

PETER MIHÁLYI

De-integration and disintegration of health care in post-communist economies

This paper attempts to provide a conceptual overview of changes occurring in the health care system of 28 post-communist economies. The hypothesis advanced is that de-integration and disintegration are taking place. Largely this is merely a reflection of the overall de-integration and disintegration processes – a natural outcome of the regime change. However, this paper also argues that the current changes are path dependent, reflecting the continuation of earlier fragmentation tendencies on both the delivery and the financing side. It is also shown, that while on paper, most governments preach solidarity between rich and poor, old and young, etc., in reality, health systems are falling apart along the interests of the privileged social groups and the pressures for privatization. Inescapably, these changes bring a lot of disruption, but there are reasons to hope that after disintegration, there will be soon a period of post-transition consolidation – and this time on an economically rational, more sustainable basis.

Journal of Economic Literature Classification Numbers: I100, I180

Mailing address: Prof. Peter Mihalyi
Central European University
Economics Department
Nador u. 9.
H-1051 Budapest
HUNGARY
E-mail: mihalyi@ceu.hu

PETER MIHALYI

De-integration and disintegration of health care in post-communist economies

Introduction

Throughout a vast territory stretching from the Elba River in Central Europe to the Pacific coast in Far East, all health matters – health status, organization and financing – have been profoundly affected by the collapse of the socialist system in 1990. Today, 28 countries with different income levels face the same openly acknowledged challenge: the transition from plan to market. In essence, this means a shift from centralized towards decentralized solutions in every aspect of life, including health care.

In many countries, the unprecedented tasks of regime change were compounded with the infernos of wars and ethnic conflicts, massive displacement of people, destruction of physical assets, *de facto* changes of or prolonged disputes about national borders.¹ In 2002, total output for the region as a whole, measured conventionally by the countries' gross domestic product (GDP) still lagged more than 20% below the 1989 level. Such a dramatic collapse of production inevitably lead to deteriorations in social services, sometimes more painful than the production figures themselves would suggest.

More than a decade after the beginning of the regime change, it is clear that the costs are much higher than expected. With the wisdom of hindsight, one can also establish that the nature and quality of policies and of institutions display remarkable, though not perfect correlation. Repressive governments were usually incompetent, too. Where output collapsed, health care failed, too. In nine countries, the relative performance of the health care system is worse than the overall development ranking, based on production data, would justify.

Countries particularly underperforming in this respect are Russia, Turkmenistan, Latvia, Estonia and Bulgaria (see APPENDIX 1).

The Semashko model revisited

As a convenient starting point, we begin our analysis by revisiting and reinterpreting the so-called Semashko health care model, named after a Russian medical doctor and politician N. A. Semashko (1874-1949). While we accept the standard interpretation, according to which health care systems of all Soviet-type centrally planned economies (CPE) were basically the copies of the Russian model, we will show that the description of the model has been misleading from the very outset from three interrelated aspects: (i) control was far less centralized than usually thought; (ii) the system of provision was much less egalitarian than claimed; (iii) the geographical allocation of provision capacities were always subordinated to non-health priorities.

It has to be recalled, that historically the Soviet system of health care grew out from a bitter rivalry between the German and the Russian Social Democracy at the beginning of the 20th century. In 1911, the Bismarckian system of sickness insurance was extended – *inter alia* - to agricultural employees throughout Germany. Thus, the Russian Social Democrats were forced to promise something even more attractive to their political support base both at home and abroad. If the German Social Democrats were able to guarantee almost universal coverage in a bloodless political evolutionary process, the revolutionary vision of the Russian party was a 100% coverage *plus* the abolition of the insurance contribution levied on wages. Indeed, such promises were already made in various Party resolutions prior to the 1917 revolution. This rivalry explains, why and how the post-1917 Russian leaders were forced themselves into a situation in which they had to declare the constitutional right of every Soviet citizen to “universal, free and high level” provision. However, the vision of Semashko was in obvious contrast with contemporary Russian realities. It is enough to note that in some regions there was only one doctor for 100.000 people. The situation was somewhat better in Central and Eastern Europe after 1945, when Soviet dominance was extended on the region, but the backwardness compared to Western Europe was significant in most

countries, too. Thus, the entire philosophy had to be changed, but – for the reasons explained above – it was impossible to communicate the paradigm change publicly.

Unfortunately, foreign health policy advisors arriving into the former Soviet Union and Eastern Europe in large numbers after 1990 were not aware of this paradigm shift either. Quite mistakenly, they attributed all achievements to the allegedly centralized, integrated and egalitarian Semashko-model – a model that existed only in Soviet propaganda, but not in reality. With hindsight, three features need to be analyzed in details: the growing parallelism in medical supply, the growing role of social insurance and the widespread use of illegal payments. All three phenomena worked against integration and equitable central allocation of resources and all three were taboos in official publications.²

Emerging parallelisms. The change can be linked to Semashko's successor, M. F. Vladimirovsky. As a part of the USSR's forced industrialization effort during the First Five-Year Plan, the country's health care system was hastily reorganized under the slogan of "Face to Production". From 1930 onwards, more and more resources were allocated to **factory-based health care units** and the principles of territorial equity were relegated. With hindsight, it is easy to see the explanations. Better-than-average health care was one of the policy tools of industrialization. Its aim was to reward those who left the villages and to secure the "health capital" of the newly emerging urban labor force.³ At a time of mass epidemics and virtually non-existent health care consciousness of the urban masses, this policy did have its own medical rationale, too.

In the former Soviet Union and the former GDR, occupational health care was particularly extensive. At the end of the 1980s, 90% of the East German working population received medical care at the workplace. In Czechoslovakia 75% of the working adult population was primarily treated by enterprise doctors as of end-1980. In Hungary, by contrast, this proportion was well below 50%, because primary care was mostly provided by designated family doctors. In Russia 20 ministries operated parallel health services (9 in Belarus). In Bulgaria, the military had 14 hospitals and 8 hospitals belonged to the Ministry of Transport, etc.

Between 1930-1989, there were several waves of reorganization in both the USSR and the Central and East European countries. Sometimes the regional aspect was strengthened at the expense of the factory-based health organizations, sometimes or in some countries, the

changes pointed into the opposite direction. Needless to say, that these frequent reorganizations were themselves quite harmful.

Already in 1930, Russian **medical schools** (*clinics*) were separated from universities. Thus, slowly a third dimension of the health care provision network came into being. Large medical universities were created in different parts of the country. Since these institutions were relatively better endowed with resources, patients preferred to use them even for minor illnesses. From an efficiency point of view, this was also a loss, because these hospitals were meant to treat the most complicated and most expensive type of illnesses. From a training point of view, however, it was necessary to have “simple” cases in university hospitals. Future doctors must learn how to treat the simple cases as well. Once again, this feature was taken over by all Central and East European countries after adopting the Soviet planning model.

Poland was divided into 10 health regions (above the level of the 49 *voivodships*). Each region included a Medical Academy and a teaching hospital. In a large country with 35 million inhabitants, this amount of decentralization was meaningful. But a similar structure was developed within every state of Yugoslavia. E.g., there are still five regional medical schools for 4 million people in Bosnia-Herzegovina. Medical schools all had their own hospital networks. E.g., Sofia Medical University had still 12 hospitals in the 1980s.

This multiple system led to overlaps, wasteful duplication, unjustified referrals, underutilized capacities, as well as to unnecessary rivalry between similar institutions for scarce resources. From a Western perspective, the parallel existence of health provision structures – regional, occupational and the network of clinics - may appear quite natural. After all, most Western countries did develop parallel networks (e.g. regional, branch oriented, church-financed, business-based), as well. However, there was a fundamental difference. In the CPEs, the parallel existing structures were almost indistinguishable from each other. They were all part and parcel of the same centrally planned system, controlled by the same ideology, run by the same type of people.

In retrospect, it is quite clear that these developments were the consequences of indirect prioritizing. Since free access to good quality health care could not be guaranteed for *all* citizens at given level of economic development⁴, there was an understandable political will to

ensure priority treatment for *certain* social groups. Which were the privileged groups? Workers of the newly created factories, busy politicians (*nomenklatura*), who had no time for queuing in the polyclinics, employees of key sectors, such as defense, railways, professional athletes, diplomats, children at school, etc. In other words, **universal access and equity, the key promises of the Semashko-model remained on paper only.**

Social insurance and the role of trade unions. Another major revision of the original Semashko-system was the preservation and/or the creation of the social insurance (SI). If health care is “the business of the state” in the same way as legislation, education, flood prevention or policing, why to preserve and expand a separate system for the purposes of health care financing? This is not an easy question to answer.

It is important to understand that SI was maintained⁵ – or re-created if needed - as a separate institution *not* because of health care. The real reason was that the system of sickness payments and pensions required continuous monitoring of employment and wages, as both types of payments were linked to current or past earnings.⁶ This led to the creation of a decentralized SI contribution and collection network. Factories and all other places of work were entrusted with the collection of these contributions and keeping earnings record of employees until retirement. Once this system was in place, it was logical to ask for the administration of certain health care entitlements and related payments (e.g. the access to spas and recreation centers, maternity payments) as well. Within the factory, these administrative tasks were partly implemented by the factories’ own administration and partly by the trade unions.

Let us note, however, that from the perspective of health care, the system of factory-based provisions was *not* a purely administrative matter. As said before, the modified Semashko system openly preferred the industrial workers and other state employees *vis-à-vis* farmers and small entrepreneurs. Until the mid-1970s, these two latter social groups – 20-60% of the population depending on country and time – were entitled to a very limited health care provision only. The majority of Central and East European countries declared universal access to health care only from 1972 onwards. There were two notable exceptions: Bulgaria

(1951), Czechoslovakia (1966) extended complete health coverage from insurance to a citizen entitlement.⁷

On the example of Hungary, the details can be well presented. In 1950, still 5 mn people (53% of the population) had to pay for virtually all health care services and for hospitalization in particular, because they were NOT covered by SI. Only few treatments were freely accessible, such as neonatal care for prematurely born babies, injuries related to military services, lunatic asylums, etc. Otherwise, the prices were prohibitively high. In the 1950s, the cost of an average operation was 1.5-2 times higher than a monthly monetary income of a working peasant. The list of paid services was very long and remained virtually unchanged until 1975. The improvement took place through the reduction of the size of the 'disprivileged' group. In 1955, their number was down to 4 mn and fell under 1.5 mn by 1960. By 1975, the number of disprivileged fell to a few ten thousands.

From a Western perspective, there was nothing wrong with a separate financing institution. Market economies applied this type of purchaser-provider split for decades. In the CPEs, however, the purchaser-provider split existed only on paper, if at all. There was never any close link between SI revenues on the one hand and health care (or pension) expenditure on the other. Both types of financial flows were determined by administrative *fiat* and the resulting deficits or surpluses were simply absorbed by the central budget. The SI institutions were - for all practical purposes - quasi-governmental institutions. The **financial mix** of the CPEs can be reconstructed as follows (Table 1).

TABLE 1: Financing mix of health care in CPEs according to official data

(Percentages)

	USSR (1968)	Czecho- slovakia (1973)	Hungary (1968)	Poland (1973)	Bulgaria (1973)	GDR	Romania (1968)
Government	77	70	48	69	95	49	80
Social in- surance	6	23	46	13	-	48	1
Enterprises	14	N/A.	N/A.	1	N/A	N/A	2
Direct per- sonal payments	3	7	6	17	4	2-3	17
Total	100	100	100	100	100	100	100

Note: These figures need to be taken with some degree of caution, however. Health expenditures of the working places are certainly underestimated. The total costs of maintaining occupational health care were never revealed as production enterprises and budgetary organizations – including the army, the police and the party apparatus – absorbed these costs without reporting them in details. Both Czechoslovakia and Poland are cases to confirm this assumption. In the two countries, 7 and 10 per cent of spending on health came from the ministries of defense, internal affairs and transport (Marrée – Groenewegen, 1996). In terms of employment, Polish data suggest that about 10% of the total health workforce was employed by institutions belonging to the branch ministries.

Source: Kaser (1976) p. 31.

It is important to underline that health care institutions themselves did not receive direct payments from the SI fund. The fund was an integral part of the budget. With some simplification, it is correct to say that from the perspective of health care, the SI did have health-related inflows (a planned portion of the mandatory SI contribution), but did not have outflows towards the health care providing institutions. The medical institutions acquired their funds directly from the central budget.

Illegal payments. Like elsewhere in the Soviet system, consumer sovereignty was severely limited. The Semashko-model did not allow patients to choose their doctors and in a similar way, doctors were not allowed to open medical practice at their own wish. From the early days of the existence of the USSR, however, patients did find the way to get around this, if

they really wanted.⁸ The solution took the form of illegal payments (“gratitude money” or “under the table payments”). First in the USSR, then in other countries it has become generally accepted that patients had a certain amount of freedom to choose from the services offered by the parallel existing medical services. With simple needs, factory workers went to the in-house occupational doctor, where no extra payment was expected. With more complicated cases, or with the illness of their family members, the family doctors (GP) were entrusted. Although, patients typically did not pay to the GP for each encounter, but some kind of *‘pauschale’* payment (once a month, twice a year) was quite widespread. Beyond these two possibilities, more demanding patients could consider to visit a university professor (or someone else they knew at the medical universities). At any given moment of time, the fees for such visits - and the “price” of ensuing operations if that was needed - were known by the public through hearsay. Needless to say, that getting around the official referral system was not always medically justified. It often led to repetition of examinations and waste of highly qualified human resources.

A wrong system - why it worked?

Surprisingly, the Soviet model of health care - a nasty system of “dictatorship over needs” (*Fehér – Heller – Márkus* 1983) - worked much better in health care than in other sectors.

First, let us look at the numbers. If measured by five partial indicators, former socialist countries initially displayed significantly better public health performance than the countries’ overall economic development would have justified (Table 2). Mortality figures decreased spectacularly. By the mid-1960s, only 1-2 years separated life expectancy in CPEs from that in the developed OECD countries. On the other hand, it is noteworthy that later this relative advantage has been eroded in most of the countries. In 1985, only the least developed countries (e.g. Albania, Romania) were able to perform significantly better in health care than in the overall, international GDP-growth competition.

**TABLE 2: Ratio of implied per capita GDP by 5 public health indicators*
To average per capita GDP**

	Indices		Direction of change
	Level of public health (over- all GDP/head = 100.0)		
	1970	1985	
Albania	132.8	136.1	?
Bulgaria	147.3	122.1	?
Czechoslovakia	125.2	118.6	?
GDR	117.9	98.3	?
Hungary	125.3	105.9	?
Poland	126.8	121.4	?
Romania	137.7	144.6	?
Soviet Union	151.0	115.4	?
Yugoslavia	107.6	115.6	?

Note: * Public health indicators used = Water supply, infant mortality, death rate from infections, hospital beds, life expectancy at birth.

Source and methodology: UN ECE (1993) p. 75.

In my view, the Semashko-system's effectiveness was chiefly the result of the following mechanisms⁹:

a) The conscious politicization of health care helped to implement major public health programs which other countries at a similar level of development were incapable to finance or organize.¹⁰ The vast network of Sanitary-Epidemiological Services initially served well-founded medical objectives.

b) Neither patients, nor doctors were free to choose. Their "encounters" were organized in a planned fashion. The supply of pharmaceuticals was also planned and in distributed centrally. Preference was given to domestic production, imports – and hard currency imports in

particular - were severely limited. Rationing was tolerated by the public and the medical profession as well, since the technique of rationing – namely prescription, as a condition to buy subsidized drugs – was widely used in western countries as well.

c) In most countries, primary care was provided by polyclinics where the continuous supply of scarce resources was guaranteed. Furthermore, polyclinics represented a healthy concentration of human capital, with cross-fertilization of ideas, sharing knowledge and allowing for specialization. Family doctors (GPs) and/or outpatient polyclinics worked as gatekeepers, thus alleviating the pressure on hospitals.

d) Central planners used hospitals, which are very expensive in any system, in the same way as in most countries of Western Europe. Perhaps, there was a somewhat more conscious effort to build larger institutions in order to allow for specialization, better use of capital and to ensure quality control. Special emphasis was put on reducing infant mortality and striking at the root of communicable diseases. The rapid expansion of maternity wards helped to increase the proportion of infants born under medical control. The creation of enormous bed capacity was also rational for decades, because this allowed for the isolation of infectious cases.¹¹

e) Like everybody else in the Soviet-type system, physicians were salaried. Given the high labor-intensity of the industry, controlling doctors' wages was a tool of overall cost-containment. Nurses and other health care assistants – which outnumbered physicians in all health care institutions – were not allowed to earn more than a pre-determined fraction of a salaried doctor. In the end, health care workers were *all* poorly paid, but their relative situation was not revolting. First, the low salaries of doctors were compensated by the social prestige of the profession. Second, similar professions were also badly paid (e.g. teachers, lawyers, and researchers).¹²

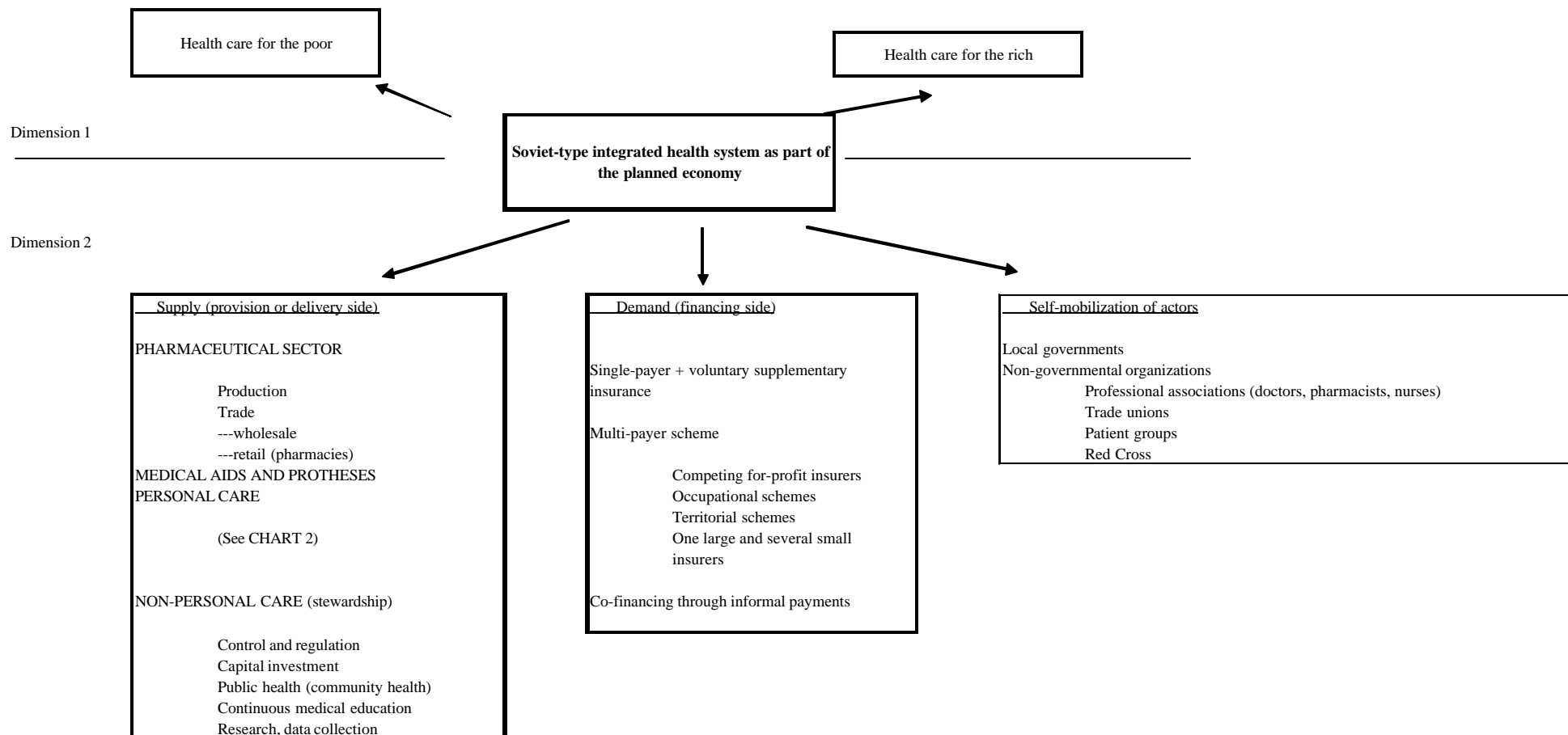
In sum, we argued above that, the Soviet model of health care was in many ways, a coherent, cost-effective system to cope with the medical necessities of its own time and for a period where health care was less technology-intensive and less diversified.¹³

Falling apart

In addition to the unprecedented fall of output, the transition from socialism to capitalism has led to a large increase in inequality. This was foreseeable. Policy makers faced a choice, whether or not this inequality should be allowed to manifest itself in the health sector. This option was flatly rejected. Apart from East Germany, Croatia and Slovenia, we are not aware of any post-communist country, where the health sector was purposely divided for segments devoted to the rich and another destined for the poor (see Dimension 1 in CHART 1). Thus, **universal coverage with an unchanged comprehensive benefits package was – initially - nowhere abandoned**.¹⁴

The example of East Germany is interesting, because this country opted for a lock-stock-barrel introduction of the (West) German health system with its Bismarckian traditions, according to which individuals with incomes above a certain threshold were allowed to opt-out from the common solidarity pool. In Croatia, individuals whose annual income exceeds EUR 30,000 are allowed to opt-out from the mandatory sickness insurance fund. Slovenia, the most developed country among all, is unique because this is the only country where voluntary supplementary insurance covers a large segment of the population. In the Ukraine, one of the most backward post-Soviet states, regional Hospital's Saving Banks operate on a semi-legal basis as private insurance companies – presumably also for the top 1% of the population (cca. 400 thousand clients in 2003).

CHART 1: Opportunities for decentralization in post-communist economies



But health care needs cannot wait. Given the extraordinary importance people in *every* society attach to their own health, differentiations in power, income and wealth, as well as the privatization drive have become the most powerful forces shaping the health care sectors of post-communist economies. Relative to these two factors, new administrative structures, novel public finance paradigms had have only minor influencing power (Table 3).

TABLE 3: The relative importance of social factors, shaping the health care system of post-communist countries

<i>Processes</i>	<i>Relative importance (scale: 0-5)</i>
New borders, new states	5*
Differentiation in power, income and wealth	5
Spontaneous privatization	4
Illegal payments for health care provision	4
Centralization of state-run health care providers	3
Devolution of territorial health administration	2
Professional associations	2
Quality driven segregation between rich and poor	1
Private supplementary insurance	1*
Foreign direct investment in health care provision	0
Private insurance	0**
Patient groups	0

Notes:

* When applicable.

** Except for Slovenia and the former GDR.

With hindsight, it is easy to uncover how the devolution of power influenced the way in which health care functions were assigned to new agents, or the ways in which “old” actors

have changed their behavior. Changes have occurred along the inherited fissures of the nominally integrated system. As explained above, the health care systems of the former CPEs were not fully integrated. In 1989, various parallel structures coexisted. After the regime change, like a piece of perforated paper, **the system fell apart along the existing horizontal and vertical separation lines.**

In logical terms, two processes merit special emphasis. First, the provision and the financing side went apart, and then the picture has further differentiated itself after the emergence of new, independent actors (e.g. local governments, NGOs). Second, the narrowly defined health care sector – i.e. the provision of personal medical care – has also started to disintegrate (CHARTs 1 and 2). In the dimension of time, the two types of disintegration proceeded simultaneously.

Chart 2: Old and new forms of personal medical care in post-communist economies

	<i>Territorial structures under MoH</i>	<i>Territorial structures under other line ministries</i>	<i>Other structures</i>
<i>Levels of provision</i>			
<i>Primary care</i>	Nurse, midwife or <i>feldsher</i> lead health posts in rural areas	Primary care provided in educational facilities (kindergartens, schools, universities)	
	Family doctors, district physicians, paediatricians, dentists, in-home nursing	Workplace primary care provision	
	Polyclinics ---single-handed ---group practice		
<i>Secondary (specialized, out-patient) care</i>	Solo practices	Primary, secondary and tertiary care provided by health care organizations under the ministry of defence, interior, transport or the trade unions (solo practices, occupational health centres, hospitals)	Secondary and tertiary care provided by health care institutions attached to medical universities and schools (clinics)
	Ambulatory clinics, dispensaries, centres for emergency care		
	Polyclinics ---Free-standing ---Attached to hospitals		
	Out-patient specialists ---Standard treatments ---New technologies (MR, CT, dialysis, etc.)		
<i>Tertiary (in-patient) care</i>	Municipal hospitals		
	Single specialty hospitals, national institutes, one-day-surgery		Tertiary care provided by religious organizations
<i>Social care</i>	Rehabilitative facilities, sanatoria, resorts, spas	Rest homes, veteran homes, resorts under the Ministry of Social Welfare or other line ministries.	Social care provided by religious organizations
	Long-stay beds, convalescent care facilities, nursing homes, day-care centres, infants' homes		

In virtually every country, the **pharmaceutical sector** was the first to break away from the monolithic planned system. Imports were liberalized, local factories were privatized, often to foreigners. In parallel, the former centralized distribution mechanism was broken down into wholesale and retail units. Within 3-5 years, these latter ones have also found private owners. In very poor and unsuccessful countries (e.g. Moldova), the flourishing private pharmacies – full with imported medicine - have become for many people the only accessible source of medical help, as the normal providers have become bankrupt, unreliable or

unaffordable. Private pharmacies in the Moldavian capital Chisinau are now operating day and night, thus capable to offer free “consultation” together with the purchased (high price) medicament. In many other countries (e.g. Ukraine, Bulgaria, Romania) hospitals are functioning on a “buy-it-yourself” basis, meaning that patients have to bring in medicaments if they want to be properly treated. This is bad for patients, but good for the pharmacies (often owned by the higher echelons of the hospital’s medical staff). **Medical aids** and the **prothese industry** were also quickly privatized. Foreign suppliers were in the forefront, when it came to privatize formerly state-owned entities.

In the least urbanized countries, where nurses, midwives or *feldsher* led health posts or paramedical centers were traditionally important, there was little initiative to change. These extensive **primary health care** institutions remained publicly owned. The only change was that the share of illegal financing (under-the-table payments or gratuities) has grown dramatically (*Lewis, 2000, Shishkin, 2003*). In more advance countries, like Hungary or Poland, the network of family doctors or district physicians continued to function almost unnoticeably for most of the patients. In legal and financial terms, however, the changes were important. These doctors, together with the pediatricians, the dentists and the most qualified nurses have incorporated themselves and obtained relatively lucrative financial deals with the SI. It is a matter of definition, whether this change is considered tantamount to privatization or not. In Hungary, much of the infrastructure (building, equipment) used by GPs are still publicly owned, but only notional fees have to be paid for their use. In other countries, the process went until full-scale privatization, as GPs were encouraged to own everything they work with. Hungary also serves as a good example for introducing in-home nursing to non-critical patients. Since 1994, several hundreds of small companies provide home care on a for-profit basis with financing agreements obtained from SI.

Secondary (outpatient) care shows an extremely differentiated picture. Even within the same country, one can find many solutions. Ambulatory clinics, for example, can operate as freestanding entities – often in private hand (former GDR, Czech Republic). New technologies, particularly in the field of diagnostics (MR, CT) often enter into the system only through private investment. But there are many examples, where specialized care is pro-

vided by centers attached to state-owned hospitals even for those patients whose conditions do not require the support of such a large and expensive institution. The roots of the problem are historical, as in the 1950s, hospitals were united with polyclinics in most CPEs. They delivered outpatient services to the local communities, which was positive, but at the same time extended the dominance of the hospital sector over primary health care.

In the area of **tertiary care**, ownership changes are few and far between. A notable case is the Czech Republic, where rehabilitative facilities and sanatoria were all quickly privatized in addition to 64 small hospitals (9% of beds). Bulgaria and Slovakia have also reported 16 and 4 private hospitals, respectively – a fraction of the nationwide networks. In many countries, the past decade witnessed a strong centralization and rationalization process. Small, obviously unviable hospitals were closed down or merged with larger units. Albania was an extreme case, where out of 162 hospitals in 1992 only 51 remained operational by 2002.

There is not much comprehensive information about the developments in **social care**, since in many countries the facilities were almost outside the health system. Long-stay beds remained publicly owned and managed, but there are more private initiatives in providing day-care and social homes. Churches are active in this area, too.

Stewardship as understood in recent WHO publications is a particularly important function of post-communist governments to maintain and enhance the trust *vis-à-vis* and the legitimacy of the health care system. Decision making power usually rests in the MoH, but there are many examples where the Prime Minister's Office or the State Health Committee has the power to overrule the ministry (Azerbaijan, Moldova, Hungary, and Estonia). There are examples (Czech Republic, Hungary, Lithuania), where the parallel existence of the MoH and a centralized SI administration has led to institutional rivalry. Given the blurred borders of responsibilities, this was only to be expected.

Another set of problems root in ill-conceived and/or spontaneous territorial decentralization of both the provision and the funding sides. Despite the best intentions, the repeated waves

of public administration reforms caused more harm than good. In virtually all countries, the state administration was reorganized at least once, but often twice during the last 15 years. Health and SI administrations had no choice; they had to follow the general line. In Slovakia, for example, the 1996 administrative reform created 8 counties, 79 districts and 23 networks of specialized local administration. In 2002, the whole system was re-modeled into 12 regions (*zupy*). In Lithuania the Sickness Fund first copied the country's territorial division (10 counties → 10 sub-units), eight years later the number of sub-units was halved to 5, etc. Sometimes, ethnical rivalries and the tolerance to wasteful organizational practices have led to extreme results. The Federation of Bosnia and Herzegovina with 2.5 mn inhabitants has 11 ministries of health: one at the Federation level and one in each of the 10 cantons.

The crux of the matter is that everywhere in Central and Eastern Europe territorial devolution is characterized by **fiscal federalism**, where taxation rules and transfers are annually negotiated with the central government. One way of extracting more revenues from higher-level governments is to neglect health (and education) and hope that – at some point – the central government will allocate extra funds to avoid catastrophe. This type of fiscal federalism stands in sharp contrast with the present Chinese system of fiscal decentralization, where taxation is based on long-term agreements and there is very little redistribution, if at all (Roland, 2000 pp. 279-281.).

The results are meager. The population, as well as the medical profession is voicing serious signals of discontent. Health policy formulation lacks the appropriate vision, regulation fails in setting fair rules of the game with a level playing field. Even in the most developed post-communist countries, there are many evidences of substandard care, waste and conflicts of interest, if not outright corruption.

With few exceptions (e.g. Armenia, Azerbaijan, Ukraine, Moldova) the paradigm-shift from tax-based to pay-roll **financing** has already taken place. But the funds raised through SI are insufficient to cover health expenditures. Thus to a varying extent, the systems continues to

be financed from central and local public funds, by voluntary payments of employers and out of illicit pocket payments of patients.

Important tasks are delegated to **professional associations** (accreditation, quality assurance, and training). There are few countries where the medical profession as such has a direct role to play in resource allocation. Romania is interesting case in this respect. The College of Physicians (CoPh) is legally entrusted with contracting rights with insurers at both the national and the level of 41 districts. By virtue of this, the CoPh has an influence over the content of the benefit package for the insured population, the type of reimbursement mechanisms, etc. In other countries (e.g. Hungary), the Medical Chamber has already asked for such privileges, but in vain so far.

Hospital sector: waiting for foreign investors

In-patient care is undoubtedly the most sophisticated part of any modern health system. It requires vast resources – both in human and financial terms – and complex organizational structures. In well-established market economies, long multi-stage chains of agency relationships have developed in each and every sector of the economy¹⁵ – including health care. Some of these chains are external, such as the links towards suppliers, while others are internal, governing the procedures within the hospitals. E.g. while patients have the physical possibility to “walk-in” into any hospital, usually they follow a well-established referral process. While doctors’ hands cannot be prevented to accept direct payments, in practice doctors are salaried workers and the patient pays through an insurance company, etc.

But there is a problem. Such long agency chains need to grow incrementally and evolve over decades. If one tries to just set up a market economy overnight with such extended and concatenated agency relationships then the superstructure may collapse in dysfunction. That is what has happened in the hospital sector of the former Soviet Union and many countries of Eastern Europe. The political and medical elites who have had the roles of institutional

agents representing broad social interests have betrayed society's trust on a massive scale. Hungarian, Czechs and Slovaks go to Austria or Germany for treatments; the Asian republics of the former Soviet Union go to Turkey. Those who should enforce the long agency relationships and other social obligations are often themselves part of the problem. The elites are impatient: they are well-to-do and want good quality care right now. The medical profession is driven by similar considerations. They show little care about the economic potential of their own countries, they demand equipment at par with the Mayo Clinic in the US and salaries at the level of the EU-average.

Because of these pressures, it is likely that after a slow and hesitant initial pace, hospital privatization will take off sometimes in the near future. Large European and/or American hospital management companies will soon arrive to the region. The forms and the modalities of large-scale sell-offs are not tangible yet, but the cross-country comparisons among the OECD-member countries are instructive. There seems to be a palpable negative correlation between the proportion of privatized hospital beds on the one hand and overall economic development on the other. In less developed countries, such as Greece, Portugal or Spain the weight of privatized sector is higher than in the more developed countries. In some countries (e.g. Bulgaria, Lithuania) most hospitals have been already converted into shareholding companies, which is an important step to take private owners on board. In Romania, some hospitals were already sold or given into concessions. In other countries (e.g. Hungary), corporatized hospitals are only rare.

Insurance reforms

The next likely stage of disintegration will affect health care financing. After 1990, most post-communist countries have formally created an independent, centralized, nationwide sickness insurance funds. Quite mistakenly, this step was identified by most analysts inside and outside the region, as an adoption of the Bismarckian model (Marrée – Groenewegen, 1996, WHO, 1997). In reality, much less happened. Where it existed, the state-run social insurance was extended. Where such institutions didn't exist at all, a sizeable part of the

health ministry's bureaucracy was carved out and a new government body was called into being. The newly created system differed from the Bismarckian-model – as it is known today in Western Europe – in three fundamental ways. First, there was only one sickness fund and not dozens, or hundreds from which people can choose at their own will. Second, membership in this state-run fund was mandatory for the entire population and opting-out was not allowed for the rich – i.e. for those who could afford to buy insurance for themselves. Third, the use of health care services at point of delivery is free of charge, unlike in most Bismarckian systems, where fees and drug expenses are first paid, then reimbursed.

It is impossible to overestimate the demoralizing consequences of these three features. The public at large didn't even notice this paradigm shift. For patients the system has maintained its old characteristics: no mandatory payment from current incomes to caregivers. How come? While administratively it is true that health care contributions are deducted from gross salaries, this is simply not felt by workers, partly because employees' contribution is relatively small, and the bulk is paid by employers, and partly because these payments are automatically deducted from salaries (together with all sorts of taxes). All the above said is *a fortiori* true for pensioners, the largest group of patients, whose pensions – in most countries - are not subject of social security contribution at all. Solidarity, based on coercion alone doesn't work. Employers and employees use every possible tricks to minimize health insurance contributions, because being a free rider in the system doesn't bring tangible consequences for the individual. The rich know that if they become sick they will buy health provisions for themselves for cash, anyway.

The then united Czechoslovakia was the first country, where competing for-profit insurance funds were created right from the outset and these funds were allowed to compete with each other. In other countries (e.g. Russia, Poland, Romania, Hungary) the nationwide sickness fund was purposely broken down to territorial units with some limited autonomy. Competition among the funds, however, was not allowed. None of these solutions has proved themselves so far. In the Czech Republic, the competing for-profit funds represent only 20% of the insured and the public opinion does not see the superiority of their performance *vis-à-vis* the state-run fund. In Hungary or Poland, the territorial decentralization failed, because it

lead to increased transaction costs and political conflicts without delivering any efficiency gain. In Poland a great amount of independence was taken back during re-centralization, in Hungary the recentralization measure was less significant, because the earlier decentralization process was also much weaker. At the time of writing, Hungary is planning to adopt a combination of the American managed care and the UK fund-holding systems that would result in competition among 15-20 for-profit sickness funds. Currently, 10% of the Hungarian population is already integrated into the new system – further expansion is planned for 2005.

Conclusion

In this paper we argued that both the delivery and the financing side of health care is disintegrating in the post-communist countries. However, this process will reach its limits soon. Modern medicine requires large structures, complex agency chains. At the end, the concentration and centralization tendencies of the developed market economies will also prevail in this part of the world. One can hope only that this seemingly inevitable phase of disintegration will not last very long and will not result in excessively large transaction costs in the years to come. After that a healthy process of post-transformation consolidation will take place – hopefully on solid macroeconomic basis.

Appendix 1: Basic indicators of 28 post-communist economies

World Bank grouping	Country	Total population in mn (2000)	Real GDP in 2002 (Indices, 1989 = 100)	Ranking of GNI per capita in 2002 at purchasing power parity (World Bank methodology)	Ranking of overall health system performance, measured by WHO (2000)
Upper middle-income countries	Former-GDR	16 000	100
	Slovenia	1 968	117,3	46	38
	Czech Republic	10 272	105,8	56	48
	Hungary	9 968	11,7	59	66*
	Slovakia	5 399	108,7	60	62*
	Estonia	1 393	93,6	66	77*
	Poland	38 605	129,6	70	50
	Lithuania	3 696	74,1	73	73
	Croatia	4 654	86,4	76	43
Lower middle-income countries	Latvia	2 421	80,6	78	105*
	Russia	145 491	70,2	83	130*
	Bulgaria	7 949	82,9	86	102*
	Romania	22 438	87,4	92	99*
	Macedonia	2 034	78,5	94	89
	Bosnia and Herzegovina	3 977	..	99	90
	Kazakhstan	16 172	85,4	102	64
Low income	Belarus	10 187	95,2	105	72
	Ukraine	49 568	47,3	119	79
	Turkmenistan	4 737	98,4	120	153*
	Albania	3 134	113,9	128	55
	Armenia	3 787	79,3	139	104
	Azerbaijan	8 041	63,1	141	109
Below the average of low income countries	Georgia	5 762	35,1	151	114
	Moldova		38,6	173	101
	Kyrgyzstan	4 921	73,2	174	151
	Tajikistan	6 067	43,1	191	154
	Uzbekistan	24 881	106,3	170	117
	Serbia	10 552	49,5	...	106

Note: * countries, where relative health system performance lags behind relative levels of GNI on a worldwide scale

Source: UN ECE (2003) p. 224., WHO (2000, 2002), www.worldbank.org

References

- Davis, Christopher (1990): "Economics of Soviet Public Health, 1928-1932", in: Solomon, S. S. – Hutchison, J. F. (eds.) : *Health and Society in Revolutionary Russia*, Bloomington: Indiana University Press, pp. 146-174.
- Dorotinsky, Bill (1998): "Transplanting Managed Care to Hungary", U.S. Treasury, *Manuscript*.
- Fehér F. – Heller Á. – Márkus Gy. (1983): *Dictatorship over Needs*, Oxford: Basil Blackwell,
- Figueras, Josep – McKee, Martin – Lessof, Suszy: *Ten years of health sector reform in CEE and NIS: An Overview*, Paper prepared for USAID Conference, Washington, D.C. 29-31 July 2002 "Ten Years of Health Systems Transition in Central and Eastern Europe and Eurasia".
- Field, Mark G. (1957): *Doctor and Patient in Soviet Russia*, Cambridge, Ma.: Harvard University Press
- Fuenzalida-Puelma, Hernan L.: *Health Care Reform in Central and Eastern Europe and the former Soviet Union (A Literature Review)*, Local Government and Public Service Reform Initiative, Open Society Institute, Bp. 2002
- Goldstein, E. – Preker, A. S. – Adeyi, O. – Chellaraj, G. (1996): *Trends in Health Status, Services and Finance (The Transition in Central and Eastern Europe Vol. I.)*, World Bank Technical Paper No. 341.,
- Horvath, Tamas M.: *Decentralization: Experiments and Reforms – Local Governments in Central and Eastern Europe*, Vol. 1. , Local Government and Public Service Reform Initiative, Open Society Institute, Bp. 2000
- Jakab, Melitta – Fidler, Armin (1998): "Health Reform Options in Hungary", Background paper for a World Bank conference held in Visegrad (Hungary), October 16-17.
- Kandrea, Emilia (ed.) *Stabilization of Local Governments - Local Governments in Central and Eastern Europe*, Vol. 2., Local Government and Public Service Reform Initiative, Open Society Institute, Bp. 2001
- Kaser, Michael (1976): *Health care in the Soviet Union and Central Europe*, London: Croom Helm, 1976

- Kornai, Janos – Eggleston, Karen (2001): *Welfare, Choice and Solidarity in Transition (Reforming the Health Sector in Eastern Europe)*, Federico Caffè Lectures, Cambridge University Press.
- Lewis, Maureen (2000): *Who Is Paying for Health Care in Eastern Europe and Central Asia?* The World Bank, Washington, D. C.
- Marrée, Jörgen – Groenewegen, Peter P. (1996): *Back to Bismarck: Eastern European health care systems in transition*, Aldershot: Avebury Ashgate Publishing House
- Mihályi, Peter (2000a): *Hungarian Health Care: Diagnosis and Therapy*, Budapest: Springer Orvosi Kiadó (in Hungarian).
- (2000b): „Post-socialist Health Systems in Transition: Czech Republic, Hungary, and Poland”, *CEU Department of Economics Working Paper*, WP4/2000.
- (2003): HMO Experiment in Hungary,- A Unique Road to Health Care Reform, *CEU Department of Economics Working Paper*, 9/2003
- Orosz, Eva – Burns, Andrew (2000): “The Healthcare System in Hungary”, *OECD Economics Department Working Papers*, No. 241
- - Petru, Ryszard (2001): „The fiscal impact of health care reforms in Central Europe”, in: Dabrowski, Marek – Rostowski, Jacek (eds.): *The Eastern Enlargement of the EU*, Kluwer Academic Publishers, Boston/Dordrecht/London, pp. 203-232.
- Peteri, Gabor, ed. (2002): *Mastering Decentralization and Public Administration Reforms in Central and Eastern Europe*, Local Government and Public Service Reform Initiative, Open Society Institute, Bp.
- Roland, Gérard (2000): *Transition and Economics*, MIT Press, Cambridge, Ma., London, England
- Shishkin, S. V. ed. (2003): *Informal out-of-pocket payments for health care in Russia*, Moscow Public Science Foundation – Independent Institute for Social Policy, Moscow.
- Stiglitz, Joseph (1999): „Whither Reform?” *World Bank Annual Conference on Development Economics*, Keynote Address
- United Nations Economic Commission for Europe (1993): *Comparative GDP Levels (Physical indicators, Phase III.)*, Economic Studies No. 4. , United Nations, New York.
- (2003): *Economic Survey of Europe*, 2003 No. 1., United Nations, New York and Geneva
- U.S.S.R. Handbook (1936) , London: Victor Gollancz Ltd.

WHO Regional Office for Europe (1997): *European Health Care Reform (Analysis of Current Strategies)*, WHO Regional Publications, European Series, No. 72.

WHO (2000): *World Health Report 2000*, United Nations, Geneva.

NOTES

¹ The de-integration of the former Soviet Union has led to open wars in Armenia, Azerbaijan, Georgia, Moldova, Russia, Tajikistan and Turkmenistan. The fall of Tito's Yugoslavia triggered war and major destructions in Bosnia-Herzegovina, Croatia, Kosovo and Serbia. Two other Balkan countries Albania and Bulgaria suffered massive exodus of people affecting about 10% of their population, although these two countries were not directly involved in any war. In the Ukraine, the disruption of the economic system pushed an estimated 7 mn citizens – out of a total population of about 50 mn - to seek work in other countries. In some countries, the medical profession suffered exceptionally great losses: from Turkmenistan Russian-speaking doctors and nurses were forced to flee in large numbers, because they were not willing and/or capable to learn Turkmen. To a smaller extent, such exodus happened in most non-Russian successor states of the former Soviet Union.

² Western specialists, of course, were fully aware of the significance of all three issues. See e.g. Field (1957), Davis (1990).

³ As Field (1957) explained in a succinct manner: „The regime is not interested so much in providing the entire population with medical care for its own sake as in providing care to the part of the population which, in the estimation of the regime, is most capable of contributing to the realization of its goals or on whose loyalty and support it depends most.” *op. cit.* p. 13.

⁴ As a matter of fact, many Western countries were also unable to introduce and maintain universal access for their whole population until 1945 or even later.

⁵ Russia introduced a Bismarckian social insurance system already in 1912 – i.e. years before the 1917 Bolshevik revolution. Most East European countries had done the same around the turn of the century, thus the communist health financing system had to be superimposed on the existing Bismarckian system after 1945, when the Soviet model of health care was adopted.

⁶ This was *not* the case in health care provision, where treatment took place in-kind and there was absolutely no link between health care needs on the one hand and earnings on the other. As Table 2 indicates, in the Soviet Union only a fragment of health expenditures was financed from SI (e.g. sick pay, maternity leave, spas), while the bulk was directly paid by the central budget. For this reason, in many post-Soviet republics it required a major rearrangement of government finances to shift health care provision entirely from tax-financing to pay-roll financing. The Ukraine, for example, is still contemplating the shift.

⁷ During the 1970s and 80s, national constitutions used a vague and ambiguous language. The Czechoslovak basic law stated that “every worker has the right to the protection of his or health and medical treatment” (23. § (1)). The Hungarian version ran as follows: “In the Hungarian People's Republic citizens have the rights to the protection of life, physical fitness and health” (57. § (1) etc.

⁸ For a recent overview see Shishkin (1993). Whether it is true or not, it is worth quoting from this source a statement widely attributed to Semashko himself: “There is no need to pay good salaries to doctors, because doctors will always be able to provide for themselves”. *op. cit.* p. 36.

⁹ Stable economic growth itself, high levels of employment, consciously promoted educational programs and the emancipation of women were all among the explanatory factors. For a more detailed description of the original Semashko model see Mihalyi (2000b).

¹⁰ The strong politicization of health care helped the state to implement major public health programs, but there was little or no room for effective campaigns against bad life style habits. The importance of this issue, however, became clear only many decades later. By contrast, the tendency to carry out mass screening with little thought as how any needs detected will be met, was problematic from the very beginning. It was even more problematic later on that the system of data collection on the health status of the population largely remained in the hand of the San-Epid stations, in spite of the evidently growing impact of non-communicable diseases which were outside of their competency.

¹¹ Beyond these medical considerations, the Soviet model of health care showed a strong pro-hospital bias for an entirely different reason. Military planners insisted on the creation of access hospital capacities along the Western borders of Russia and the Soviet empire. Thus in countries like Estonia, or in Hungary a large number of extra hospitals were built in the 1950s in preparation of a hypothetical Third World War.

¹² There were only few socialist countries, such as Hungary and Poland, where some doctors were privileged to run private practice *in addition* to their salaried job. In the majority of CPEs, this possibility was virtually non-existent.

¹³ Although it was surely not on purpose, many elements of this system were “copied” by post-war Western health care systems, most notably into the early ‘editions’ of NHS in the United Kingdom (e.g. universal coverage, tax financing, powerful health ministry, regional planning and low relative wages).

¹⁴ It is noteworthy that the post-communist Russian constitution of 1993 still uses the same language. According to § 41. “provision of health care at state and municipal health institutions shall be free of charge”.

¹⁵ This argument is directly taken from a very influential paper of Sitglitz (1999).