

CONCEPTUAL BACKGROUND PREPARATION OF MANAGEMENT DECISIONS FOR THE FORMATION OF A MODEL OF NATIONAL HEALTH CARE: A SYSTEMATIC ANALYTICAL APPROACH

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The problems of system-analytical preparation make effective management decisions for the formation of the Russian model of healthcare with the dynamic changes in the macro- and micro-economic factors of the national economy.

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Today in the economic and management community there is practically no doubt that to view healthcare as an entirely grant-based industry which consumes resources and is financed with whatever funds remain, is a profound mistake. In the present-day world healthcare is positioned as the most important social state institute, which contributes significantly to the national economy and formation of the national wealth. In all fairness this ensues from projecting the primary goal of healthcare – assurance and support of public health – through a prism of state economy, with focus on reproducing labor potential and preserving ability to work [1].

Also it should be noted that at present many countries of the global community, including the economically developed countries, struggle to resolve issues with putting together most effective models of healthcare development that consider onrush of medical science, equipment and technology, as well as dynamic transformation of social and economic environment under changes of macro- and microeconomic factors in the world and national economies, which are hard to predict. To a great extent this can be explained with greater difficulty and labor intensity in the current social and economic assessment in order to make decisions, which are important and strategically significant for adequate development of any industry, and should enable to fend off new threats, as well as dangerous and already developed problems [2].

Indeed, the globalization processes and major demographic, social, economic and environmental changes issue challenge to all countries. Over the last 25 years the countries of the European region members of the World Health Organization (WHO) witnessed a great number of profound political, economic and social changes. As it is noted in various sources even in the relatively prosperous European countries overall health of its residents improves insuff-

ficiently (in relation to the efforts made). Many specialists are getting more emphatic in their assertion that now is the time for deeper apprehension and insight into the nature and extent of determinants of problems that form within social and economic processes, and directly connect with community health care.

There come to the front problems of managerial decisions, which can be figuratively described as “financial and technological scissors” that ruthlessly and literally “hack away” attractive healthcare projects. This paradox of “financial and technological scissors” involves substantial and difficult contradiction of two trends:

- on the one hand, availability of the existing knowledge database and rapidly developing technologies enables to deal with the current issues in disease treatment and community health improvement;

- on the other hand, cost of newer and more extensive technologies can surpass available financial capacities (of both government institutions and individuals if using fee-for-service medicine), especially during periods of economic difficulties.

This explains the mounting concern that the existing state funding can prove insufficient for a financially acceptable universal access to consistent and good medical care, which is of particular importance in the circumstances of global and national economic volatility [3].

In recent years active efforts have been made to improve financial situation of the Russian healthcare. However many problems remain unresolved, with one of the reasons being incompleteness of organizational and management institutional restructuring in the industry. Their acuteness is defined not only by extent of the healthcare underfunding, but also lack of clear understanding as to which model the Russian healthcare goes to today, and what priorities there are in relation to global economic transformations and growing

demographic trends. The economic crisis escalated and clearly highlighted weaknesses in the Russian healthcare, poignantly raised a question of continuing initiated reforms, which were aimed at improving availability and quality of medical care, efficiency in utilization of the allocated state funds. Underestimation of social demographic factors plays a critical part, particularly ageing of population as a slow catalyst of an economic crisis with ominous consequences for the whole management system [4]. Especially important for today's Russia, in light of the abovementioned circumstances, is the focus on creating a strong medical support for the broad movement to fully implement aspirations to active ageing. It should also be noted that only on this basis a fully reasoned decision on incrementing the retirement age can be made (instead of the pointless and incompetent jabbering seen on TV shows).

In all countries, without any exceptions, the economic system and healthcare system are the two most complex, with their interaction contingent upon both direct and deeply internal feedbacks that are often critical for the intended effect. The public health is explicitly dependent on the level and type of economic activity and economic policy. And it involves the following chain of logic: distribution of both private and public resources – availability of effective healthcare – public health.

In fact, this conceptual arrangement determines one of the fundamental key strategies that WHO recommended to the European governments for anti-recessionary measures in 2009, which stated: "Every minister is a Minister of Health" [5]. The strategy is as relevant as ever for the situation in the Russian healthcare system. Within the given context another thesis is also practically assured that healthcare is only one of the important determinants of health, and expenses on healthcare are only one type of investments in health.

From the abovementioned it clearly follows that to invest in health means to invest in economic development of a society, which is especially relevant when the world system undergoes significant transformations in the conditions that enable the so-called "persistence" of an economic crisis. Thus in some countries it can be characterized as an "indolent degenerative economic process", while in other countries with inefficient economic policy it can develop into a threatening situation vulnerable to influences of micro- and macro-setting factors [2, 6].

Today there is an active search for the most effective conceptual framework of the Russian healthcare economic model, based on consistent and analytical research that first and foremost includes:

1. Theoretical understanding of the market mechanisms in order to achieve objectives of the healthcare policy.

2. Case studies of the market reforms in the countries, where it is implemented in the most consistent manner.

3. Assessing implementation of a market model in the Russian healthcare consistent with the aspects of the industry development [7].

4. Search for a model that corresponds with particular qualities of the Russian society and prevailing economic conditions.

The essential aspect of developing conceptual solutions to form a healthcare model is to account for a known factor, which could be called a "recessionary demand increase factor in medical care". This means that in general in a period of crisis demand for medical services increase dramatically. It also employs cause-effect relationships, which are shaped in a recessionary social and economic environment, creating another chain of social strain: changes in resources available for the healthcare system – changes in conditions and style of life and consumer behavior – changes in social norms and values – changes in public health indicators – increased risk of financial difficulties stemming from health condition [8]. To ensure the minimum required amount of financing for healthcare facilities all available sources of funding should be consolidated. Under the conditions of government deficit and low household income only a diversified model with multiple financing could be viable and ultimately effective [9].

According to the signs at this stage Russia is making a rapid transition from the social insurance model to a commercial one, that way committing an error, which some countries try to rectify by reinforcing the state role in the healthcare. The drive to a market model without an adequate understanding of risks related to the transformation is extremely dangerous from the viewpoint of healthcare functioning as a system.

Why cannot a purely market healthcare model be implemented in Russia at the present stage of social and economic development?

Strictly speaking the healthcare market model has a number of disadvantages that at present do not allow for its effective application in Russia:

1. This is an expensive model (in the USA it produces 12% GDP to the budget, and consumes 14% GDP).

2. Access to medical services is limited with the ability to pay. Even with improvements in the quality of life in Russia the most destitute social groups (the elderly, children, and disabled people) would not get full medical service.

3. Reliance on the market self-regulation reduces control over price management.

4. Private healthcare is underdeveloped, hospitals are poorly equipped for effective competition, weak facilities of medical preventive institutions (MPI).

5. Lack of management that could be effective in competitive environment and is guided by generation of profit (importance of this factor cannot be overestimated with transition to the market model).

Under the market conditions, where only changes are constant, there is a pressing need for transformation that would enable companies, or even whole industries, to be more effective. And it has a direct relation to healthcare as well.

It should be realized that in today's Russia the primary motive for company restructuring is the depth of an economic crisis and particulars of development of domestic transition economy, with its oftentimes unsystematic and even controversial reforms.

An idea, crucial to the management concept, was set forth, which stated that an organization is an open system capable of adapting to a rather diversified external and internal environment, and the main cause for what occurs within an organization should be looked for without it.

Therefore the healthcare system should be viewed as an object that functions in the environment and interacts with other systems. Primarily this means that nothing in healthcare can be localized and investigated independently. Only on the basis of such philosophy can the nature of current developments, causes for progression of processes and events be understood and correctly assessed, sources and resources of its occurrence defined, as well as targets they generate and roads to such targets.

Following the appropriate analysis of the current situation and definition of the opportunity corridors a "pattern model" of the prospective healthcare must be created. It also brings to the fore a function of labor potential reproduction in the society and preservation of its ability to work, which, as it was noted above, gives grounds for viewing the industry as the one that contributes to the national economy and generates the national wealth. Clearly in this context the healthcare is also regarded a resource consumer.

Assessing the state of macroeconomic environment in general with regards to the area of interest – healthcare, it is appropriate at first to distinguish essential qualities of the current situation in the international and national social and economic space. Today the social and economic situation in Russia and the rest of the world is ambiguous and an attempt to evaluate it highlights problem areas in practically every prominent system component [10–12]:

1. There is no doubt that the world community is in political crisis, its causes lying in the global crisis of the world order, redivision of spheres of influence, inversion of the global order, intensification of the struggle for global leadership among the largest economies in the world. Some politicians assess the current situation as a controlled chaos. At that the largest threat would be transition of the world order to an unregulated chaos with loss of control.

2. Redivision of spheres of influence between the East and the West. Establishment of global subsystems that in one way or another divide the uniting world (Transatlantic union between Europe and the USA, SCO, etc.).

3. Negative consequences of the globalization policy, which lead different countries to an ever-increasing dependence on the external market and enhance its vulnerability in all economy management areas. A dependency on external investments and exchange rates also increased.

4. The need for reinforcing the national security in all areas, especially economic security.

5. With a serious reliance on external factors, an exercise of one's right to political will may evoke (and, as practice shows, evokes) inadequate response of the world system to a situation of shift of a tenuous pseudoequilibrium in the world order. In such case it is quite challenging to anticipate consequences of some actions – more often than not they are unpredictable (considering close interrelation of different components within a unitary whole the consequences may explosively extend to all sectors in a systemic circle of the macro- and micro-economic space).

6. The "gas diplomacy" still has a significant influence on the social and economic status of the country. The raw material leverage affects strategic decision-making and proves difficult for complete removal.

7. An external political crisis in conjunction with the problems of a "resource economy" creates tendencies for internal unrest in the country. And under certain conditions this process can mount, something that is clearly noticeable in the current situation.

It would seem that healthcare is one of the most apolitical areas of a national economy, however highly qualified and responsible policy makers are increasingly focused on interprocess communications at the macro level, realizing that the most severe "shockwave impact" of the consequences would be on the social welfare, and, among the first industries, healthcare is the one to react to these negative changes.

Today many politicians and leading economists acknowledge an economic crisis is occurring in Russia, with the following characteristics:

1. It is directly related to the global political crisis (economic sanctions).

2. Alleviation of the economic relations with Europe and the USA. Increasing rate of development of economic relations with the Asian countries.

3. Economic redivision of the world – at WTO conditions new alliances between countries are established based on streamlined versions of economic cooperation with the centers of gravity at the USA and China.

4. Reorientation of the production and sales of practically all types of commodities to the Russian domestic market.

5. Rise in exchange rates to ruble. Inflation, which is constantly and perilously close to the loss of control.

6. Price deflation on the oil and gas markets, which makes the basic sector of the Russian economy – base materials – vulnerable.

7. Decrease in investment attractiveness of the Russian economy sectors and changes in the investment geography.

8. Onset of the budget deficit and the need for its redistribution under the conditions of a high uncertainty in the economic status.

9. Increment of business non-confidence in the government agencies and officials.

10. Change in the state (near-critical) of the social section in the macroenvironment as a response to political and economic transformations.

The basis of an optimistic scenario for the Russian innovative breakthrough lies in the industrial expansion and production growth in strategic perspective. Of course, a special place in solving this task is given to import substitution, though in all fairness it must be said that it did not appear on the day of announcement by the USA and Europe of their sanctions. It is well known to the specialists in economics and management. At present this is a situation, where it needs to be solved under the conditions of anti-recessionary measures, and this means quickly, reducing, redistributing and economizing material and financial resources. Under the circumstances, in the conditions of shortage of internal funds and investment reduction it is crucial not to make strategic mistakes (riding on the “wave of short-term production burst”) that can lead to persistent recession, which would only be exacerbated by the existing sanctions (proportionate to their extension) [13, 14].

Today, more than ever, effective management can play a fateful role in the bailout of Russia, and it is especially in-demand in the Russian healthcare [15] (fortunately this understanding is apparent at all management levels). A rather significant factor in the effective stabilization of the current situation can be collaboration between the business elite and the state, and investments to fun-

damentally change the industrial production, which would enable to if not revolutionize the production, but at least to stabilize the basic branches, and outline the development options for high-technology production and systematic reorganization of the existing base concentrated in the real economy [16].

Certainly a special attention should be paid to pharmaceuticals and the medical industry. There, as in other industries, the problem of import substitution is long-standing and severe, for which reason back in 2011 the Federal special-purpose program “Development of the pharmaceutical and medical industries in Russia for the period through to 2020 and further on” was designed to transfer these industries to an innovation-driven growth model. The program is geared to technical re-equipment of the Russian pharmaceutical and medical industries, bringing its products to a degree of competitiveness on the international markets, and contains a list of activities aimed at modernization of the existing research institutions and creation of new ones, and their inclusion into the chain of innovative products. It is designed to further introduce the Russian products to the international markets and increase the product output by 8 times compared to 2010 [17].

The leading Russian pharmacologists and practicing physicians feel a certain suspicion towards the announced ambitious plans for a rapid import substitution in the pharmacological industry. According to many specialists the state still allocates insufficient funds to finance research activities that precede production of the Russian medications [18–19]. This means the problems already begin at the preliminary stage of the production process (at the very beginning or even prior to the process), and naturally instead of serving as a foundation for success it creates a high risk of failure. The situation is worsened by the fact that at present it is difficult to find a Russian company able to develop a drug from scratch and carry it through to commercial distribution on the international market. Provided that the full cycle of development is 10 to 15 years, evidently it would be rather problematic to reach 50% in production of domestic innovative products by 2020 (and according to estimations of a number of experts – absolutely impossible [20]). Meanwhile today there is only one criterion for choosing commodities in pharmacies in most cases – a lower price, which is a focus for pensioners and people of poor income. Many practicing physicians note that the quality of some Russian medications not always conform to the specifications stated and the increase of import substitution is only possible

under greater government control over the quality of pharmaceutical drugs and their compliance to the international quality standards. Out of 448 life-saving medications over 160 are still not produced in Russia [18].

There is also a not exactly comforting situation in production of the domestic medical equipment and health products. From the analysis of the Russian market of medical equipment conducted by the economists of the Bauman MSTU it can be concluded that today the most important segments of the high-technology medical equipment market are unquestionably dominated by the international companies (Hitachi, Philips, Siemens, Toshiba, General Electric, Dräger), and there are no objective preconditions for radical changes in the situation. An adequate import substitution requires consolidation of domestic producers, sufficient funding and personnel resources. The market growth is phenomenal, and the average over the stated period is ca. 19% a year (with the worldwide average of 7%). The reasons for such growth are the increase of business activities in Russia and ageing of the population that leads to a greater demand for healthcare services. In the last decade large-scale investments were attracted to the healthcare, however the funds were mainly invested into purchasing medical equipment, not developing the medical industry. Despite the growth of production of medical equipment in Russia (in value relation over the period from 2000 to 2011 by over 4 times), the share of Russian producers on the domestic market over the stated period reduced from 30 to 18,5% caused, on the one hand, by inflation, and, on the other hand, by a growth of the share of expensive high-tech medical equipment (HME) [21]. According to the analytical data the most important segments of the HME market in Russia are:

- products with high degree of imaging (tomographic scanners, ultrasonic units, angiographic units);
- anesthesia apparatus and artificial ventilation instrumentation;
- vital activities monitoring systems.

Importance of these segments has objective reasons and can be explained by not only ageing of population, but also prevalence of cardiovascular and oncological diseases, including among the middle age and with a dangerous tendency of a shift to the younger age groups.

In March 2014 a new draft decree of the Russian government “On banning purchase of commodities (selective number of medical products) produced in foreign countries for the State and municipal needs in order to protect the domestic market” was published for public hearings and assessment of regulatory con-

trol [22]. Among such products are: antiseptic tissues and draining sorbents, tomographic scanners and X-ray agents, fluorographs and defibrillators, microsurgical and dental instruments. It was assumed that following introduction of the decree the output of domestic medical equipment will increase by 4 times by 2020 compared to the estimated figure for 2014 – up to 78,8 billion rubles [23]. However, the Expert Advisory Body noted that having drawn up the draft, the Ministry of Industry and Trade did not provide analysis of the Russian industry capabilities to produce sufficient amount of medical products instead of the banned ones [24]. The experts also made some critical comments on the drafting process: views of the key reference groups and, above all, the medical community and healthcare branch that bear the prime responsibility for the quality medical service [25].

A viable competition, at least on the domestic market of high-tech medical equipment, requires an all-around consolidation of efforts from the Russian companies and drastic modernization of the medical industry. This provides an adequate import substitution on the domestic market, and also reinforces the government credibility, stimulates development of the Russian science and industry in general, creates new work places. Once again it makes abundantly clear the importance of healthcare for development of the Russian economy and possible sizable contribution to solving the task of innovative breakthrough.

It should not go unmentioned that what also poses a serious risk for preparation and implementation of the anti-recessionary program is a “rose-colored spectacles” syndrome, that enables some specialists and officials to say there is no economic crisis in the country [11]. This statement could have been regarded as accurate, if it was not for markers of worsening in the economic climate – emerging of the social crisis patterns in the country. And unfortunately a quite significant “contributor” is the existing healthcare system. For instance, at present Moscow (and it is followed by some of the regions) combines healthcare facilities – first outpatient clinics, then hospitals. The conjoined hospitals close up departments, cut back on doctors and nonmedical personnel, and not one at the time, but by dozens [25]. Doctors are offered to undergo retraining and focus their efforts on the outpatient-based care, where there are staff shortage and low availability of some types of medical care in many outpatient clinics. The reasons for the reform being implemented, according to ideologists, lie in orientation on the European healthcare model, where no more than 10%

of health care institutions are state-owned. Other medical preventive institutions comprise the private healthcare market, which falls under the market self-regulation laws. A number of hospital beds cut are explained by reduction of a number of patients in “social hospitalization” [25]. What is exactly understood under social hospitalization in the Russian healthcare? Strictly speaking it is a paramedical term that is almost never found in medical records. Sometimes we tend to forget that healthcare is a social category and any health problem can be socially important, and there is a number of facts to back it up. With a growing trend of ageing of population perhaps the term “social hospitalization” should be a part the medical practice, followed by an increase in the patient capacity for this population category. Currently the opposite is true.

One of the essential errors of the domestic healthcare is that it is attempted, however formal and without systematic analysis, to copy organizational and managerial decisions of the European countries. Historically there is a completely different structure of society in Russia. The so-called middle class is thinly represented, and high-tech and expensive medical treatment is aimed at it. Stratification of the Russian society is, to put it mildly, “quite paradoxical”, and prior to focusing healthcare on a financially reliable population group, this group should be sufficiently present. Today even doctors would not be considered a part of the middle class. The reform stipulates that the social (meaning free-of-charge) segment of medical care would reduce substantially and the released facilities would be acquired by private investors that are expected to solve humanitarian problems of public health protection. Though business and social responsibility in today’s Russia are two subject matters that are far apart. The business is prepared to work under public private partnership, but on one condition – it profits from every kopeck invested. The State can save on budget expenditures, though what does that leave for the patients? Now is the time to ask a long-pending question – how should the doctors keep working under the conditions of volatility and complete demotivation in their favorite occupation? Who should frail elderly people that live on a pension turn to, when in the outpatient clinics queues could last for a month, and ambulance may not attend every call, even though doctors may not be on strike at the moment, and so on, and so forth.

Those who want to save on the social sphere should not forget that the result will reverse, and this “boomerang” may hit a lot sooner than it seems. Expenditures of the

government funds would increase and there would come a time to raise the question of giving private clinics back under the state jurisdiction. Single-source financing would switch to multi-source, and healthcare would stop its commercialization, as where business begins healthcare usually finishes. And it is well known that health (to the regret of a certain group of people who bought everything else) cannot be bought.

The social component is in direct and continuous relation with healthcare and it constantly affects every person through transformations of notions of employment and recreation, healthy lifestyle and other social components that, at the end of the day, form the society life.

Healthcare and social sphere is the litmus test for any economic crisis, and they are the first to react to the consequences of redistribution of any processes within the society, especially if instead of sound and elaborate anti-recessionary projects the “management enthusiasts” are concerned with another impulsive and perfunctory “modernization”.

As such the situation in the domestic healthcare branch cannot be viewed independently from the ongoing processes in the world community and national economy, but should be analyzed in a consistent manner. Only an understanding of interrelations of macro- and microenvironment components would allow predicting a vector of further industry development and correcting control actions that are in the way of the reform.

The management on all levels (especially those officials responsible for strategic solutions) should overcome their irrepressible desire to mindlessly and slavishly copy one-time activities, actions and projects that “caught their fancy” during overseas trips. The branch reforms should not be fragmentary and hasty, and need to account for the interests of those involved. The necessity of unpopular measures always has economic, political and social rationale, but radical surgery is never performed on a patient that has not been prepared for it, at least psychologically.

Of course, transition to a free market economy leads up to the need for a socially responsible business environment, which has its laws of development that are different to other paradigms of commodity exchanges. But at the same time public health officials should take the following thesis as an unbreakable rule: some healthcare categories can be a commodity (in specific and individual cases), and a number of categories would never be able adopt such attributes, whatever the changes in micro- and macroeconomic factors of the national economy.

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