



Health system architecture and its role for economic perspective of wellbeing

Timotej Jagrič *

Abstract: Wellbeing from an economic perspective is about getting access to quality healthcare when needed to enable a quality life and healthier and more productive workforce in the economic ecosystem, thus contributing to economic growth. In this analysis we try to identify, what type of the architecture in the health care system can promote wellbeing

Keywords: health system, market failures, health providers, health insurance

JEL: I13, I14, I15, I18

* prof. ddr. Timotej Jagrič,
CQRM
Head of Institute for Finance
and Artificial Intelligence
University of Maribor

10.32015/JIBM.2022.14.1.1

© Copyrights are protected by
= Avtorske pravice so zaščitene s
Creative Commons Attribution-
Noncommercial 4.0 International
License (CC BY-NC 4.0) / Creative
Commons priznanje avtorstva-
nekomercialno 4.0 mednarodno
licenco (CC BY-NC 4.0)

Mednarodno inovativno poslovanje
= Journal of Innovative Business and
Management

ISSN 1855-6175

Struktura zdravstvenega sistema in njena vloga pri gospodarskem vidiku blaginje

Povzetek: Z gospodarskega vidika blaginja pomeni dostop do kakovostnega zdravstvenega varstva, kadar je to potrebno za zagotavljanje kakovostnega življenja ter bolj zdrave in produktivne delovne sile v gospodarskem ekosistemu, s čimer se prispeva h gospodarski rasti. S to analizo poskušamo opredeliti, katera struktura zdravstvenega sistema lahko spodbuja blaginjo.

Ključne besede: zdravstveni sistem, nedelovanje trga, izvajalci zdravstvenih storitev, zdravstveno zavarovanje

1 Introduction

Businesses in all economic sectors perform comprehensive risk management processes to identify, measure, quantify, manage, and monitor risks threatening the company's financial stability and performance. Among many others, it includes scenario analysis, and stress testing.

COVID was a live-performed stress test for health systems, and the results were disastrous. It is expensive and harmful proof that health systems need to enhance their architecture to serve their primary goal: to deliver health care services to the population.

Instead of risk management measures, it was COVID that revealed the weaknesses in the system. One was the lack of crisis-ready capacities for intensive patient care and insufficient flexibility within the system to scale them up in a short time. In normal times empty capacities and flexibilities are costly and non-profitable, but they are crucial for the resilience of the system. Why was this system failure build up? Why did it happen?

Healthcare services differ very much according to the cost and time perspective. Therefore, only some parts of the healthcare market are a subject of interest for private investors, e.g. non-complicated and simple curative services involving only cheap or nearly no medical equipment. Allowing private providers to enter the healthcare market leads to adverse selection in the services offered. Public healthcare providers are left with complex and long-lasting curative services. Thus, public providers should provide all services. Profitable market segments should not be separated from non-profitable segments, but used to finance the latter. Why? These less-attractive services are crucial for social cohesion and force the system to fulfill principles of equity, solidarity, human rights.

2 Market failure: interplay of supply and demand in the market of health services is a typical, well-known case for urgently needed state intervention to achieve proper allocation of services

The main reason health systems failed during the COVID outbreak was the existing insufficient public policy intervention into the health system architectures, resulting in market failures.

The health care market is a sizeable industry, with a monopoly-like position on the supply side and constant demand, even more, constantly growing demand. Such market structure offers great business opportunities for the future, which attracts investors and other parties motivated to benefit from certain revenue. However, as seen in many countries, only the supply side of public healthcare providers can prevent market failures.

If the state intervention does not prevent market failure, the following arises:

- the abuse of monopoly power on the supply side,
- oversupply of demerit (bad) and undersupply of merit (quality) goods,
- information asymmetry between supply and demand-side that leads to improper quality and quantity of bought services,
- negative externalities augment needs for healthcare services (e.g. if smoking is regulated, it can limit the healthcare needs of passive smokers).

For successful market intervention, the state is given multiple roles which take place in the following areas:

- The state is the industry regulator (legislation and decision making may not be influenced by corruption, lobbying by providers, occupational associations etc., conflict of interest when same people are involved as both parties, an international policy promoting market-based health sector reform);
- The state fulfills social risk-pooling by obligatory health insurance scheme and becomes the buyer of all services. Therefore, insurers (patients) cannot directly negotiate for the price and quality of services bought (customers negotiate in every market: at the hairdressers, buying or constructing a house, in a bank for the interest rate...). Negotiation is a means of arriving at market equilibrium;

therefore, the state as the sole demand-side representative, has to assure efficiently that the quantity and the price of the provided services are in line with the economic and general price level of this country;

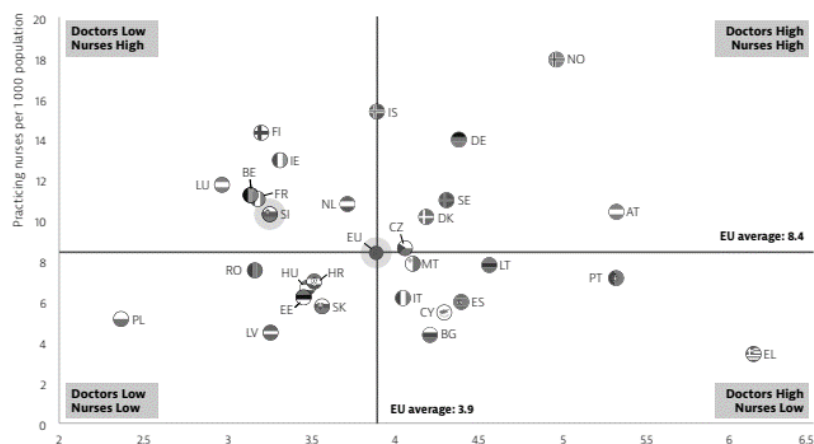
- The state is the enabler and direct provider of services; market failure caused by private investors can be resolved only by the healthcare sector of public healthcare providers. However, with public healthcare providers, the corporate governance and management should be professional, ensuring financial soundness, managerial skills needed for governance to the institution's benefit (e.g. hospital), as well as to all its counterparties (e.g. medical equipment suppliers, employees, etc.). Performing lucrative business attracts profit motivated behavior, again, corruption, lobbying and conflict of interest may arise within such institution, resulting in above-market prices for supplies, preferable working conditions for some individuals employed or groups of workers (e.g. omission of non-competition clause). Proper professional supervisory boards of public providers can ensure corporate governance. Counterparties with conflict of interest should not have a chance to influence or take part in the management, decision-making processes, and supervision of the public providers to healthcare services.

3 Professional and accurate capacity management ensures the delivery of services in adequate quantity, quality and time

The healthcare providers receive payments for services, but their investments into infrastructure are being additionally supported by public funds. The infrastructure being built up in decades has to be managed professionally, and used optimally. For example, in case of very expensive medical equipment, the latter is being used only few hours in the morning and is standing still in the afternoon, night and for the weekends. On the other hand, there are long waiting lists for services provided by this equipment. Thus, professional management would organize the provision of services to enable the best usage of all capacities. Further, the number of services performed on available capacities depend on working norms of team members. In case of Slovenia, they are set for public providers but not for private. In this way, the capacities valid for public providers are underused, and thus they artificially create the impression of a lack of capacities. Bottle-necks are thus result of improper management and supervision of the usage of available capacities, and not a real lack of capacities.

Another example is the number of doctors in Slovenia (see Figure 1). The data show that the number per capita when compared to the EU average is too low, which is known already for decades. The number could increase by young doctors graduating from two Slovenian universities and by migration. However, due to language obstacles, the latter is rather small and can not replace the domestic students. The number of students admitted to study is much lower than needs and much smaller than students' interest. Many willing candidates don't get a chance to study. The universities claim that they don't have the facilities needed as professors are doctors in the hospitals, just few hours a week ready to teach. As the payroll at the university is much lower than the doctors' payroll, no one would teach full-time.

Figure 1: Medical stuff capacity



Source: Slovenia: Country Health Profile 2021 (OECD, 2022).

Further, the program of specialisations is being controlled by the medical association. So, can a group of doctors themselves not let the number of young doctors increase significantly to maintain the scarcity in the availability of professional staff? No other professional group can control the number of newcomers in this, let's say, effective way.

4 Patient are insurants and should be addressed as insured persons when receiving the services

In economic terms, buying any insurance signifies managing and mitigating the loss resulting from risks that may materialize at an uncertain moment in the future. The risk of poverty arises. It is no different in the case of obligatory health insurance systems; individuals manage the risk of poverty resulting from illness costs.

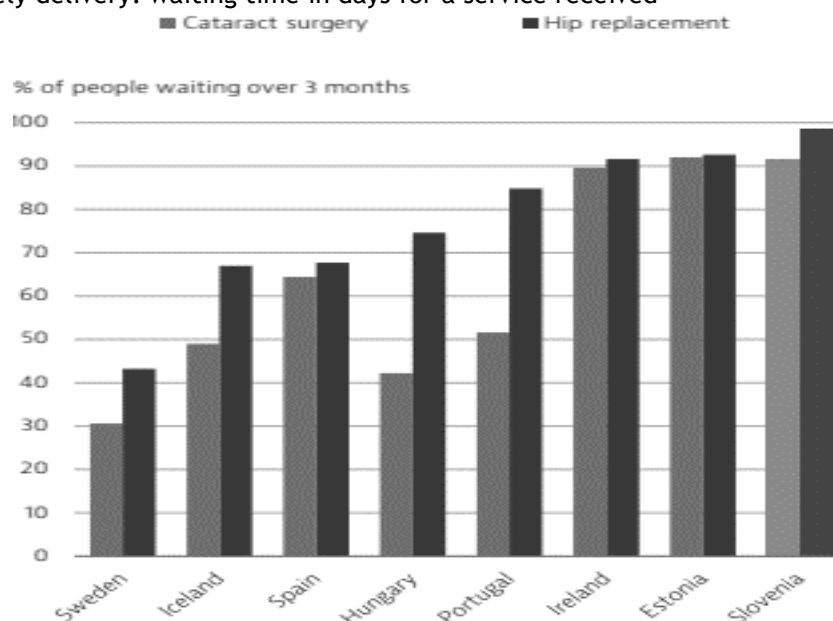
Typically, when we are young and healthy, the revenues are higher, and health care needs generally are lower. Therefore, in health insurance, one pays the insurance premium, thus paying for services he will demand shortly, or anytime in life. As his risk is unknown, also the time and the quantity of services required is unknown. But it is not unknown at the population level, where the quantity demanded can be estimated quite accurately.

Considering the patient as insurant, he has to be seen as someone who has pre-paid services he is receiving. When coming to the healthcare services provider, the patient is not asking for help nor demanding a gift, but is receiving services resulting from the contract between the healthcare provider and the public health insurance. According to the principle of solidarity and equity in social-pooling based insurance, and like in any other property or non-life insurance, the individual correspondence between paid premium and loss events is not relevant, but the portfolio's loss ratio is. Thus, providers of services should consider patients as clients and not as someone receiving favors.

Preventive and promotive healthcare services are lowering future costs of healthcare and enabling people to work (less absenteeism from work). But within the health system infrastructure, preventive and promotive services should not be separated from curative ones.

Once curative care is needed, access to quality healthcare is satisfactory only when this is done timely (see Figure 2). Timely care results in better recovery chances, fewer days of absence from work, and a sooner return to family life. This is economic perspective of well-being.

Figure 2: Timely delivery: waiting time in days for a service received



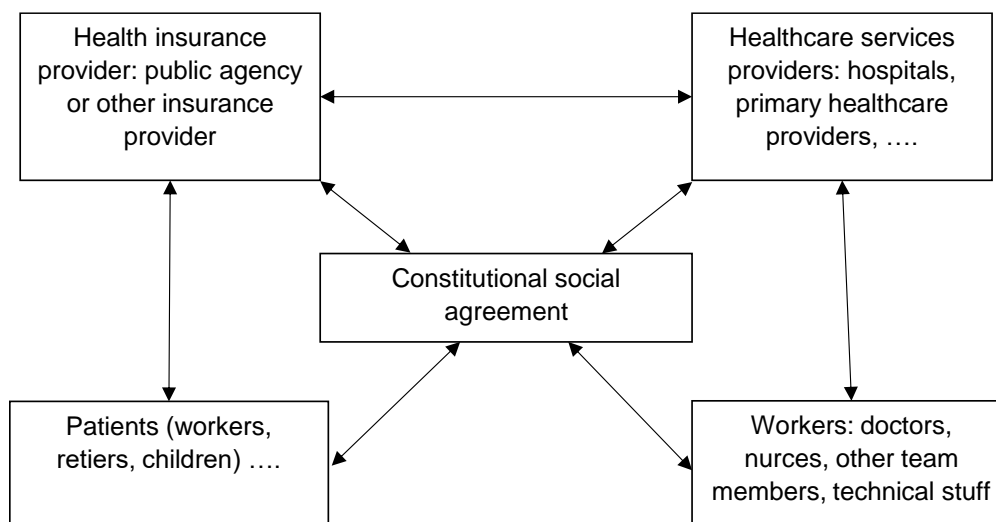
Source: Slovenia: Country Health Profile 2021 (OECD, 2022).

5 Stakeholders in the healthcare system architecture

As with any profitable business areas all the stakeholders try to reach its maximum advantage. In the healthcare system not only the individual stakeholders have to find the equilibrium but the state also has to assure that broader social agreements and constitutional principles are properly respected. Which stakeholders are involved in the healthcare system and what economic interest do they pursue (see Figure 3)?

1. **Individuals'** goal is a quality life where health difficulties are resolved properly and quickly. Thus for a lowest insurance premium paid they would like to receive the greater amount of health services' coverage. Here, the public finance principles are applied to ensure that the premium paid reflects the ability to pay according to social cohesion. Here, universal health coverage is achieved.
2. **Employers** defend and strive for a health system promoting and enabling a healthy workforce. The workers can be more motivated, more productive, more creative, more satisfied, and less absent only in case of good health. Economic competitiveness can be achieved if the latter is the case.
3. **Society** demands health services are provided for an economically sustainable price, enabling to finance broader social needs with properly justified economic burden to the economic ecosystem, involving all industries. In many countries, health expenditure is already high compared to other areas covered by public finance, and therefore the effectiveness of spent money has to be justified.
4. **Providers of the health care services:** they are interested in the highest price received for the delivery of services. Here, the margin matters - the difference between the revenue and the costs. It results from the interest in profitable services (bringing lower cost or uncomplicated), and avoiding non-profitable services.

Figure 3: Stakeholders involved in the healthcare system



5. **Medical associations**, e.g. chambers of doctors, influence the regulation for the benefit of a single occupation group, e.g. medical licencing terms, training and specialisations, disciplinary procedures, norms and standards regarding the quantity of work to be performed in labour contract. Further, artificially creating bottle necks in provision of services and staff availability results in the longer waiting time for patients. Occupation representatives are not providers of services in the health market, but are employed by the providers of the services. Thus, the level of negotiation should follow the chain of contract counterparties and valid flows of democratic decision-making mechanisms, where at the end the constitution guarantees the respect of social agreement. When unjustified parties can influence the regulation of an industry, additional market failures appear. In case of medical associations deciding on the properties of the healthcare system, minority is deciding on the rights of population, which can only be a social agreement. Occupational conditions can be negotiated in the same process and follow the same principles, which are valid for other occupational groups. The broader social agreement includes all industries in the economic perspective and various population groups in the social perspective that live in equilibrium.

6 Conclusions

In our opinion, the wellbeing from an economic perspective can only be achieved when the healthcare system is functioning well. It means that the mechanisms explained above are in place, and groups of stakeholders, like private investors, suppliers, occupational groups etc., can not benefit at the cost of the populations' final health outcome.

The health care system planned this way must also be actually realised and, in this context, it has to ensure efficient and effective operation. The control system must warrant up-to-date identification of gaps in the presence and functioning of the health system, and provide appropriate corrective actions to address them.

Thus, the healthcare system, at the end, achieves its primary goal: delivering complete healthcare services to achieve the best health outcomes for the population, while adding supplement private health care solutions that do not fall within the scope of basic health care. This way, not only quality of life is improved, but it also promotes economic growth, which is generated and multiplied by the health sector. But, the characteristics of national healthcare systems differ significantly regarding, for example, access to quality healthcare; thus, patients' needs are not satisfied even at elementary level. Therefore, in some countries, more changes are needed in the architecture of the healthcare system in order to provide a well-functioning system.

References

OECD/European Observatory on Health Systems and Policies (2021), Slovenia: Country Health Profile 2021, State of Health in the EU, OECD Publishing, Paris, <https://doi.org/10.1787/1313047c-en>.