Problems of Transition from Tax-Based System of Health Care Finance to Mandatory Health Insurance Model in Russia

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The transition from the command administration model to market-driven economy in Russia incorporated the attempt to replace the former tax-based system of health care finance with the mandatory health insurance (MHI) model. The reform, however, was hindered by complexity of the proposed mandatory health insurance system, its incomplete implementation, eclectic combination of old and new financial arrangements, wide cross-regional variations in transitional models, poor coordination of actions and delineation of authorities between players in the field of health care finance, and failure to induce due competition between health insurance carriers. [1,2]

Currently, the national system of health care finance is characterized with the three problem bundles:

- unrealistic government promise of health coverage too wide to be achieved with available resources;
- inefficient management of health care delivery systems;
- lacking evidence of actual positive changes effected by the new players: mandatory health insurance carriers and funds.

Further evolution of the national system of health care finance, including mandatory health insurance system, will depend on how these problems be addressed and unbundled. The intent of this paper is to analyze the named key problems and suggest some solutions to them.

Financial Inadequacy of the Government Promise of Free Health Care

As compared to 1991, by 1998 public health expenditure had reduced by 33% in terms of resource-related value. [3-6] At the same time, the government promise of free health services was ever the same. The August 1998 financial collapse produced dramatic negative impact upon the entire health care industry. Public funding of health care (including government allocations and MHI premiums collected from employers) in 1998 was 18.5% less than in 1997.

The RF Ministry of Health reported the projected annual cost of primary and secondary care, with current utilization patterns in place, equal to 3.85% of GDP in 1998. This estimate was rated with standard costs per outpatient visit and per bed day in hospital. These rates would include neither facility maintenance nor costs of new equipment. Moreover, no adjustments were made to reflect excessive capacities’ operational costs, while such capacities exist in health networks nationwide. Therefore, the projected annual budget is not enough to cover actual costs incurred within the current national system of health care delivery, unless it is restructured and optimized.

Costs of primary and secondary health services should be covered with allocations by regional governments and employer contributions to mandatory health insurance (MHI) funds. As for today, in 1998 actual public health expenditure amount (aggregate of regional allocations and MHI premiums collections) equaled to 2.93% of GDP. [3,4] Note, that only 75% of projected health care
costs could be covered with those resources. Taking into account the above considerations indicative of inadequacy of pricing methodologies used to project costs, one should admit that the actual level of deficiency of public health programs was much higher (see Table 1).

Table 1. Levels of financial coverage of government guarantees of free health services available to the population.

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
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<tr>
<td><strong>Public health expenditure (% of GDP), including:</strong></td>
<td></td>
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<tr>
<td>Federal budget</td>
<td>0.34</td>
<td>0.21</td>
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<td>Territorial budgets of the RF subjects</td>
<td>2.56</td>
<td>2.19</td>
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<tr>
<td>MHI premiums collection from employers</td>
<td>0.71</td>
<td>0.74</td>
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<tr>
<td><strong>Total cost of government guarantees implementation</strong></td>
<td>3.68</td>
<td>3.85</td>
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<tr>
<td>including costs of basic MHI benefits</td>
<td>2.57</td>
<td>2.69</td>
</tr>
<tr>
<td><strong>Financial coverage of government guarantees (%)</strong></td>
<td>89</td>
<td>75</td>
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* Projected costs of health benefits to be covered under the program of government guarantees of free health care.
** This ratio is calculated as the sum total of territorial health care budgets plus employer contributions to MHI funds divided by projected total cost of government guarantees.


In 1998, the federal government took the first major step to review its promise of universal health coverage. In November 1998, the “Program of Government Guarantees of Free Health Services Delivery to Citizens of the Russian Federation” was approved. While leaving the benefit schedule unchanged, the Program contains useful tools to balance available resources with government guarantees of free health care through meticulous restructuring of current health care utilization patterns in such a manner as to replace costly hospital care with inexpensive outpatient services wherever possible. The trend to reduce excessive hospital capacities was already visible throughout the past decade (see Table 2). The government Program instructs local health care executives to enforce further close-down of idling hospital facilities that fail to demonstrate high cost-effectiveness of care. The Program sets the target of 18.5% reduction in hospital utilization through shifting as much services to the outpatient sector (e. g., day care facilities of hospitals and polyclinics). The share of outpatient costs in public health expenditure shall increase from present 27% to 35-40% in the future. With these targets achieved, public health care expenditure required to cover costs of government guarantees will mount to 3.05% in 1999, which is about 75% of what would be required to fund public health sector with present utilization patterns in place.

Table 2. Public health sector capacities.

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<tr>
<td><strong>The number of hospitals (1,000)</strong></td>
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<tr>
<td>- hospital beds/1,000 population</td>
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<tr>
<td><strong>The number of outpatient clinics (1,000)</strong></td>
<td></td>
<td></td>
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Unfortunately, neither definite timeframes to achieve the Program targets nor cost-analyses of restructuring activities are found in the document. To implement the Program, trilateral agreements will be required between the RF Ministry of Health, Federal MHI Fund, and health authorities at each of the RF territories. Such agreements will cover the following issues: federal government obligations to fund targeted federal programs (e.g., Diabetes Mellitus, Tuberculosis Prevention, Immunization, Medical Technologies Development, and other public health projects sponsored by the federal government) in territories; Federal MHI Fund obligations to subsidize territorial health systems; territorial governments’ obligations to adopt and execute territorial program of health benefits in compliance with the federal program and restructure their respective territorial health systems.

Adoption of the federal program and matching territorial programs of health benefits, however, may not resolve the problem of financial shortfall in public health sector, as it will not address the key issue of excessive coverage promise. The most optimistic projections for 1999 result in 2.8% of GDP estimate for public health expenditure available from regional budgets and employer contributions to MHI funds collectively, which is only 92% of what is required to cover costs of public health programs.

Therefore, public health sector finance and operations will not normalize, unless steps are taken to radically reshape health benefits promised by the government. The most handy opportunity is to introduce patient co-payments, while leaving health services absolutely free for low-income categories and patients with certain diseases.

Anyway, deficient public funding of health services has already resulted in widespread practices of unauthorized co-payments. As reported in January 1998 survey of families in 14 regions (conducted by the Institute for Sociological Study and sponsored by the Boston University Project of Legal and Regulatory Reform in Health Sector), out-of-pocket payments for health services and drugs near the level of 2.73% of GDP, whereof 1.46% go to pay for over-the-counter drugs, while the rest 1.27% are costs of direct provider reimbursement. [7] The notable fact is that the share of shadow “pocket-to-pocket” payments (0.34% of GDP) is far less than the share of multiple odd arrangements invented by health care facilities’ administrators to collect unauthorized co-payments from their patients right in the open (0.93% of GDP). That is, respondents were officially charged the reported amounts at the receipt desk (and these payments could not stay undetected by overseeing agencies) to obtain services they were eligible to receive at no cost.
The survey data indicate that health care systems successfully adapt in new environments of deficient public financing through making it up with private money. Some territories of the RF have already passed enabling acts that legalize co-payments, regardless of their vulnerability as preempted by federal laws. For example, Perm Oblast Health Department established fixed charges for each outpatient visit and each day of patient stay in hospital. Kaluga Oblast legislature considers incorporation of co-payment provisions in the draft On State Guarantees of Health Care Delivery to the Population of Kaluga Oblast. Republic of Karelia withholds 80% of retirement income of elders hospitalized for medical/surgical conditions and redirects withheld amounts to respective hospitals.

All the above is indicative of the urgent need to update the constitutional promise of universal health coverage and legally introduce patient co-payments. The present situation of unregulated collection of payments for formally free services results in limited access to care for low-income and rural populations. In December 1997, twenty per cent of households with the lowest family income spent 27% of their month’s budget on health services and drugs, while the richest 20% of families expended on these purposes only 9% of their budget. Local monthly averages of out-of-pocket costs of health care and drugs were at their lowest in Moscow and St. Petersburg ($34), and at their highest — in minor urban communities ($44).

Therefore, conservation of the present gap between the constitutional entitlement of everyone to receive free health services and actual public expenditure in health sector will result in compensation of health care budget deficit with private payments and aggravate social tensions due to the lack of equity.

**Inefficient Healthcare Management**

As a result of overall decentralization of government administration, healthcare management was also decentralized; the vertical administrative system was eliminated and segmented into distinct federal, regional and municipal systems. In the course of differentiation processes, delimitation of powers and competencies between federal, regional and municipal authorities, by virtue of the political situation, was defined hastily and imprecisely.

Some functions of healthcare management proved not to be supported by corresponding statutory instruments. The question of primary concern is the lack of regulations to compensate costs of healthcare provided by a territorial healthcare system to the population of other territories. Thus, in the healthcare system of the Soviet period a network of specialized interregional diagnostic and clinical centres was created, serving the population of adjacent Oblasts. In turn, within each Oblast, Rayons could essentially differ in services available, since Rayon health networks were widely used to provide healthcare services to the population of other Rayons within a given Oblast. Utilization of such “extra-territorial” health services was subject to thorough planning at the level of central and

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**Table 3. Healthcare expenditure in 1997.**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Rub. trillion</th>
<th>% GDP</th>
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<tbody>
<tr>
<td>1</td>
<td>Government allocations</td>
<td>75.1</td>
<td>2.81</td>
</tr>
<tr>
<td>2</td>
<td>Mandatory health insurance premiums collected from employers</td>
<td>18.3</td>
<td>0.68</td>
</tr>
<tr>
<td>3</td>
<td>Subtotal public expenditure (1+2)</td>
<td>93.4</td>
<td>3.49</td>
</tr>
<tr>
<td>4</td>
<td>Out-of-pocket costs of health services</td>
<td>34.0</td>
<td>1.27</td>
</tr>
<tr>
<td>5</td>
<td>Out-of-pocket costs of drugs</td>
<td>39.1</td>
<td>1.46</td>
</tr>
<tr>
<td>6</td>
<td>Voluntary health insurance premiums collected</td>
<td>0.9</td>
<td>0.03</td>
</tr>
<tr>
<td>7</td>
<td>Subtotal private healthcare expenditure (4+5+6)</td>
<td>74.0</td>
<td>2.76</td>
</tr>
<tr>
<td>8</td>
<td>Total (3 + 7)</td>
<td>167.4</td>
<td>6.25</td>
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*Source: [9]*
regional health authorities.

The single purchaser model of health care finance, with MHI carriers responsible for purchasing the entire scope of regular health services determined in the MHI program for their respective enrollments, should have been implemented through the MHI organizational network: territorial MHI funds and insurance companies that would contract healthcare providers to furnish the type and volume of services defined in the territorial MHI program. However, the MHI system implementation was incomplete, and the MHI programs stood unbalanced with actual financial flows. As the result, territorial MHI funds and insurance companies are practically unable to finance extra-territorial services and purchase a complete range of medical services defined in the MHI program for populations they serve. Thus the key concept of a single purchaser is eroded from the MHI system.

In turn, government healthcare administration agencies should have been made responsible for financing and delivery of health services rendered under federal target programs and tertiary services not included in the MHI program, along with planning and managing utilization of these resources. However, federal and regional health authorities are badly short of resources and thus unable to act in the role of single government purchasers of health services at the territorial level and, in particular, cover costs of extra-territorial healthcare. Government healthcare budgets at different levels are usually planned with no attempt to rationalize utilization of health services to be financed with government allocations.

Powers and responsibilities of healthcare administrations and MHI funds were not precisely delineated. This problem was intensified due to the incomplete introduction of the MHI system: health administrations and MHI carriers continue to fund healthcare facilities without any attempt to coordinate financial flows. In 1997, only 26.6% of public health expenditure was accumulated in MHI funds. [4,5]

All the above created the environment where non-aligned interests of players may lead to an open confrontation between health administrations and MHI funds, and in some regions such conflicts have already actualized.

To eliminate such problems, the reform of the existing eclectic system of healthcare management is required. There are two alternative approaches to such reforms.

The first approach is to recreate elements of vertical government: administrative subordination of the MHI fund to health administrations, centralized territorial health care budget, ear-marked allotments to municipal healthcare systems accumulated at healthcare administrations for their subsequent disposal. This approach will allow the removal of the most acute conflicts in the healthcare management system and primarily those existing between health authorities and the MHI system. Thus, federal and territorial health authorities will receive the opportunity for more rational utilization of resources available to fund healthcare systems. The question is, will they use those opportunities to their maximum benefit? It is predictable that in bureaucratic environments administrators will have no incentives to allocate resources in such a manner as to improve cost effectiveness of care. Moreover, backward transformations may lead to continuation of the present problems and give new rise to those organically inherent in former healthcare administration systems: i.e. ineffectiveness, lack of incentives to improve health care quality and efficiency, a decline in the institutional protection of patient rights, etc.

The second approach is to preserve the autonomy of the MHI system and to implement the MHI model, as legally conceived, to the full extent in all regions, to enforce local governments’ obligation to pay MHI premiums for non-employed populations, to balance financial resources accumulated in the MHI system with territorial benefit plans. While the polycentricity of the healthcare system is preserved, functions of health authorities at different levels and MHI funds should be precisely delineated and supplied with adequate financial resources. Clear distinction of competencies between various health care purchasers should be facilitated with coordination procedures. This scenario of the reform seems more viable from the standpoint of the need to reshape healthcare systems in such a fashion as to make them more responsive to market economy conditions.
Insurer Role in Health Care Finance

Another peculiarity of Russian mandatory health insurance system is that two types of entities may perform the role of insurance carriers: (1) health insurance companies; (2) branches of territorial MHI funds. Health insurance companies are usually private profit-generating entities. By 1997, there were 461 insurers of this type in Russia. [5] Carriers of the second type are structured within government financial credit organizations — territorial MHI funds. Territorial MHI funds are present in every of 89 regions that constitute the Russian Federation. In 1997, territorial MHI funds operated the total of 1,160 branches. In 42 regions of the Russian Federation, health insurance companies are the only MHI carriers; in 23 regions this role entirely rests in MHI fund branches; in 22 regions both types of carriers co-exist.

In 1997 the number of health insurance companies began to decrease. By the end of that year, their number reduced by 14% [5] The notable fact is that most health insurance companies that leave the MHI system do so on in force of administrative decisions of local authorities. In some regions, such a Moscow and Khanty-Mansy autonomy, annual accreditation was required of MHI carriers, resulting in their at least twofold decrease in number, while remaining health insurance companies proportionately increased their MHI market share. In other regions, such as Kursk Oblast, private insurers were simply ruled out of the MHI system with local government acts.

Table 4. Mandatory health insurance system composition*.

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<tbody>
<tr>
<td>Territorial MHI funds</td>
<td>86</td>
<td>86</td>
<td>88</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>Branches of territorial MHI funds</td>
<td>1,058</td>
<td>1,103</td>
<td>1,140</td>
<td>1,108</td>
<td>1,160</td>
</tr>
<tr>
<td>Health insurance companies</td>
<td>164</td>
<td>439</td>
<td>536</td>
<td>538</td>
<td>461</td>
</tr>
<tr>
<td>Healthcare organizations</td>
<td>n/a</td>
<td>4,501</td>
<td>7,372</td>
<td>7,416</td>
<td>7,880</td>
</tr>
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* by the year end
Source: [5]

In November of 1997 the RF Government approved the Concept of Health Care and Medical Science Development in the Russian Federation. [9] The Concept implied that private insurers would be responsible for health care purchasing for the MHI system, while MHI funds’ branches might act as substitute insurers in remote low-populated areas only, where private companies could not offer their services.

With the Concept approval, however, the discussion around appropriateness of purchasing health services for the MHI system through private insurers would not stop. No visible competition exists between insurers. Instead, they simply deal market shares and areas of their influence and operate there in a monopolistic manner. Insurance companies’ operations in the MHI system are widely criticized, for they act as mere “middlemen” between MHI funds and health care providers: in fact, they simply redistribute financial resources available from a territorial MHI fund to providers for fixed interest rates to cover costs of administration, while doing nothing to control utilization and quality of care and protect their customers. Opponents of the reform argue that operational costs of insurance companies and MHI funds are too high, while their efficacy is doubtful. In fact, average costs of administration in territorial MHI funds and their branches was 2.8% of total MHI costs in 1994-97; [10] and health insurers’ costs of administration took away 3.5% of what they received from territorial MHI funds in 1997. [5]

To obtain any grounded answer to the question of whether private insurers’ participation is appropriate in the MHI system, one should have some understanding, first, of what opportunities to improve effectiveness of health care resource utilization are embedded in their position of health care
purchasers for the MHI system. Is competition of MHI carriers prerequisite to their effective operations? Is some positive effect still to be expected from private insurers’ presence in the MHI system even without any tangible competition between them?

Implementation problems inherent to the model of public health care finance through competing private purchasers, along with analyses of the model viability criteria and necessary conditions to produce actual positive impact upon health care effectiveness were examined quite thoroughly. [11] The model of public health care finance through third-party purchasers of health care to contract providers, but without competition of purchasers, was also analyzed. It was demonstrated that separation of purchaser and provider functions and provider contracting by purchasers would all by itself result in a system with many advantages over the model of integrated government finance and administration of health care delivery. [12] Most attention, however, was focused on provider-related aspects of such innovations and effectiveness of health care delivery. Now we are going to address institutional conditions of operational effectiveness of third-party purchasers of health services in public-financed health sector.

The level of insurers’ interest in effective utilization of MHI resources will depend on two driving forces: competitive pressures and regulatory pressures. Regulatory pressures here mean government-imposed requirements as for productivity and efficiency of health care purchaser function.

The level of competitive strain will depend on the following factors:

- the number of competing purchasers for public-financed health programs;
- enrollees’ access to information about quality of competing insurers’ operations and services, along with costs of access to such information and re-enrollment in another insurer’s health plan;
- antitrust regulations, along with penalties for non-compliance and enforcement procedures;

Conditions of positive impact of purchaser competition upon effectiveness of health care resource utilization include: [13]

- government policies to encourage purchaser competition;
- adequate level of purchasers’ administrative capacity to choose the most effective ways to provide health services to the served population;
- securities of patients’ right to choose health insurance plans and health care providers;
- purchasers’ financial responsibility for the effective use of health care resources.

While encouraging effective utilization, the competition of purchasers, however, is not the only way to achieve that goal. In local markets where the level of purchaser competition is inadequate, regulatory pressures may serve sufficient drivers of effective health care purchasing. For government regulations to be capable factor of influence upon insurers and make them perform effectively, the following conditions should be present:

- thoroughly specified requirements as for structure, volume, quality and cost of health services to be provided to the covered population, along with purchaser’s responsibilities to meet those requirements;
- adequate public funding of purchasers through arrangements that encourage effective performance (e. g., stable funding on per member per month basis at rates adjusted for a variety of health risks present in the served population, with rating adjustments made at least once a year);
- administrative requirements to secure effective utilization of public funds entrusted to the purchaser (e. g., mandatory submission of insurers’ operation plans to check how they are going to manage patient flows and channel them into such healthcare facilities that are most appropriate from the standpoint of cost-effectiveness);
reasonable costs of state oversight of insurers’ compliance;

• hurtful penalties for noncompliance with state regulations and their inevitable application to all exposed violators;

• purchasers’ qualification to make informed decisions about the most appropriate ways to render health services and ability to make health care providers respect such decisions.

In Russia, government requirements of rational resource utilization are declamatory and unspecific. The mere control of where government allotments actually go is weak, not to speak of cost-effectiveness control. The government steadily disregards its obligations to finance health care. Capitation rates at which insurers are funded do not suffice to cover medical costs of benefit plans promised to the insured. Moreover, those rates are sometimes amended several times a year, which makes insurers’ efforts to manage utilization and gain on economy impracticable. Regional and local government agencies often force insurers to contract health care facilities under their administration in order to keep them running regardless of quality and effectiveness of care they provide.

In such circumstances, it would be naiveté to expect effective utilization management from health insurers responsible for the use of public resources. Insurers will rather strive to receive more funds at their disposal and live on their commissions (supposed to cover costs of administration) and profit on legal and illegal short-term investments of spare cash.

At the same time, some Russian insurers have demonstrated examples of institutional innovations to facilitate effective utilization of MHI resources. Examples of effective institutional innovations include:

• costs of data communication and management decrease through:
  - automated systems of claims and benefits inventory management and pharmacy prescriptions reporting;
  - individual plastic cards issuance to enrollees for automated input of data about all health services rendered and further claims processing and transactions with providers;

• development of regulations to implement medicoeconomic standards, including requirements as for efficiency of MHI resource utilization;

• implementation of market-driven procedures for MHI resource allocation.

As an example of the latter initiatives, the pilot project undertaken in 1997-98 in Moscow by Max-M and Rosno health insurance companies is illustrative. [14] These two companies acquired from the government the function of payer for drug benefits covered with government allocations. In the course of the pilot, insurers detected plentiful fake prescriptions of covered drugs. The corrective actions followed, including modification of prescription blanks and better control of how they are stored and filled, resulting in complete elimination of counterfeits. Another innovation was purchasing of covered drugs through competitive biddings. The major result of the pilot project was 30% economy achieved as compared to projected costs of drug benefits allotted for in the Moscow budget. [15]

Unfortunately, such examples are few. Unless the competition of insurers is encouraged and, which is even more important, government oversight of insurers becomes really pressing with development of more specific regulations and requirements along with tools of their enforcement, most insurers will retain their present position of “middlemen” in the trade of public health care finance. In the course of fact, development and enforcement of state regulations require much effort on behalf of government agencies. Meanwhile, governments at all levels fail to demonstrate any willingness to engage in such efforts. Conversely, many regional authorities choose to counteract the federal concept of health sector development and approve policies to eliminate private insurers from their territorial MHI systems.

Recommendations as for Government Policies
In order to resolve economic problems present in Russian health sector, the following steps are required:

- revision of current government guarantees of free health care, introduction of co-payments for health services provided to certain categories of population;
- government support of voluntary health insurance development to absorb current shadow cash-flows from patients to providers of health services;
- legislative requirement of financial projection procedures application when planning operations of health care systems at regional and municipal levels: in every region, territorial health authorities, in cooperation with territorial financial authorities, municipal governments and territorial MHI funds should annually redesign their territorial programs of health benefits, including thoroughly planned volume and structure of health services to be provided to the entire regional population and at each municipality within it;
- implementation of systematic activities to secure transparency of expenditures from public funds by health administrations, health care organizations, MHI funds, and health insurance companies: federal requirements on financial data to be reported, guarantees of public access to information for personal use and publication through media, and so forth;
- elimination of shared responsibility for financing health care provided under MHI programs: MHI funds should become sole administrators of resources allotted to cover costs of territorial programs of health benefits;
- enhanced requirements to health insurance companies participating in the MHI system and their operations through more specific licensure terms and stricter monitoring of compliance;
- creation of competitive environments in local markets of mandatory health insurance;
- measures to encourage health insurance companies to manage health care delivery to their enrollees.
References

15. Matvienko, in Meditsinskiy Vestnik.