occupational category. They are *community-rated* when they are the same for all residents within a given geographical area (Mossialos and Dixon, 2002).

Regardless of the methods used for calculating the premium, the insurance model relies on the principle of *risk-pooling* to spread the financial risk among the policy holders (Kutzin, 2001; Hussey and Anderson, 2003). The expenses incurred by those who become ill are also paid with the premiums of insurance holders who stay healthy.

Compared with the simple market system, the insurance model should offer the additional advantage of providing the economic coverage that results from holding a policy so that after paying the premium, the policy holder knows that any incurred medical expenses will be covered by the insurance. In practice, however, insurance reimbursement of all medical expenses actually paid by the policy holder is not a given. It depends on the policy. Individual insurance packages may certainly include various types of restrictions, such as deductibles,

maximum coverage and copayments. Insurance companies may deny coverage for some services and may impose limitations on the choice of providers. Theoretically, the voluntary insurance model allows for 'tailored' policies negotiated between insurer and subscriber depending on the latter's economic means, health condition, risk propensity, age, and lifestyle risks.

Similar to the direct market model, the problem of the poorer segments of the population is also tangible in the voluntary insurance model since those who cannot afford the cost of a private insurance policy are obviously subject to discrimination. Another problem that may arise because of insurance logics, (and that should be discouraged by the direct market), is the typical behaviour that economists refer to as 'moral hazard' (Arrow, 1963; Pauly, 1968; Zweifel and Manning, 2000), as such, the lack of a direct correspondence between the amount of medical services used and the premium paid may lead policy holders to request treatment and procedures that are either unnecessary or that they would do without if they had to pay the full price. It is a bit what happens to many of us when at a buffet or in restaurants with offers for 'all you can eat'. Knowing that we will not pay for every single dish we consume, we are tempted to taste many dishes, with the result that we eat too much.

Regarding healthcare provision, services are usually offered by providers outside the insurance companies, and the role of the insurer is limited to reimbursing the costs. In other cases, insurance companies may negotiate terms with some providers and enter into specific healthcare service agreements. Insurers who apply this strategy maintain a 'preferred providers' network and encourage their subscribers to choose a provider within their network, usually offering a reduction in the insurance costs.

In a voluntary insurance system, the State must regulate and supervise both the providers and the insurance companies in order to prevent the latter from taking opportunistic actions to the detriment of the policy holders. Legislation may also provide for tax or monetary incentives in favour of those who subscribe to an insurance policy, or - conversely - penalties for those who decide against one.

In such a system, ultimately, who pays? Only those who voluntarily enter into an insurance contract for themselves and their household pay. Those who cannot afford it or who decide against it, do not contribute to risk pooling. Who benefits from this system? Only those who hold an insurance policy and their dependents, if coverage is extended to them.

1.2.1 Voluntary insurance in the United States

For a broader insight into the actual functioning of a voluntary health insurance system, we can examine what is available in the United States of America. In the U.S. there are some public schemes against the risk of illness, but these are limited to the minority of the population. The majority of Americans fall within a private health insurance system. As will be argued later, in the US private insurance is financially incentivised, but it is not formally mandatory, at least in most states.

Hence, in the United States there is a plethora of competing private insurers offering different types of healthcare insurance plans. The insurance companies that operate in the American market can be for-profit or non-profit. Insurance premiums vary considerably depending on the services included in the policy, deductibles, the forms of copayment charged to the subscriber and the freedom of choice of healthcare providers. Only few insurance policies leave the subscriber free to choose any specialist or healthcare facility. Most insurance companies have their own network of 'contracted' providers, and policy holders have to bear additional costs if they opt for out-of-network care.

United States residents can enter into a health insurance contract in two ways: through their employer, or directly subscribing to an insurance plan. Employer-based policies are usually less costly and apply the group rating principle. Employers negotiate with the insurance companies and choose the type of insurance policy to offer to their employees. Policies taken out individually are generally more expensive, the subscriber can enjoy greater freedom of choice, and premiums can be calculated based on individual risk (Rice *et al*., 2013). In 2019, 56 per cent of Americans had private employer-based health insurance, while 10.2 per cent had insurance policies that were purchased individually (US Census Bureau, 2020).

There are two reasons why, in the vast majority of cases, private insurance is provided by the employer: one of a fiscal nature and the other of a historical nature. The fiscal reason simply stems from the fact that for companies the contributions paid for employee health insurance are tax-free (Mossialos et al., 2017). For the historical reason, we must instead go back to the Second World War. During wartime, in order to contain inflation, the American government had placed strict controls on wage increases. Not being able to directly increase wages, companies decided to attract workers by offering them various benefits, one of which was, precisely, health insurance, which is a practice that continues today (Blumenthal, 2006).

In the American system, due to the voluntary nature of insurance coverage, there is an inevitable result in that part of the population may not have health insurance, either because they do not want to subscribe to an insurance policy or because they cannot afford the related

costs. In 2019, about 26 million Americans (8 per cent of the population) did not have any type of health insurance (US Census Bureau, 2020).

With the aim of progressively reducing the number of uninsured, Obama's reform, which was approved in 2010, introduced some substantial novelties in the health insurance market (Jacobs and Skocpol, 2010; Jones *et al*., 2014). From 2014, each state was to have set up its own 'health insurance marketplace', that is, a sort of online health insurance stock market that would make it easy for citizens to compare the policies and costs of different insurance companies. For some years now, economic aid is being provided to help medium-low income households pay for an insurance policy. However, for a period of time (later this measure was revoked), those who had a sufficiently high income, but who did not subscribe to a healthcare insurance policy, incurred a fine. A tax penalty was also foreseen for companies with more than 50 employees, which do not offer any insurance coverage to their employees.

It is important to clarify that the presence of financial incentives (or disincentives) aimed at encouraging the purchase of an insurance policy does not indicate that the United States had introduced a mandatory insurance system in that those who do not want an insurance plan, can decide against it. All in all, the American system is still one of voluntary insurance, despite Obama's reform.

1.3 Social health insurance

The basic principle behind the social health insurance (SHI) model is that the government requires certain categories of workers to pay contributions from their salary in order to have coverage for the risk of illness. In this model, the role of the insurer is not played directly by the national government, but by sickness funds, which are quasi-public, non-profit organisations that are subject to strict governmental regulations (Saltman, 2004), and are appointed to collect contributions based on occupational or territorial criteria. Hence, there may be a fund for industry workers, one for state employees, another for the employees of a given region, and so on. The sickness funds undertake to reimburse medical expenses incurred by members and their dependents in exchange for the contributions paid.

The SHI model therefore divides the population into two groups. On one hand, there are those who, as members of certain working groups, must pay mandatory contributions. They cannot choose whether or not to sign up for the health insurance scheme since they are forced to do so. On the other hand, there are those who are not subject to any obligations, who may, if they

wish, take out a voluntary insurance policy or resort to out-of-pocket spending for their healthcare.

The first country to introduce a form of mandatory health insurance was Germany, under Chancellor Bismarck, from the end of the 19th century. For this reason, SHI is also referred to as the Bismarck Model. We can take a look at the German case to gain insight into how this system was conceived, and how it has evolved over time. According to the Bismarckian legislation of 1883, the obligation to make payments to a sickness fund was initially limited to industry workers who had incomes below a given threshold. However, coverage for the risks of illness was soon extended to family members of the workers who were insured. Likewise, the principle was affirmed that sickness funds should cover not only active workers, but also those who had retired, who during their working lives had made regular contributions. In the following decades, even the number of occupational categories subject to the obligation of insurance coverage had also progressively increased, and so this explains why SHI schemes, originally designed to offer protection to certain categories that were considered particularly vulnerable, over time, have come to embrace the majority of the population (Alber, 1982).

The classic SHI model provides for different sickness funds that are not in competition with each another to be operative within the same country; and workers are assigned to a certain fund by law, depending on their occupation.

Let us try to elucidate, at least in principle, the strengths and weaknesses of this financing model. Compared to the previous two models, SHI certainly grants less freedom of choice, but promises to reduce inequalities among subscribers. As far as users' freedom of choice is concerned, SHI systems do not give all citizens the possibility to choose whether or not to get insurance (if they belong to given categories, they are obliged to be insured). Moreover, at least with the classic version of SHI, citizens do not even have freedom to choose a sickness fund to subscribe to. Despite the drawback in terms of lack of freedom of choice on the part of the user, SHI seems to take a few steps towards fairness of treatment. While the voluntary insurance model indeed provides for premiums to be calculated on the basis of individual risk, with SHI, contributions are the same for all subscribers to the same sickness fund. Contributions are usually calculated as a fixed percentage withheld from gross salary and, in most countries, they are shared between employee and employer (Normand and Busse, 2002). However, we should not neglect the fact that some categories are excluded from health insurance coverage and that, lacking a mechanism for compensation among funds, the sickness funds for higher-income professions may offer higher levels of treatment.

We should recall that an essential feature of SHI is that it is a typical occupational system.

Therefore, the obligation to pay health contributions is not prompted by nationality or residency, but rather by one's occupation. By following a rigorously occupational logic, the SHI system inevitably excludes those who do not fall within one of the occupational categories subject to the insurance obligation. SHI systems, therefore, have a considerable limitation; that is, unless they are complemented by some 'targeted' programs, (which we will discuss shortly), they generally do not guarantee coverage for the entire population.

Another feature of SHI - considered to be an essential strength of this model in many countries - is that the insurers are non-profit although they are private companies (Saltman, 2004). The sickness funds are neither for-profit insurance companies (easily accused of achieving maximum profit, even contrary to the interests of the insured), nor are they government agencies (characterized by the inefficiency and rigidity that is typical of public bureaucracies).

As far as the relationship with healthcare providers is concerned, differences from the previous model are not significant in that even in SHI systems, subscribers can freely choose healthcare providers and facilities and, in most cases, healthcare providers are autonomous with respect to the sickness funds.

Therefore, we can state that the SHI system is usually based on a plurality of sickness funds and that subscription to these funds is mandatory for only a part of the population. Who are the payers and who are the beneficiaries? The beneficiaries of the system are all those who pay the relative contributions along with their dependent family members. All the occupational categories that are subject to the obligation to subscribe to a sickness fund must pay for coverage. The State decides what benefits the sickness funds are required to reimburse and which categories have an obligation to pay contributions as well as those which are not. The State must also monitor the correct management of the sickness funds, and in many cases it also determines the amount of contributions that workers must pay to the respective fund.

1.3.1 Social health insurance in Austria

In Austria, there is a rather typical social health insurance system, the origins of which date as far back as 1888. Everyone working in Austria, with the exception of a small group of self-employed workers (Österle, 2013; Bachner et al., 2018), is required to contribute a part of his/her salary to a sickness fund. For most categories, healthcare contributions currently account for 7.65 per cent of income. This rate is established by parliament at the federal level. SHI contributions are capped. Individuals who exceed a given income threshold do not have

to pay contributions for the amount that is above the threshold (Bachner et al., 2018). Contributions are paid in equal shares by the employer and the employees.

Unlike what happens, for example, in Germany, the Austrian SHI system does not allow choice of the sickness fund. Allocation to the fund is made *ex-officio*, depending on residence and occupation. The sickness funds are not in competition. In Austria, there is a total of 18 health insurance funds. They can be territorial, occupational or corporate. These include four occupational funds for farmers, self-employed workers, civil servants, railway workers and miners. Those who do not fall within the foregoing occupational categories are required to subscribe to a territorial sickness fund. There are nine territorial funds, one for each of the Austrian constituent lands. Most of the Austrian population is registered with regional funds. Finally, there are five corporate funds including some large Austrian companies that have their own sickness funds; the employees of these companies do not pay contributions to occupational or territorial funds, but instead, they contribute to the company fund.

Sickness funds are self-governing bodies, which are financed mainly through mandatory contributions by subscribers. Through tax revenue the State also contributes to the financing of healthcare, especially as far as hospital care is concerned (Gönenç *et al.*, 2011).

All subscribers to sickness funds are entitled to a number of benefits, either in kind or in cash. The service package guaranteed by SHI is generous and includes: hospital care, outpatient primary and specialist care, physiotherapy, medication, home care and preventive care. Upon the provision of services, users are often requested to share in the expenses. Subscribing to a sickness fund benefits not only the workers who pay contributions, but also their dependents. Pensioners are also required to contribute a part of their pension to a sickness fund. Some categories at risk (including low-income citizens, recipients of unemployment benefits and asylum-seekers) are covered under statutory health insurance with contributions being paid either by federal funds or the responsible Land. The overall effect is that 99.9 per cent of the Austrian population is covered by one of the 18 sickness funds operative in the country. Who makes up the remaining 0.1 per cent that is excluded from social health insurance? Some categories of individuals are more likely than others to have no insurance (Österle, 2013; Bachner et al., 2018): (1) the unemployed who are not entitled to unemployment benefits; (2) part-time employees earning less than a set limit; (3) students, who have not found a regular job at the end of their studies; and (4) people who do not have stable employment following a divorce (if they were co-insured with their spouse before the divorce).

Finally, let us consider the relationship between insurers and healthcare providers. Sickness funds - with the exception of one that operates in Vienna - do not have their own hospitals,

while some of them may have their own outpatient clinics (Österle, 2013). In most cases, however, healthcare providers are autonomous and are reimbursed by sickness funds on the basis of a common price list.

1.4 Targeted programs

In countries where either voluntary or social health insurance prevails, there are often programs that can be defined as 'targeted'. In the literature of the Welfare State, these are also called 'residual' programs (Wilensky and Lebeaux, 1958; Titmuss, 1974). The programs that we define as 'targeted' (or 'residual') for the purposes of this book, are those that are financed by the public budget and are intended for particular target populations. The beneficiaries of these programs are generally the most vulnerable categories, those that are most exposed to health risks, such as, low-income individuals, the elderly and minors, those suffering from serious illnesses, prisoners and refugees. Various countries have targeted programs not only for the 'weaker groups', but also for certain occupational categories considered particularly worthy of protection by the government, such as the military or civil servants.

Targeted programs are, therefore, funded by the entire community. They are financed through general taxation or by earmarked taxes. There may be a number of targeted programs within the same country. Each single category of beneficiaries often has its own dedicated program, administered separately from other residual programs and with its own processes in terms of affiliation and provision of services.

A key difference between targeted programs and other financing models is that, in the latter, those who pay earn the right to benefit from the program being financed. In the case of targeted programs, this is not necessarily true since beneficiaries coincide only in part (or not at all) with those who finance such programs. A healthcare program for the unemployed, for example, is financed by tax payers who do have a job. Healthcare for prisoners is paid by those who are not in prison. A program designed for minors is financed by adults who pay taxes, and so on. Targeted programs are, in short, programs financed by the community, but only available to particular categories.

Let us examine the advantages and disadvantages of such a model, at least on a theoretical basis. A favourable aspect lies in the fact that some categories of 'weak' subjects, who under other systems would have no insurance coverage, are directly protected by the State. Targeted programs are based on the principle that public resources, which are limited by

definition, should not be spread out over the entire population, but rather used for the benefit of those who are more needy. The rest of the population, namely those who do not belong to disadvantaged classes, are expected to obtain healthcare by their own means. The main disadvantage of this model is that only a part (usually a minority) of the population is covered by public programs.

As far as relationships with healthcare providers are concerned, targeted programs can be of two types. In most cases, the State only plays the role of insurer, hence financing external providers. There is a second, albeit less frequent type of targeted program, which envisages a public program with its own medical staff and healthcare facilities where it can provide its users with the care they need.

Finally, let's consider the role played by the public actor. In this model, the State is responsible for identifying the categories that require special protection, financing the targeted programs and, in some cases, providing healthcare directly.

1.4.1 Public programs in the United States

We find typical examples of targeted programs in the United States. Most of the resources that the US government allocates to healthcare are indeed used to finance a plurality of typically residual programs. The major ones are *Medicare* and *Medicaid*, both established in the mid-1960s under Lyndon Johnson's presidency. Medicare's objective is to provide healthcare coverage to citizens over 65 years of age, as well as patients with Amyotrophic Lateral Sclerosis (ALS) and people affected by chronic kidney disease. Medicare is financed through a combination of general federal taxes, a mandatory payroll tax (shared by employees and employers), and individual premiums (Tikkanen et al., 2020). The program is divided into different parts, covering inpatient, outpatient and medication expenses[1]. In 2019, Medicare had more than 58 million enrolees, which is nearly all citizens over 65 years old (US Census Bureau, 2020).

Medicaid is largely tax-funded, with federal tax revenues representing two-thirds of costs, and state and local revenues the remainder (Tikkanen et al., 2020). Medicaid provides healthcare to the poorer segments of the population and people with disabilities. Since each state

[1] Part A (hospital insurance) covers inpatient care, which includes hospice and short-term skilled nursing facility care. Part B (medical insurance) covers certain doctors' visits, outpatient care, medical supplies and preventive services. Introduced in 2003, Medicare Part D is an optional outpatient prescription drug coverage. Medicare Advantage, also called "Part C" or "Managed Medicare", is the private health insurance alternative to the federally run original Medicare. Medicare Advantage plans are offered by private managed care organizations (Tikkanen et al., 2020). The federal government requires these Medicare Advantage plans to cover everything that original Medicare covers, and some plans include services that original Medicare does not.

provides different forms of protection and applies different criteria for enrolment into the programs, not all those who are disabled or in low-income brackets qualify for Medicaid, which in 2019 provided healthcare to almost 56 million Americans (US Census Bureau, 2020). In addition to Medicare and Medicaid, the US government finances many other targeted programs, including the Children's Health Insurance Program (CHIP), which is addressed to minors in low-income families. Other targeted programs are designed for the armed forces, war veterans, federal employees, Native Americans, prisoners and people affected by HIV/AIDS. Overall, the targeted public programs cover a little more than a third of the US population (US Census Bureau, 2020).

1.5 Mandatory residence insurance

The mandatory residence insurance model is based on the principle in which the government requires all residents to take out a private health insurance policy covering essential healthcare services, using individual resources. Since there is no single public scheme into which contributions can be paid, the policy has to be taken out with different, for-profit or non-profit insurers who are in competition with each another. The mandatory residence insurance system is, therefore, a multi-payer system, in which citizens are obligated to acquire insurance and can choose their insurers.

Once all residents have been obliged to get insurance coverage, the government may provide subsidies for low-income citizens (who might otherwise find it difficult to pay the insurance premiums regularly), and may impose even very strict regulatory measures on the insurance market.

Ultimately, in a mandatory national insurance system, who pays? All residents are required to take out a health insurance policy, and each one pays their own insurance premium. Who are the beneficiaries? All citizens must have health insurance, hence the entire population should by definition be covered against the risks of illness. The insurance packages usually differ from one another, as they may provide coverage that is supplemental to the minimum required by law. We must therefore bear in mind that there may be differences between the services provided to individual healthcare users.

Compared with the models discussed above, the main benefit guaranteed by a mandatory residence insurance system is the coverage of the entire population: if all residents comply with the insurance obligation, there should not be any uninsured individuals. Additionally,

citizens are obliged to pay for a health insurance contract, but they are free to choose the insurance company they prefer.

The limits of this model are similar to those already reported for voluntary insurance. If insurance premiums are risk-rated, the most vulnerable (such as the elderly and those affected by chronic disease) end up paying far higher premiums than the average. And if low-income individuals do not receive financial support from the State, they face the risk of not being able to regularly pay their insurance premiums.

Finally, we come to the relationship between insurers and healthcare providers. As for the other models analysed previously, even in mandatory residence insurance schemes the providers are usually independent from insurance companies, and are reimbursed by the latter. Insurance companies may, however, also have their own healthcare facilities and staff who provide in-kind services to their subscribers, or they may enter into specific contracts with given providers.

1.5.1 Mandatory insurance in Switzerland

As from 1996, Switzerland has adopted the model of mandatory residence insurance. All Swiss residents (and not just workers) are required to purchase a basic health insurance. Subscribers are required to cover the cost of the premium with their own means, and can choose from among about 50 competing insurance companies (Schmid and Beck, 2016).

Insurers need to abide by strict public regulations: they cannot make profits on the basic insurance package, nor can they apply enrolment criteria (they must accept everyone in compliance with the rule of open enrolment), and they have to calculate premiums according to the community rating principle[2]. Lower income families are aided by cantonal governments: about one third of Switzerland's population is granted public subsidies to purchase health insurance (Biller-Andorno and Zeltner, 2015; De Pietro *et al*., 2015).

This regulatory framework pertains to the package of essential care, namely healthcare subject to the insurance obligation. Although the basic package is generous, some services, including most dental care, are excluded. To cover non-essential services, the Swiss can request complementary insurance. Each insurance company usually offers different insurance packages to choose from: the premium may vary depending on the deductible, the freedom of choice in terms of provider and the inclusion of services other than the essential ones. We

[2] Premiums are allowed to vary only by three age categories, with different prizes for children (0-18 years), young adults (19-25) and adults (26 years or older). In addition to this, basic package premiums may vary depending on the extent of the deductible and for managed care insurance policies.

ought to point out that many of these insurance packages apply the 'managed care' formula: this means that insurance companies set up their own network of preferred providers; policy holders who accept to select only preferred providers pay lower insurance premiums. Forms of this kind are increasingly widespread, and more than half of today's insurance plans are estimated to be of the managed care type (De Pietro *et al*., 2015).

1.6 The universalist model

A universalist system is defined as a single-payer insurance scheme (therefore, one for the entire nation) covering all residents and financed through taxation. Similarly to the mandatory residence insurance model, the universalist model guarantees healthcare coverage to the entire population. Compared with other insurance schemes, the universalist system is marked out by the fact that the right to healthcare is not linked with payment of a premium or a contribution, but to residing in a given country. Healthcare is therefore a right of the citizens of that country. Care may be provided free of charge or with co-payment (usually a small fee) covered by the patient.

From the point of view of those who have to contribute financially, the universalist system does not grant freedom of choice. Unless a form of opting out is provided, residents cannot choose whether or not to finance the universalist scheme; instead, they are required to pay taxes in order to finance the program. And, given that (direct) taxes are usually paid more than proportionally with respect to income, the universalist scheme turns out to be a typically progressive financing system (Mossialos and Dixon, 2002; Hussey and Anderson, 2003).

It is important to underscore that, unlike the social health insurance model, the universalist system envisions taxation not only on work income, but on all forms of income. Financing of the universalist scheme, therefore, has a clear redistributive intent in that the richest end up paying for the healthcare services provided to the poorer citizens, at least in part.

A further difference from the models examined above is that, while the former tolerate disparities in treatment between citizens, however, in the universalist system all citizens should be entitled - at least in theory - to the same package of services.

As discussed in the following chapters, there are two types of universalist models: one that is 'separated' and one that is 'integrated'. The key difference between the two lies in the relationships between the insurer and the providers. In the separated model, the State is only committed to financing healthcare, which is provided by autonomous providers. In the

integrated type - corresponding specifically to the National Health Service - the State not only finances healthcare, but also provides it directly through its own facilities and staff.
In universalist systems - both separated and integrated - the State ends up playing a pivotal role by acting as the insurer for the entire population. It is indeed the State that collects the financial resources that are to be allocated to healthcare, and that decides how providers are remunerated. In integrated universal systems, the State is also the actual healthcare provider.
Therefore, who benefits from a universalist program? The entire resident population is entitled to essential healthcare. Who finances the program? All tax payers.

1.6.1 Medicare in Canada

Canada is an example of a separated universalist system. The Canadian healthcare system is structured around a single public scheme, known as Medicare, which acts as the insurer for the entire population. The Medicare scheme is financed through tax revenue and does not involve co-payment by users (Marchildon, 2019). Although the federal government imposes a regulatory framework that is common throughout the country, Medicare is managed at a provincial level. Therefore, there may be differences in organization and management of services between one province and another. The provision of healthcare services is not guaranteed by facilities and staff that operate directly under the Medicare scheme, but by independent providers (Marchildon, 2013).
Medicare undertakes to cover primary, specialist outpatient and hospital care. The reimbursement of services pertaining to physiotherapy, long-term care, eye and dental care is partial, and varies according to the province of residence. For services that are not included in the Medicare package, two-thirds of Canadians subscribe to private complementary insurance (Martin et al., 2018). Most private insurance policies are paid through employers, unions or professional associations under a group contract (Marchildon, 2013; Mossialos et al., 2017).

1.6.2 The National Health Service in the United Kingdom

The British National Health Service (NHS) embodies the prototype of the integrated universalist system. The UK was, in fact, the first large country (and the first European country) to adopt the national health service model, established in 1946.
Despite the devolution (the NHS is now subdivided into four distinct administrations, for Northern Ireland, Scotland, Wales and England), and other radical reforms introduced over the years, the National Health Service has always retained some distinctive features: it continues to be financed through tax revenue and provides care to all legal residents of the

United Kingdom. The British NHS owns and operates its own hospitals and outpatient clinics, covering the entire national territory. Most healthcare personnel are employed by the NHS.
Users mostly benefit from NHS services free of charge. In the United Kingdom, the only forms of co-payment involve medication and dental care. However, many categories of patients (children, the elderly, the chronically ill, low income households, the disabled, pregnant women, etc.) are exempt from co-payment (Cylus *et al*., 2015).

1.7 Medical savings accounts

An additional financing model for medical care - still not widespread, but the object of great interest in recent years, even at theoretical level (Wouters et al., 2016) - involves the so-called '*medical savings accounts*' (MSAs). These are individual deposit accounts whose holders periodically pay an agreed amount or a percentage of their salary. MSAs allow for tax deductions and may be combined with high-deductible catastrophic health insurance (Mossialos and Dixon, 2002; Wouters et al., 2016).
Reserves accrued on these deposit accounts can only be used to reimburse healthcare expenses. An account holder can withdraw from the account only to pay for healthcare services received personally or by a dependent family member. Interest is paid on the account balance at the end of the year. Unused amounts are accumulated for the future.
Compared to the traditional insurance scheme, the main advantage of MSAs is that they do not incentivize moral hazard (Hsiao, 1995; Barr, 2001; Mossialos and Dixon, 2002).
The MSA system can be broken into two types: a *mandatory* type whereby workers (or residents of a particular country) are legally required to open their own account and deposit contributions on a regular basis; and a *voluntary* type, which gives individual enrolees the freedom to open an account (which often supplements another type of insurance coverage). In both versions, healthcare providers have no relationship with the institution where deposit accounts are held (whether they are social security agencies, credit institutions, or insurance companies). Hence, account holders can choose the providers they prefer by using a market-based approach.
Especially in the mandatory MSA model, the State performs important regulatory functions. Public authorities are indeed responsible for: (1) deciding which categories must mandatorily open individual medical savings accounts; (2) determining the amount of contributions to be

deposited into the accounts and the criteria for using the deposited resources; (3) supervising the institutions where the deposit accounts are held.

According to some commentators, medical savings accounts can be regarded as a variant of the insurance principle. If this were the case, mandatory deposit accounts would then be a variant of social health insurance or of mandatory residence insurance, while voluntary MSAs would be a variation of voluntary insurance. This is true only to a certain extent, and we need to point out the essential element that differentiates MSAs from the insurance models discussed above, that is, medical savings accounts are individual deposit accounts, whose purpose is to guarantee coverage to the individual deposit holder from the risks of illness, especially in anticipation of old age. Unlike voluntary insurance or mandatory social insurance, MSAs do not imply any solidarity among deposit holders, nor do they provide for any form of risk pooling with others (Hsiao, 1995; Mossialos and Dixon, 2002; Hussey and Anderson, 2003). Medical savings accounts bear a strong individualistic imprint (Barr, 2001; Robinson, 2005). Each deposit holder accrues resources for themselves, and the solidarity element is confined to the narrow family circle.

1.7.1 Medisave in Singapore

Medical savings accounts are used in some countries, such as, China, Singapore, South Africa and the United States (Wouters et al., 2016). In the United States, as well as in South Africa, it is possible to open voluntary healthcare accounts alternatively or in addition to other forms of insurance. In China, MSAs are utilized in combination with compulsory insurance that covers catastrophic medical expenses. None of the 27 OECD countries contemplated in this study adopt a mandatory MSA system. To get an idea of how a mandatory MSA system operates, one can review the system implemented in Singapore. In this country, workers are required to contribute to the mandatory savings scheme called *Medisave*, which was introduced in 1984 and managed by Singapore's pension institution.

Within this scheme, workers hold individual deposit accounts, into which they must deposit form 8 to 10.5 per cent of their salary on a monthly basis (Yin and He, 2018). All contributions placed into Medisave accounts are tax-exempt, accrue interest and may be used by the account holder only to pay for certain healthcare expenses, such as hospital care, day surgery, some outpatient procedures, rehabilitative care and long-term care (Barr, 2001).

The funds accrued in these deposit accounts do not participate in any form of risk pooling (Hsiao, 1995), rather it is at the disposal of the account holder, who can transfer it to only family members such as a spouse, children, parents and grandparents. Resources left unused

at the end of the year are kept in the account to cover healthcare expenses incurred in the future. The underlying principle of the Medisave program is to compel all Singapore residents to set aside part of their salary during their working lives in anticipation of unforeseeable medical expenses and, more importantly, of old age.

Healthcare providers are not connected with Medisave. In Singapore, patients can freely choose their healthcare provider or the facility they prefer and they can decide whether to pay for any service received out of their pocket or from their Medisave account.

For the sake of completeness, we ought to point out that Medisave is not the only public health insurance scheme in Singapore. In addition to Medisave, there are two other government programs. One is called *MediShield Life* and consists of mandatory health insurance, which is the same for the entire population, and covers 'catastrophic' healthcare costs (such as very expensive inpatient procedures or costs arising from ongoing treatments such as dialysis and chemotherapy). The MediShield program covers all Singapore residents and those who have the economic resources are requested to contribute to the program by paying an annual premium. Those who can document a lack of resources to pay the premium receive a special government subsidy (Yin and He, 2018). Medisave and MediShield are complemented by a third national program called *Medifund*, which is a targeted program financed by the government and designed to reimburse all healthcare costs (and not only the exceptional expenses) incurred by the poor.

1.8 Comparing the seven models

To synthesize the topics discussed in the previous sections, it seems opportune to recapitulate the major similarities and differences between the seven financing models. To do this, it is advisable to recall the six dimensions identified earlier in this chapter.

The main characteristics of the different financing models are summarized in Table 1.1. Since there are two types of medical savings accounts, it was preferable to keep the compulsory version of MSAs separate from those that are voluntary, within the table.

1.8.1 Payers and beneficiaries

In two models (i.e., direct market and medical savings accounts), those who receive healthcare services are required to pay the full cost. Everyone pays for only the medical care received. Hence, there is a perfect correspondence between those who benefit from the

services and those who finance them. Conversely, in targeted programs, those who finance the program coincide only partially (or may not coincide at all) with those who benefit from the services. In the other four models, the insurance approach prevails. Many subscribers contribute financially to the risk pooling scheme, acquiring the right - in case of illness - to receive reimbursement for incurred medical expenses. Whoever takes out an insurance policy, (even if healthcare services are not utilized), contributes to financing the system. Thus, the healthy part of the population ends up paying for the care of the sick.

Focussing once again on the recipients of the different insurance coverage schemes, we can state that in the universalist model the beneficiaries are all residents of a given country, regardless of whether they contribute or not to financing the scheme. The beneficiaries of voluntary insurance systems, SHI, mandatory residence insurance and medical savings accounts are those who regularly pay premiums or contributions. In targeted programs, beneficiaries are specific 'privileged' or 'vulnerable' categories (Frenk and Donabedian, 1987; Lee *et al*., 2008).

It is important to specify how risk pooling takes place on a different scale depending on the model (Mossialos and Dixon, 2002; Hussey and Anderson, 2003). As seen in voluntary insurance and mandatory residence insurance, risk sharing occurs only among subscribers of the same insurance company; while in SHI, fund pooling takes place among all members of the same sickness fund (which could also coincide with the occupational category). In the universalist model, the risks of sickness are spread over the entire population, while in direct market models and medical savings accounts there is no form of risk sharing with other individuals.

1.8.2 Number and legal status of insurers

In the literature (Kutzin, 2001; Hussey and Anderson, 2003), a distinction is usually made between single-payer systems, (where there is one single insurer for the entire population), and multi-payer systems (in which a plurality of insurers operates in the same country). The universalist model is, therefore, a single payer system. Voluntary insurance, SHI and mandatory residence insurance are, on the contrary, multi-payer models. MSA and targeted programs can be single-payer or multi-payer, depending on how the system is designed.

In multi-payer systems, the legal status of insurers is significant. In SHI, sickness funds are only non-profit organizations. In voluntary insurance and mandatory residence insurance, insurers can be either non-profit or for-profit organizations. Within the multi-payer models, we can further distinguish between systems in which insurers compete among themselves,

(this is the case in voluntary insurance and mandatory residence insurance), and from those where allocation to the fund is made *ex-officio*, depending on residence or occupation (as seen in the classic SHI model).

1.8.3 Contribution methods

Depending on the model, citizens' financial contribution can take on different forms (Evans, 1987; Thomson *et al*., 2009). In the direct market and the medical savings account models, users pay the full price for the services they make use of and so the total expense is, therefore, commensurate with the care received. In voluntary insurance and mandatory residence insurance systems, each user pays an insurance premium (regardless of the care they will receive, and the premium may be risk-rated or group/community rated). In the SHI model, subscribers regularly pay sickness contributions, drawn from their work income. In the universalist model and targeted programs, insurance schemes are financed through taxes.

The choice of contribution method determines the degree to which the funding schemes end up being 'progressive' or 'regressive' (Wagstaff and van Doorslaer, 1992). Progressive systems are those in which the proportion of income contributed rises with income levels so that the wealthy contribute a greater share of their income than do the poor (Hussey and Anderson, 2003). Regressive financing arrangements, on the contrary, are those in which higher-income households contribute a lower proportion of their income than do lower-income households.

Health systems financed through general taxation are typically the most progressive while those based on insurance premiums (and out-of-pocket payments) represent the most regressive options since each individual pays the same amount, regardless of income (Hussey and Anderson, 2003; Wagstaff and van Doorslaer, 1992; Wagstaff, 2010). The typical SHI systems, based on payroll contributions and an equal rate for all workers, tend to be 'proportional' in that they are neither progressive nor regressive[3].

To grasp the differences between the financing models, in terms of how progressive or regressive they are, here is a fictitious example. Imagine two individuals, who work in the same profession, who reside in the same locality, and who have roughly the same health risk profile. The first - who we will call Scrooge McDuck - receives an annual income from work of $100,000, the second - who we will call Donald Duck - has an income of $10,000.

[3] The SHI systems are basically proportional, unless: (1) there are upper limits on the overall amount that must be paid in contributions (in this case the system ends up being regressive); (2) part of the financing to the sickness funds comes from general revenues (in this case the system becomes more progressive).

If we are in a voluntary insurance system or mandatory residence insurance, the two parties contribute to the financing of the system by paying insurance premiums. Suppose that the state does not provide any financial support for the purchase of a healthcare policy. Whether the rewards are risk-rated or community-rated, Scrooge McDuck and Donald Duck - since they have the same risk profile - will pay the same premium: $5,000 a year. Although the outlay is the same, for Scrooge the premium corresponds to 5 per cent of his income, while for Donald the premium absorbs a full 50 per cent of his income.

Table 1.1 ***Comparison of financing models***

	Who pays?	*Who benefits?*	*Multi-vs. single-payer*	*Private vs. public insurers*	*Payment methods*	*Mandatory vs. voluntary*	*The role of the State*
Direct market	All those who benefit from the services	All those who pay for the services	No insurers	No insurers	Prices	Voluntary	Regulates only providers
Voluntary insurance	All those who purchase an insurance policy	Only those who are covered by an insurance policy.	Multi-payer	Private	(Risk-rated) premiums	Voluntary	Regulates the insurance market
Social health insurance	Categories of workers subject to obligation	Registered workers and dependent family members	Multi-payer	Private not for profit	Group-rated contributions	Mandatory (for certain occupational groups)	Imposes an obligation & regulates sickness funds
Targeted programs	All those who pay taxes	Specific privileged or vulnerable categories	Single-payer (multiple programs possible)	Public	Taxation	Mandatory (for those forced to finance programs)	Acts as the insurer
Mandatory residence insurance	All residents	All the insured (which should coincide with all residents)	Multi-payer	Private	Premiums	Mandatory (freedom to choose the insurer)	Imposes obligation & regulates the insurance market
Universalist model	All those who pay taxes	All residents	Single-payer	Public	Taxation	Mandatory	Acts as the insurer
Mandatory MSAs	Categories of workers/residents subject to obligation	Only the MSA holder (and dependent family members)	Single-payer	Public	Mandatory contributions	Mandatory	Imposes obligation & can maintain MSAs
Voluntary MSAs	Those who voluntarily open an account	Only the MSA holder (and dependent family members)	Multi-payer	Private	Voluntary contributions	Voluntary	Can regulate MSAs

For a second scenario, let us assume that the two individuals live in a country where there is an SHI system and that health contributions are calculated at a rate of 10 per cent for all workers. Scrooge McDuck will pay $10,000 to the health insurance fund, while Donald Duck will pay $1,000 to the same health insurance fund. Regardless of how much they have actually paid (Scrooge pays a contribution that is 10 times higher than Donald's), the two individuals will be entitled to the same healthcare services from the sickness fund.

Finally, imagine that we are in a country where the health system is financed by general taxation and that public health schemes absorb around 20 per cent of the government budget. In most western countries the tax system is progressive. Let us assume then, that Scrooge McDuck, having an income of $100,000, pays 40 per cent of taxes, while Donald Duck, with a much lower income, has a rate of 20 per cent. In this scenario, Scrooge will end up contributing $8,000 to the financing of public health services (20 per cent of $ 40,000), while Donald Duck will contribute just $400 (20 per cent of $2,000). Again, although Scrooge pays much more than Donald (20 times as much), they will receive the same level of coverage.

The above example, however simplistic, helps us understand how the seven models presented previously - if they are not 'corrected' to some extent - produce very different effects in terms of income redistribution (and therefore of the 'solidarity' of the system).

1.8.4 User's freedom of choice

The level of compulsion of the scheme and, therefore, the freedom of choice granted to individual users varies considerably depending on the model under consideration (OECD, 1994; Hurst, 1991; OECD, 2004). Market and voluntary insurance systems leave total freedom of choice. In the VHI model, the user has no insurance obligation and can freely choose whether or not to get insurance and from which insurance company to take out a policy. The user's freedom of choice is minimal in the universalist model. All residents are compelled to contribute - through taxes - to financing the system, and there is no freedom of choice with respect to the insurer. The same holds for targeted programs.

In terms of freedom of choice, the other models fall within intermediate positions. In mandatory residence insurance there is the obligation to purchase a health policy, but the user is free to choose the insurer. In both the SHI model and the MSA system, adopted in Singapore, the obligation to get insurance applies only to certain categories of workers. In many countries the latter cannot choose the insurer.

1.8.5 The relationship between insurers and providers

In some models, insurers and providers are integrated with each other (this means that the same entity acts as both insurer and provider) while in others they are autonomous. This topic will be discussed in detail in Chapter Four. For the time being, let us just say that in *integrated* systems, insurers directly provide healthcare services to their subscribers through their own facilities and staff. Conversely, in *separated* settings, providers are autonomous with respect to insurers, who are only committed to reimbursing the expenses.

MSAs are always separated systems. Universalist systems, as well as targeted programs, can be either integrated or separated. Generally, voluntary insurance, SHI and mandatory residence insurance are separated models, although there may be - within such systems - individual insurers who prefer to directly provide healthcare through their own network.

1.8.6 The role of the State

Finally, we come to the role played by the State in the field of healthcare (Rothgang *et al*., 2005; Lee *et al*., 2008). In all models, public agencies are responsible for regulating healthcare providers. In the direct market, the commitment of the State is limited to this aspect. In the voluntary insurance model, the State does not impose any insurance obligation, but may have an interest in regulating the insurance market, sometimes even in a rather decided manner. In SHI and mandatory residence insurance, the State requires workers or the entire population to subscribe to an insurance policy. Insurers are private entities, but public regulatory measures pertaining to insurers are, in this case, very stringent.

Public intervention is even more substantial in the universalist model and in targeted programs. In these models, the State not only plays a regulatory role, but acts as the insurer. Integrated universalist systems work under maximum public intervention, as the State not only acts as an insurer but also as a provider of services.

Finally, regarding medical savings accounts, the role of the State is more prominent in mandatory MSA systems (as in Singapore), while it is less significant in the case of voluntary MSAs (as in the United States).