



O zdravstvu iz ekonomske perspektive

Health care from an economic perspective

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Book review by ANTO BAJO*

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The book “Health care from an economic perspective” is the result of a two-year effort by a team of economists from the Institute of Economics and their external associates. The book, edited by Professor Maja Vehovec, PhD, includes contributions of thirteen researchers. It has 356 pages, including a preface, the authors’ CVs, 56 tables and 92 figures. The nice cover illustration suggests the conclusions of the book regarding the need of economy, prudent behaviour and more effective healthcare system management. The book is divided into five parts featuring thirteen thematic contributions, which attempt to answer five key questions regarding the Croatian health system economics.

Answers to the first question: **How is health care financed and what are the expectations for the future?** are offered by Dubravko Mihaljek in his article “How to Finance Health Care in Times of Economic Crisis?” and Tanja Broz and Sandra Švaljek in the “Healthcare Financing in Croatia: from Reform to Reform”. Mihaljek points out that while it is impossible to stop the growth of health care spending in the long run, healthcare financing can be made more effective. Since 1960, life expectancy has been extended by 11 years, to almost 80 years, which will affect cost control and efficiency improvement. Politicians have ignored this fact due to a short-term thinking horizon. From 2000 to 2010 alone, health care spending in advanced economies trended upwards from 9.9% to 12.4% of GDP. The share of public spending rose, while the share of private spending declined. The role of private health insurance schemes strengthened, but personal health care expenses decreased. Health care spending in Croatia stagnated over the last ten years (at 7.8% of GDP). However, government accounted for an above-average share in health care expenditures, as high as 85% (as compared with 72% in Central Europe and 73% in Western Europe). The government budget share increased, while the share of health insurance dropped to 67% in 2010. There are many unknowns regarding the structure of the Croatian health care financing: discrepancies exist between domestic statistics and those published by the World Health Organisation. Mihaljek deems that Croatia should take macroeconomic and microeconomic measures to curb the growth of government health care spending. Such measures have already been implemented in developed economies and they could be beneficial to Croatia as well. At the macroeconomic level, budget constraints and stricter quantity and price controls for health care services should be imposed. Microeconomic measures should include: partial restructuring of the health care system, increasing transparency in the health care billing practices (the payment of services by diagnosis-related groups, a wider choice of doctors and medical institutions when contracting with suppliers for health care services) and redressing the imbalance between primary and secondary health protection. Mihaljek also stresses the need for greater private sector participation in supplying goods to medical institutions, as well as for stronger competition among insurance companies.

Broz and Švaljek analyse the implemented health care system reforms, providing information for evaluating their effects. There have been numerous rehabilitations

in the health care area (mostly involving hospitals) in Croatia. From 1994 to 2007 alone, their costs reach about HRK 9.7bn. Apart from the rehabilitation processes, health care co-payments have been increased and supplemental health insurance has been introduced. However, despite the applied measures, medical institutions continued to accumulate losses. In 2012 and 2013 alone, expenditures for the settlement of debts incurred by the Croatian Health Insurance Fund (HZZO) and hospitals amounted to HRK 6.5bn. Since 2004, the prices of drugs have gone up. Regrettably, the numerous reforms were not based on any elaborate strategy documents. The reform launched in 2008 was aimed at curbing public expenditures and the growth of drug prices by introducing international public tenders for particularly expensive drugs, and reducing benchmark prices of prescription drugs. Moreover, medical equipment procurement has been centralised, and the control of sickness benefits and hospital payments according to diagnosis and therapy-related groups has been stepped up. Under the reform, all additional sources of the health care system funding have been tapped. Croatia needs further health insurance market liberalisation and cuts in the number of those insured at the expense of the government budget. While the bulk of reforms are still carried out at the revenue side, expenditure reforms are also needed, along with an increase in the number of private health insurance schemes, given the exhausted public revenue capacities. A similar conclusion arises from an analysis of private health care expenses.

Replies to the second question: **What ought we to know about health insurance and private health expenditure?** are given by Danijel Nestić and Ivica Rubil in the article “Private Health Expenditure in Croatia”, and Mario Puljiz in the contribution titled: “Voluntary Health Insurance: Croatia vs. Europe”. Nestić and Rubil argue that total private health expenditure in Croatia (about 1.2% of GDP) is extremely low and that little is known about its socio-economic characteristics. The information they used was based on a Household Budget Survey. Private expenditures account for about 15% of total health expenditures. Private insurance expenses account for just a small share in total private health expenditures in Croatia (0.5% of GDP). Hospitalisation costs are mainly covered from public sources. A survey on a sample of Croatian households corroborates the previously known findings of similar international surveys. In addition to income levels, the amount of private health expenditures is influenced by the level of education (high vs. extremely low educational levels), age, gender (women spend more on average for health) and settlement type (the urban population spends more on health). Propensity to buy supplemental insurance depends on gender (women are more prone to it), educational level (highly educated persons are more likely to buy supplemental insurance) and income (persons with higher income are more likely to opt for it). There are no plans in Croatia for any major health care system restructuring in terms of the sources of funding, and it is mainly considered in the context of the government budget. Puljiz points out that in Croatia, private insurance cannot be a substitute for compulsory insurance. It is necessary to define the basket of services covered by the public insurance and that provided under the

supplemental insurance. Voluntary health insurance accounts for as little as 2.44% of the total written premium of all insurance companies, which is indicative of an underdeveloped market. Further liberalisation is called for, as well as cuts in the number of budget-financed health care users. The use of supplemental and additional health insurance products by citizens could be encouraged by introducing various forms of tax relief.

The third question: **What are the key elements of health care spending and what are their specific qualities?** is answered by Ivana Rašić Bakarić in the chapter “Primary Health Protection in between Efficiency and Availability”, and a group of co-authors (Maja Vehovec, Ivana Rašić Bakarić and Sunčana Sljepčević) who point to the key problem of the Croatian health care system in the article “Challenges of Hospital Restructuring”. Sunčana Sljepčević provides an “Evaluation of the Technical Efficiency of Hospitals”, and Tanja Broz analyses “Drug Consumption and the Specifics of Functioning of the Drug Market”.

According to Rašić Bakarić, the primary health care expenditures have stood at HRK 2,95bn. Medical centres should be the main primary health protection providers. The problem lies in too few preventive medical examinations, the growing number of patient referrals to specialists and a relatively large number of patient visits per day. Every seventh patient is referred to a specialist medical examination. Thus, a general practitioner has 53.1 patient visits a day, and he/she spends 8 minutes on each of them. The basket of services included in the general/family medicine is not defined, which leads to differences in financial calculations. In most EU member states, primary health care handles 70-80% of health cases (as compared to only 50% in Croatia). Referring from primary to specialist health services is due to weaknesses in the current funding model which is not based on any standards.

Vehovec, Rašić Bakarić and Sljepčević explain an old malady of the Croatian health care system, i.e. the non-transparency of costs, especially in hospitals which account for the largest share of total health expenditures, exceeding the EU member states’ average. The ratio between the number of hospital doctors and the number of population is unsatisfactory and is below the EU average (163 doctors per 100,000 inhabitants). The same is true for the numbers of hospital beds (56 per 10,000 inhabitants) and hospitals (1.3 per 100,000 inhabitants). Croatia is the leader among the EU member states in terms of duration of treatment (7.2 days). Below-average coverage of doctors has been observed in as many as 14 counties, with unequal access to medical services. Hospital expenditures stand at about HRK 11.3bn. The bulk of them (53%) are expenditures for employees, followed by material expenditures (for drugs and hospital energy consumption). One of the key challenges is the status of the HZZO, which only transfers budget funds to hospitals, without having any autonomy in deciding on the health system’s insurance policy based on the funds raised from compulsory health insurance contribu-

tions. The general impression (confirmed by an interview) is that hospital managers know the solutions and even offer recommendations for reforms. The question remains, however, how to turn proposals into practice and does the medical profession actually want reforms. Hospital managers generally have a negative attitude towards the outsourcing of non-medical activities and do not feel responsible for salary and material cost overruns. They rather consider them a problem of the system. The relation between hospital revenues and the cost presentation model is non-transparent. Limits make up the bulk of hospitals' budgets, but it is not clear how they are determined: on the basis of a historical cost model or some additional unknown criteria. So far, hospitals have been known for good doctors rather than successful management. Hospital financing should depend on performance indicators. It is necessary to improve the computerisation of hospitals, prescribe the appropriate standards, procedures and protocols and adopt strategic plans for each medical institution.

In the part "The Technical Efficiency Evaluation of Hospitals", Sljepčević analyses the efficiency of 54 hospitals using the 2010 data. Some of her findings are very interesting. Most of the specialised and clinical hospitals employ above-average numbers of administrative and technical staff. The number of nurses grows, but is still below the EU average. Data on the number of discharged patients per hospital and on the rate of cured patients are unavailable, although they might be useful for performance analysis and hospital efficiency measurement. According to the author's calculation, seven hospitals (a clinical hospital, three general and three specialised hospitals) operated at marginal efficiency in 2010. As much as 9.8% of these hospitals use 40% to 50% more inputs than the efficient hospitals, and 3.9% hospitals are capable of cutting the user of resources by 30% to 40%, which would represent considerable savings within the system. Four clinical hospital centres show different levels of efficiency, despite their similar business characteristics. The same is true for other types of hospitals (clinics, clinical hospitals, general and specialised hospitals).

Broz analyses "Drug Consumption and the Functioning of the Drug Market", concluding that spending on drugs in Croatia exceeds GDP capacity. The drug market has no detailed and transparent statistical databases. Public spending on drugs accounts for about 80% of the total spending, which ranks Croatia among the EU member states with above-average shares of public spending on drugs in total health care spending. Drug expenses went up from HRK 3.8bn in 2004 to HRK 5.1bn in 2013.

Against the backdrop of uncontrolled consumption and non-existent standards, an important question arises, namely **How far are users involved in health care service evaluation?** The answers are provided by Jelena Budak and Edo Rajh in an interesting part titled "Corruption in Croatia's Health Sector: Myth or Reality". Jelena Budak's article deals with "Patients' Assessment of the Quality of Work of

Health Care Personnel”. Maja Vehovec writes about “An International Comparison of Health Care Quality from a User Perspective”.

Budak and Rajh hold that corruption exists and it results in unequal treatment of patients. Corruption is more prevalent in hospitals, due to their inefficiency (long waiting lists) and poor health system organisation. The most easily enforceable measure to combat corruption in the patient-doctor relationship is providing patients with transparent information on public health care. The knowledge of patients’ rights, especially to the information on the scope of services covered by health insurance and the official prices of health services, helps reduce informal costs. The privatisation of health care, breaking up a monopoly in the health services market, may be an effective step towards rooting out corruption. The key purpose of the research is to raise awareness of the problem.

Budak emphasizes that there are no public opinion polls in Croatia reflecting citizens’ opinions on the quality of the public health system. Useful tools in this regard are surveys on the public perception of the quality of doctors’ work.

Vehovec has interpreted the results of the European Health Care Index, making an international comparison of the health care quality from a user perspective. According to this index, Croatia is in the middle of the list of countries by health care quality rankings assigned by users.

Is economic evaluation in health care an option or a necessity? Answers to this questions have been provided by Ana Bobinac in the article “An Introduction to Economic Evaluation in Health Care” and Dubravka Jurlina Alibegović, who discusses “The Role of Public-Private Partnership in the Economic Assessment of the Rational Use of Resources in Health Care”. Economic evaluations (cost-effectiveness analysis, cost-benefit analysis and cost and benefit analysis) are tools to improve the system’s efficiency and are necessary for carrying out the reforms. Of course, taking decisions on the implementation of evaluations and reforms continues to be the responsibility of politics. A useful means to improve efficiency could also be public and private partnership – a model that is yet to find widespread application in the health care system.

The authors of the book have recognised the key macroeconomic challenges facing the health care system in Croatia, and opened the way to dealing with macroeconomic issues in order to review and improve efficiency. The main topics for future research into the health care economics in Croatia are the following: (a) evaluation of the success of hospital rehabilitation; (b) efficiency analyses of the completed decentralisation; (c) the manner of determining minimum financial standards; (d) asset management and valuation; (e) amount, structure and maturities of liabilities; (f) capital investments (an analysis for the period ending 2015, and plans by 2020); (g) financial analysis of the operations of medical centres,

pharmacies and hospitals (by name and type of institution); and (h) organisation and practice of the financial management of hospitals.

This book is, without doubt, a valuable piece of work which is yet to find its proper place in expenditure analyses. It could also serve as a practical guide in planning health care system reforms. An examination and review of efficiency can certainly increase accountability in the health care system. Croatia should step up the role of economy in health care and have more health professionals who are skilled in economics.