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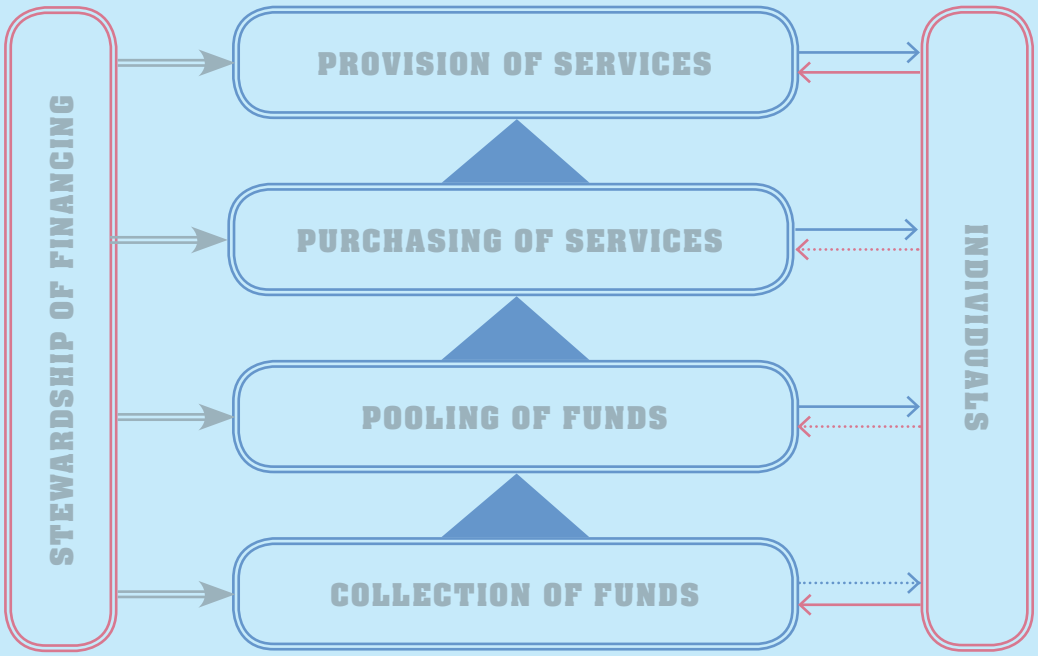

THE UKRAINIAN HEALTH FINANCING SYSTEM AND OPTIONS FOR REFORM

A THOROUGH ANALYSIS OF THE HEALTH CARE FINANCING SYSTEM IN THE UKRAINE AND SUGGESTIONS FOR FEASIBLE CHANGES

Health Financing Policy Paper 2007/1

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BY: VALERIA LEKHAN, VOLODYMYR RUDIY, SERGEY SHISHKIN

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Introduction

Ukraine is a lower middle income country. It ranked 52nd in the world in gross domestic product (GDP) in 2005 at US$ 81.7 billion, but 131st in per capita gross national income (GDI), with $1520).[1]

In the period following Ukrainian independence in 1991 the government has more than once noted a need to reform the Semashko public health care system inherited from the Soviet times, but implementation of reforms has not occurred, and public policy has aimed more at preservation of the existing system. Unlike in other post-socialist countries, large-scale health care reform has not been implemented in Ukraine, but economic transformations in the early 2000s made an impact on health care financing mechanisms.[2] A reform of the mechanisms for equalization of regional health care budgetary funding was included in an overall budget reform.

In recent years several forms of collecting funds from citizens for health care financing have developed, in particular voluntary sickness funds, with new models being tested in several pilot regions. But in other respects the public financing mechanisms have not changed significantly from the Soviet period. In the past two years, health care reform has emerged as a public policy priority. Strategic directions and specific models of health care organization and financing are being discussed, though with a lack of clarity over the problems of the current system. A thorough analysis of this system is needed to identify the priority problems and feasible changes. The aim of this publication is to implement such an analysis.

It should be mentioned that the Ukrainian health care system has recently been the subject of an analysis conducted under the aegis of the World Health Organization and the World Bank.[3] The present report is characterized by two major methodological distinctions compared to previous studies. First, it is focused on the health care financing system. Second, it takes a functional approach to public health care research. Within such an approach health care is considered as a system with collection, pooling, purchasing and provision functions.[4]

The structure of this report reflects the logic of the health financing analysis: First, it is considered with respect to each function (chapters 2–5), then the individual descriptions are synthesized in a characteristic of allocation of the functional responsibilities of the major financing system actors (chapter 6) together with a generalized assessment of the financing system (chapter 7) on the basis of the criteria derived from the aims of health care systems formulated by the World Health Organization.[5] Further in the work we consider the priorities for finance reform.

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[1] World development indicators database. Washington, World Bank, 2005, (http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf; http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf, accessed 6 June 2007).

[2] Figueras J et al. (eds.) *Health systems in transition: learning from experience*. Copenhagen, European Observatory on Health Systems and Policies, 2004.

[3] Lekhan V, Rudiy V, Nolte E. *Health care systems in transition: Ukraine*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2004.
Lekhan V, Rudiy V (eds.). *Key strategies for further development of the health care sector in Ukraine*. Kiev, Rayewsky Scientific Publishers, 2007.

[4] Kutzin J. A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 2001, 56:171–204.

[5] The *world health report 2000. Health systems: improving performance*. Geneva, World Health Organization, 2000.

1. Health care funding

1.1 The overall public financing situation

During the period marked by the collapse of the former regime and transition to a market economy, the production volumes and corresponding state revenues decreased on a very considerable scale. The production volume over the period from 1989 to 1999 was reduced by 54%.[6]

From 2000 to 2004 the Ukrainian economy was characterized, at the least according to the official statistics, by the highest rate of economic growth in Europe and one of the highest in the world, as well as by favourable economic indicators (Table 1). The external debt of the country in 2004 accounted for 27.0% of GDP and interest payments accounted for 0.8% of GDP.[7]

Table 1. Select macroeconomic indicators for Ukraine, 2000–2005.

	2000	2001	2002	2003	2004	2005
GDP, in hryvnias	170.1	204.2	225.8	264.2	344.8	415.5
GDP growth, % year-on-year	6.1	11.1	6.3	10.3	12.1	4.0
CPI inflation, % year-on-year		6.1	-0.6	8.2	12.3	15.9
Public sector debt to GDP ratio, %		36.6	33.6	29	24.7	21.1
Government Revenues to GDP ratio, %	35.1	35.6	35.3	35.5	34.5	39.7
Government expenditures to GDP ratio, %	34.5	35.9	34.6	35.7	38.9	42.7
Consolidated budget deficit to GDP ratio, %	-0.6	0.3	-0.7	0.2	3.4	2.9

Source: State Committee for Statistics of Ukraine, World Bank,[8] IMF, 2005

This provided for growth of real income, but it was not considered sufficient: in 2004 the average monthly salary amounted to $111, which was half of the average salary in Russia.[9] Dissatisfaction with the social and economic situation and political institutions caused the "Orange Revolution" at the end of 2004. The revolution caused intensification of social expectations and the expansion of social expenditures in 2004–2005 (increase of the minimum pension and minimum wage, increase in public employees' wages by 57%, etc.).

In total, according to IMF assessments, the deficit of the consolidated state budget in 2005 accounted for 2.9% of GDP,[10] the expenses for provision of pensions in 2005 reached 14.9% of GDP, which is one of the highest indicators in the world. As a result, the tax burden on the economy increased significantly. According to IMF assessments, it amounted to 33.9% of GDP

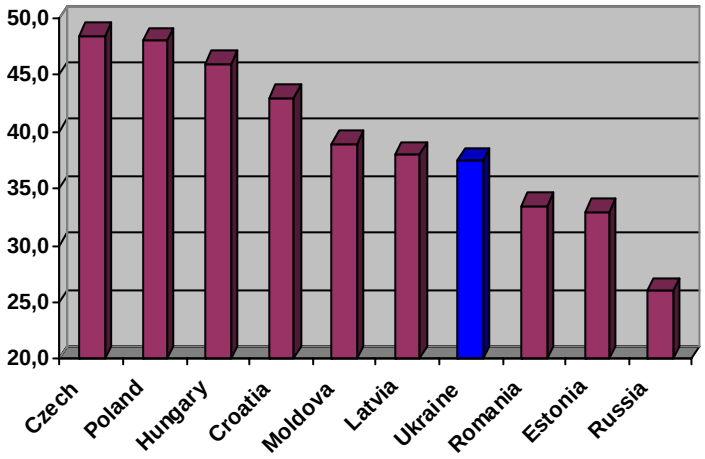
[6] Aslund A. The economic policy of Ukraine after Orange revolution. *Eurasian Geography and Economics*, 2005, 46,5:327–353.
[7] World Development Indicators database. Washington, World Bank, 2005 (http://devdata.worldbank.org/ AAG/ukr aag.pdf, accessed 6 June, 2007).
[8] World Bank, op. cit.; *Ukraine: 2005*. Article IV consultation and ex-post assessment of longer-term program engagement - Staff reports; Staff supplement; and Public information notice on the Executive Board discussion. Washington, International Monetary Fund, 2005 (http://www.imf.org/external/pubs/ft/scr/2005/cr05415 .pdf, accessed 6 June 2007).
[9] Aslund, op. cit., p.330
[10] Op. cit.

(2004=29.1% of GDP). The ratios of revenues and expenditures to GDP (39.7% and 42.7% in 2005) are high for a country with lower-middle income.

The populist social and economic policies of the government, the efforts to reconsider the results of earlier privatization resulted in the abrupt decline in economic growth indicators from 12.1% in 2004 to 4.0% in 2005. According to IMF prognosis, in 2006 the rate of GDP growth would slightly increase to 5.0%–5.5%, but the deficit of the consolidated state budget in 2006 would account for no less than 2.3% of GDP. [11]

Macroeconomic factors and the burden of existing social obligations considerably limit the possibility of increasing public financing, particularly for health care in the near future. The tax burden on employers in Ukraine is quite high and contributions to social insurance[12] are average the countries of central and eastern Europe (Fig. 1). Increasing social insurance contributions would contradict the objective of securing economic growth.

Figure 1. Contributions to social insurance in mid 1990s, as percentage of salary[13]



An increase in state revenues could possibly be secured at the expense of growth in tax compliance rates, but there is still the serious restriction of a large-scale informal economic sector. According to existing assessments the shadow economy in 1998–2002 accounted for 52% of the gross national revenue.[14] Inconsistency in state policy and corruption among public servants hinder significant improvement in tax administration and economic reform. The new political leaders have taken a range of measures to reduce corruption and over past year Ukraine

[11] International Monetary Fund, op. cit.
[12] Ukrainian employers make social security contributions on behalf of employees, based on payroll, of 32.3 per cent for the pension fund, 2.9 per cent for social insurance, 1.6 per cent for employment assistance and between 0.84 and 13.8 per cent for accident and occupational disease insurance, subject to certain limits. Employees make contributions, based on total salary, of between 1 and 2 per cent to the pension fund, between 0.5 and 1 per cent for employment assistance and 0.5 per cent for social insurance, subject to certain limits.
[13] Source: Preker A, Jakab M, Schneider M. Financial reforms in the countries of central and eastern Europe and former USSR countries. In: Mossialos A et al., (eds.), *Funding health care: options for Europe*. Buckingham, UK, & Philadelphia, Open University Press, 2002:80–109 (European Observatory on Health Care Systems series).
[14] World Bank, op. cit.

managed to rise from 128th to 113th on the world corruption list.[15] But the absolute value of the index characterizing the national level of corrupt practices (from 0 to 10) remains very low, at 2.6.

1.2 General expenses

Public health care expenditure almost doubled from 1996 to 2004 (see tables 2 and 3). After a sharp decrease in 1998 and 1999, the general health care expenditure financed out of public and private sources increased by 84% in real terms from 2000 to 2004. Health care expenditure in the GDP increased from 4.5% in 1999 to 6.1% in 2003. In 2004 the growth rate of expenditure slowed down significantly and was 5.5% of GDP.

Table 2. General health care expenditure financed from public and private sources, 1996–2004

	1996	1997	1998	1999	2000	2001	2002	2003	2004
General volume of financing, millions of hryvnias	4 033.4	5 179.2	5 218.0	5 813.5	7 881.9	10 020.2	12 139.2	16 062	18 921.6
Percentage of GDP	4.9	5.5	5.1	4.5	4.6	4.9	5.4	6.1	5.5
Percentage of public expenditure in total financing	81.2	76.4	69.6	65.5	62.0	62.3	62.1	67.1	70.4
Percentage of private expenditure in total financing	18.8	23.6	30.4	34.5	38.0	37.7	37.9	32.9	29.6

Source: Statistical Bulletin. Kiev, State Committee for Statistics of Ukraine, 2001, 2002, 2003, 2004 and 2005.

Table 3. Percentage growth of health care expenditure in real terms from 1996 to 2005, (1996 = baseline)

	1996	1997	1998	1999	2000	2001	2002	2003	2004
General expenditure	100	134	76	66	66	77	90	112	113
Public expenditure	100	102	69	62	62	73	85	115	122

Source: Ibid., with the use of GDP deflator indices.

The official data on health care expenditure by the population fail to include non-official payments for health care. A more complete assessment of private expenditure on health services and pharmaceuticals can be obtained from the data of large-scale household budget research carried out by the Ukrainian Information and Analytic Agency, Statinformconsulting, in 2003–2004 by order of the World Bank within the framework of the "Poverty Control" programme, with methodological and organizational assistance from the State Committee for Statistics of Ukraine.[16] According to the assessments received (see table 4), privately financed health care expenditure 2003–2004 accounted for no less than 41% of general expenditure.[17] According to

[15] The 2004 and 2005 *Transparency International corruption perceptions index*. Berlin, Transparency International (http://www.transparency.org/policy_research/surveys_indices/cpi/2004; http://www.transparency.org/policy_research/surveys_indices/cpi/2005 , accessed 11 June 2007).

[16] The survey involved 10 238 households and 26 675 respondents**.** The selection represented all of the Ukrainian population except military personnel, prisoners, permanent residents of rest homes and retirement homes and marginal groups. *Analytical report on results of the implementation of the project "Health and Education" module sample survey*. Kiev, Statinformconsulting Information and Analytic Agency, 2004.

[17] *National health accounts 2003–2004*. Report by USAID/Ukraine, UNAIDS, 2006 (www.sph.ukma.kiev.ua, accessed 11 June 2007).

the data from other, smaller-scale sociological surveys conducted in certain regions, the rate of citizens' participation in health care expenditure proves to be even higher – more than 50%.[18]

Table 4. Total volume of health care expenditure in Ukraine financed out of public and private sources in 2004

	Millions of hryvnias	**% of general expenditure**
Public expenditure*	13 316.1	58.1
Private expenditure**	9492.9	41.2
External sources of financing*	156.9	0.7
Total volume of health care expenditure	22 965.9	100.0

* Source: the State Committee for Statistics of Ukraine, op. cit. 2004, 2005.

** Expenses from all private sources (households' direct payments, voluntary health insurance, employers).
Source: National Health Accounts 2003–2004. Calculations are done on the basis of the data of the State Committee for Statistics of Ukraine, 2004, 2005; Statinformconsulting, 2004.

Taking into account the assessments, the total volume of health care financing in 2003 amounted to 7.0% of GDP, and in 2004 it was 6.6%. However, the calculation does not seem to be quite correct because the health expenditure figure includes informal payments, whereas the GDP figure does not include the very significant shadow component. So for better comparability of the data across years and countries, the present analysis will use the official data of the State Committee for Statistics on health expenditures. According to them, the health care expenditures came to 6.1% and 5.5%, respectively, in the years in question.

General health care expenditure in Ukraine as percentage of GDP is similar to that of the Russian Federation and Estonia, and is below many other countries in eastern and western Europe (see table 5). The major difference is a significantly higher share of private expenses in Ukraine and other former Soviet republics.

[18] Kryachkova LV, Bechke IP, Boiko OO. Обстеження бюджетів домогосподарств як механізм аналізу попиту на медичні послуги [Review of household budgets as a tool of analysis of demand for health care services]. In: *Вісник соціальної гігієни та організації охорони здоров'я України* [*Social Hygiene And Health Care Organisation in Ukraine*, 2000, 1:90–92; Litvak A, Pogorelyy V, Tishuk M. *Тіньова економіка і майбутнє медицини в Україні* [*The shadow economy and the future of medicine in Ukraine*]. Odessa, Ukrainian Doctors' Association, 2001.

Table 5. Health care expenditure in European countries in 2004

	Health care as percentage of GDP	**Percentage of private expenditure in total health care expenditure**
Czech Republic	7.2	9.3
Estonia	5.5	24.0
France	10.0	23.5
Germany	10.9	21.9
Hungary	8.4	29.2
Lithuania	6.5	24.6
Poland	6.4	30.0
Russian Federation	5.3	40.2
Slovakia	5.8	12.0
Slovenia	8.7	22.8
Ukraine	**5.5**	**29.6**
United Kingdom	8.1	14.1
EU countries	8.9	24.1
CIS countries	5.3	43.2

Source: Health for all database. Copenhagen, WHO Regional Office for Europe, 2006; the State Committee for Statistics of Ukraine, op. cit., 2004.

1.3 Public expenses

1.3.1 State guarantees of health care provision

Ukraine formally has the most extensive guarantees of free health care provision of all CIS countries. In the Article 49 of the Constitution of Ukraine adopted in 1996 it is stipulated that "Everyone has the right to health protection, health care and health insurance. Health protection is ensured through state funding of the relevant socioeconomic, medical and sanitary, health improvement and prophylactic programs. … State and communal health care institutions provide medical services free of charge…".

In the economic decline of the 1990s and corresponding reduction in public health care financing, the state guarantee of free health universal care lacked financial support. That is why the state health care facilities were allowed to provide paid medical services in 1996. In an environment where the conditions for provision of free and paid services were not specified in a transparent manner, this led to the development of the practice of charging money for treatment and a decrease in access to health care for the population in general. This provoked dissatisfaction and caused a lot of patient complaints. In 1998 and 2002 the Constitutional Court of Ukraine considered the constitutionality of patients' payment for health services. In May, 2002 the court ruled that in state and municipal facilities health care must be provided to all citizens irrespective of its volume "without advance, current or subsequent payment", with a stipulation that services beyond the scope of medical aid may become subject to payment. Nonetheless, in practice the right to decide on the relative volumes of free and paid care remains the prerogative of health care providers.

1.3.2 Allocation of health care expenses on budgetary system levels

The main part of public funds allocated for health care comes from subnational budgets. In the 1990s the share of public funds was about 80%. In recent years due to increasing centralized purchase of medical equipment and pharmaceuticals and increasing state health programs, the central budget share has grown: to 35% in 2004, with the remainder coming from subnational budgets (table 6).

Table 6. Allocation of public health care expenditure by budgetary level in 2004

Budgets	**Allocations to health care, in millions of hryvnias**	**Percentage of public health care expenditure**	**Percentage of budget expenditure**
National budget	4 631.3	34.8	7.3
Subnational budgets:*	8 684.9	65.2	22.1
regional	2 318.3	17.4	n.a.
municipal	3 464.3	26.0	n.a.
rayon	2 064.0	15.5	n.a.
village	517.1	3.9	n.a.
Public expenditure, total	13 316.1	100.0	13.0

* Data on the allocation of Hrv 321.2 million on these levels are not available.

Source: State Committee for Statistics of Ukraine, op. cit., 2005.

Table 7. Allocation of central budget health care expenses to budget fund administrators

Fund administrators	**2003**		**2004**	
	millions of hryvnias	%	millions of hryvnias	%
Ministry of Health	1 722.0	50.9	2 524.0	54.5
Other ministries and authorities	1 661.2	49.1	2 107.3	45.5
Total	3 383.2	100.0	4 631.3	100.0

Source: State Committee for Statistics of Ukraine, op. cit., 2004, 2005.

Fifteen vertical state programmes were funded in 2003–2004, including those for immunoprophylaxis of the population, AIDS control, tuberculosis control, oncology and pancreatic diabetes. In addition, state budgetary funds provide for financing of centralized purchasing and other measures for heart peacemakers and endoprostheses, organ and tissue transplantation, high-priced equipment and – starting from 2004 – diagnostic and therapeutic equipment for control of oncological diseases, tuberculosis and other diseases, primarily for rural hospitals.

Table 8. Vertical programme financing in the 2003 and 2004 Ministry of Health budgets, in millions of hryvnias

Programs	2003	2004
Immunoprophylaxis	101.6	104.9
Tuberculosis control	59.6	58.8
AIDS control	16.4	18.1
Oncology	114.7	162.0
Pancreatic diabetes	132.0	165.9
Other programmes and measures	69.8	70.4
Total, millions of hryvnias	494.1	580.1

Source: State Committee for Statistics of Ukraine, op. cit., 2004, 2005.

1.3.3 Prospects of increasing public expenses

During the presidential election campaign in 2004 as well as the parliamentary campaign in 2005 numerous social obligations were assumed (salary and pension increases, etc.) whose fulfilment is facing difficulties. Furthermore, in 2005 the rates of economic growth in the country abruptly slowed down. These factors show that one cannot expect a considerable increase in public health care expenses.

There are also a range of economic obstacles in the way of social health insurance implementation. First, this is a high tax burden for employers (the ratio of all social insurance pay roll taxes to labour remuneration funds is already more than 39%). Second, an increase in prices for energy resources, particularly gas, undermines the competitive capacity of the Ukrainian economy and reduces the chance of achieving an agreement on the new payroll tax introduction. At the same time the introduction of a single social tax (including the health care component) raised from all kinds of revenues, including savings, capital income, subsidies etc., is being discussed.

1.4 Private expenses

1.4.1 Private expenditure on medical services and pharmaceuticals

The health care expenses of the population grew by a factor of 7.4 in nominal terms from 1996 to 2004 (see table 9).

Table 9. Structure of private health care expenditure from 1996 to 2004, totals and percentages

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Private expenditure for health care, millions of hryvnias	759.6	1 223.3	1 586	2 004.8	2 993.7	3 781.3	4 601.3	5 290.4	5 605.5
Expenditure on services, including:	14.3	14.2	19. 8	22.6	24.3	24.9	26.7	24.9	19.8
medical services	10.1	8.5	8.3	5.9	5.1	5.3	4.3	4.4	3.8
social services in health care institutions	0.9	0.8	5.3	3.1	8.3	5.7	6.6	8.1	7.1
educational services[19]	3.3	4.0	5.8	6.4	5.1	7.3	6.0	5.5	4.7
humanitarian aid to health facilities[20]	n.a.	n.a.	n.a.	6.2	3.3	3.3	4.3	3.9	1.8
Charitable contributions to sickness fund s, etc.	n.a.	n.a.	0.4	0.9	2.5	3.3	5.5	3.0	2.5
Private expenditure for pharmaceuticals and bandaging materials	85.7	85.8	80.2	77.4	75.7	75.1	73.3	75.1	80.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: State Committee for Statistics of Ukraine, op. cit., 2001, 2002, 2003, 2004, 2005; working materials of the Department of Economy and Finance of the Ministry of Health.

The expenditures for pharmaceuticals and medical materials increased from 0.78% of GDP in 1996 to 1.36% in 2004. Their share in health care expenditure financed from all sources over the same period increased from 16.1% to 23.9% (see table 10).

Table 10. Private expenditure for pharmaceuticals and bandaging materials

	1996	1997	1998	1999	2000	2001	2002	2003	2004
In millions of hryvnias	651	1 049	1 272	1 552	2 265	2 840	3 374	3 973	4 528
Percentage of GDP	0.78	1.11	1.22	1.18	1.34	1.41	1.41	1.48	1.36
Percentage of health care expenditure financed from all sources, %	16.1	20.3	24.4	26.7	28.7	28.3	27.8	24.7	23.9

Source: State Committee for Statistics of Ukraine, op. cit., 2001, 2002, 2003, 2004.

It is quite difficult to assess the real volume of out-of-pocket payments for health care by the population due to the insufficiency of data about the scale of under-the-table payments. According to the assessment of the project "Ukraine – National Health Accounts 2003–2004", based on household budget research by the Statinformconsulting (see 2.2), the volume of citizens' health care expenses in 2004 was 1.5 times higher than registered by the state statistics.

[19] Payment for training at medical educational institutions.
[20] Cost of donations to health facilities in the form of drugs, equipment, etc.

1.4.2 Voluntary health insurance (VHI)

The number of insured people in the VHI scheme and the payment out of VHI funds increased rapidly up until 2003. From 1999 to 2002 their growth rates were 1.7 and 4.1, respectively, but in 2003 and 2004 the number of insured and volume of payment both decreased (see table 11).

Table 11. Development indicators of voluntary health insurance

	1999	2000	2001	2002	2003	2004
Number of insured, in thousands	268.0	307.5	467.0	459.9	341.2	344.9
Payment from VHI funds, in millions of hryvnias	5.8	10.1	12.8	23.8	16.6	20.9
VHI payments per insured, in millions of hryvnias	21.6	32.7	27.4	51.7	48.7	60.6

Source: State Committee for Statistics of Ukraine, op. cit., 2001, 2002, 2003, 2004, 2005, working materials of the Department of Economy and Finance of the Ministry of Health.

VHI remains a minor form of health care funding, comprising just 0.17% of general health care expenditures.

1.4.3 Health care expenses of enterprises

According to existing statistical data, employers' expenses for health care services provided to their employees in private and mixed ownership (public/private) facilities in 2004 amounted to Hrv 572.6 million, about 3% of general health care expenditures. At the same time only about 15% of these funds went to services provided in health care facilities, while the remaining 85% covered payments to sanatoriums and spas.

1.5 Donors for finance reform

External sources of funding, including international aid, have contributed to health funding. In 2005, donors spent about $140 million, about 0.4–0.7% general health care expenditure. The international aid is narrowly focused – mainly on vertical disease control of HIV and TB. The Global Fund provided a grant of $92 million in 2003 for five years for action against the HIV epidemic. In 2003 Ukraine borrowed $60 million for five years from the World Bank for HIV and TB programmes. USAID spent about $6.4 million for HIV programmes in 2005. As for support of health care reform, the only project that can be mentioned is the European Union TACIS Project "Health Financing and Management in Ukraine" (2003–2006), with a budget of €4 million.

2. Pooling of funds for health care

2.1 The situation before 2000

After 1991 decentralization shifted most responsibilities to the regional and local levels. The pooling of health care funds was split in two components: First, pools on each budget level funded public medical facilities belonging to different levels of administration. These facilities provided health care services that were partly overlapping and substitutive (for example, oblast

and municipal facilities providing the same services within a given area). The pools of health care funds on each budget level partly overlapped from the point of view of the population and benefits covered. Second, the budgets allocated part of their funds to equalizing the financial resources of lower budgets. But interbudgetary transfers were not specified by the line-items of budgetary expenditures.

The assessment of all kinds of lower budget expenses was carried out in order to calculate the transfer volumes. In the segment of social expenditures, including those for health care, the assessment involved calculations of costs required for the maintenance of already established network of social institutions, which was done with account for the financial provision standards for certain kinds of costs (labour remuneration, public utilities etc.). Still, as a rule, the assessments of required costs to a great extent reflected the historically formed expenditures of corresponding social institution networks. There was no specific accounting for differences in gender, age or morbidity among the citizens residing in different territories. Subsidies from higher budgets were allocated to lower budgets proportionally to the difference between the estimates of the required budgetary expenditures and the planned revenues of these budgets coming from taxation segments assigned to them and other sources. Upon the reception of the subsidies, the regional and local authorities independently specified the expenditure volumes of their budgets allocated for different purposes. This system failed to ensure equitable funding of health care and preserved historically established disproportions.

2.2 Budgetary reform in 2000 and new mechanisms of pooling funds

A new budgetary code was adopted in 2000, introducing considerable changes in health care fund pooling. The budget was divided into national, regional (the Autonomous Republic of Crimea and oblasts), rayon and city and village levels. Financing of social expenditures, including health care, is a national level function, but its execution is delegated to the subnational level. The delegated functions are financed through state budget allocations in the form of transfers to regional authorities. This means that each budget level is responsible for the financial provision of concrete types of care and health facilities via transfer from the national budget. Regional budgets hand over a part of the funds to the lower-level rayon and municipal authorities, who in turn direct part of these funds to settlement budgets.

Estimate indicators for the volumes of health care expenditure in regional, rayon (city) and village and township budgets are defined using the specified formulas, approved by the Cabinet of Ministers in 2001 and 2004, on the basis of a single, per capita national budgetary provision for health care, weighted for different levels and regions and for gender and age demographics within administrative units.[21] The per capita sum and adjusting weights are approved by the Cabinet of Ministers. There has been a lot of progress towards a risk-adjusted capitation process in allocating subnational budgets, but this needs to be further refined. The existing per capita norms of health care funding are not differentiated according to health status, which can vary significantly from region to region.

Estimates of health care expenditure are submitted to the lower budgetary levels. Interbudgetary transfers are handed over as the funds for financing of all national functions (public

[21] Similar formulas are used to define the estimate indicators for allocations for other national functions (public administration, culture and art, physical training and sport, social programs for families, women, youth and children).

administration costs and social expenditures). In these transfers the targeted costs for execution of separate national functions, in particular health care, are no longer specified. Regional authorities and autonomous bodies have the right to independently define the cost structure of their budgets and thus to set the directions of use for the funds.

The subnational rights are limited by national salary setting for budgetary sphere employees and the obligation to send a certain part of the funds on to lower budgetary levels. It is prohibited to reduce the stipulated allocations for the national pancreatic diabetes programme or the treatment of diabetes insipidus.

The calculation of health care allocations between budgetary levels is done within the following conditions.

- Regional budgets must retain 35.4% of the total transfer allotted to them.
- No more than 55.1% of the transfers to municipal and rayon budgets may remain on that level.
- Village budgets must receive no less than 23% of the total transfer from the national level to the municipal and rayon budgets, or not less than 9.5% of the total transferred to the regional budgets.

However, the planned expenditures in subnational budgets do not always correspond to those estimate indicators that have been submitted from the national level. For example, an authority may decide to allocate the larger part of their funds to the local educational system and to reduce funds for the local health care system. During the development and approval of the budgets for 2005, 17 out of 25 regions envisaged smaller health care expenditure than stipulated by the Ministry of Finance's estimate indicator.

The new mechanism of budget income equalization is potentially favourable for restructuring the health care facilities network because the funding has not been connected to facilities' capacity. However this mechanism does not account for the problem of health finance fragmentation inherited from Semashko system. The pooling of health funds is still done on different levels, the pools are still used to maintain networks of facilities belonging to different levels and services provided by these facilities are still partly overlapping and substitutive. The existence of different pools prevents optimization of service delivery and perpetuates ineffective provision patterns.

2.3 Voluntary health insurance

2.3.1 Voluntary health insurance on commercial basis

Voluntary health insurance presently plays a very insignificant role in health care financing, mainly as a supplemental form. In 2004, according to State Committee for Statistics data, 632 900 people were involved in VHI programmes. In 2004, health facilities earned about 33.2 million hryvnias for VHI service provision, only 0.17% of total health care expenditures. According to Ministry of Health data, about 80 insurance companies, with varying products, work in the VHI market. The major form of VHI is group insurance provided by employers. Individual insurance accounts for a small portion of VHI.

Health care under VHI is provided to the majority of the insured in the same public health facilities that provide medical services to uninsured people, with the same array of medical technologies and frequently the same level of comfort. The major difference is that VHI programmes usually cover a part of pharmaceutical costs. In this respect, VHI is complementary to public financing. Some doctors are unwilling to operate on insured patients, since they refuse to pay additional "shadow money".

There are some institutional barriers to VHI development. According to the tax code, voluntary insurance contributions made by employers for their employees are spending from profit and therefore are subject to income tax, with no exemptions. Furthermore, the rules for budgeting, reporting and accounting and strict limits on provider autonomy in moving funds across line items are obstacles to getting payments from VHI insurers. Accurately foreseeing income from the services provided to people with VHI is quite difficult for medical facilities. Any discrepancies between planned and actual incomes create budget revision problems, and the increase of non-budget incomes might decrease the facility's budget funding for the next year. However, public health facilities maintain contractual relations with insurance companies because this is the only legal way to sell health care services. So a considerable number of VHI contracts are in fact quasi-insurance that disguises patient payments for health care services. The patient formally makes VHI contributions, but the VHI insurer acts as an intermediate party between the patient and the facility in the purchase of health care services.

2.3.2 Health Insurance for Railroad Workers

A special place in Ukrainian health care financing is occupied by health insurance for railroad workers. Having begun with an experiment initiated by the top management of the railroad administration in 1995, it covers rolling-stock and operational service workers and extends to other categories of workers in the industry, as well as to pensioners.

Insurance contributions are paid by the railroad and workers on a parity basis. Contributions for pensioners are fully paid by the railroad. The sum total of the monthly contribution is Hrv 4 (that is, a little more that $9 per year). In 2004, about 650 000 people were insured (38% percent of railroad sector employees) and about Hrv 30 million in insurance contributions was collected (equal to 11% of the Ministry of Transport's state-allocated health care budget).

Railroad workers are insured by a private health insurance company. Insurance makes provisions for inpatient care exceptionally in the departmental network of health facilities. Funds transferred to health facilities cover expenses for pharmaceuticals, food, linen and bandage materials for each patient in an amount corresponding to the under-funding of these items in the State budget, but not more than the stipulated maximum insurance amount. Health facilities keep accounts of current treatment expenditures for treatment of insured patients individually.

2.3.3 Sickness funds

A number of nongovernmental associations (sickness funds, credit unions), charities and funds have been established in Ukraine in recent years for purposes of health care financing, amounting to voluntary health insurance on a non-profit basis. Participation in sickness funds is voluntary; some individuals pay their own contributions, while some unions, enterprises and other institutions pay their personnel's contributions. The organizations are registered as charitable non-profit organizations guided by the common interest of improving members' health care. Attempts to establish sickness funds as public insurance organizations failed. The

Constitutional Court prohibited collection of contributions from citizens by public organizations for funding health care services that are guaranteed by law to be free of charge.

The major function of sickness funds is pharmaceutical provision when the budgetary funds are not sufficient. Some sickness funds also assist health facilities in purchasing modern medical equipment, conducting targeted programmes, training staff, promoting healthy lifestyles, safeguarding maternal and child health, etc. In contrast to VHI organizations, sickness funds do not pay public health facilities for health care services because such payments are prohibited. Instead, the funds donate items as charity to health facilities upon request. Medicaments received from sickness funds are kept separately and used only for members. Each fund defines cost limits for medicaments to patients. Donated medical equipment is used for all patients, not just fund members.

The sources of sickness fund monies are the contributions of the founders and members, charitable contributions by organizations and revenues from charitable events, with members' contributions representing the largest share. Contributions are generally a percentage of wages (usually within 5%) or a fixed amount ($7–$19 per year). The performance efficiency of sickness funds is in direct proportion to the number of members, thus, they prefer collective membership.

Table 12. Performance of sickness funds, 1999–2004

	1999	2000	2001	2002	2003	2004
Number of sickness fund members, in thousands	39.4	76.7	232.2	403.3	652.2	n.a.
Funds received, millions of hryvnias	1.6	3.6	13.0	17.2	28.7	33.1
Average contribution per member, hryvnias per year	40.4	47.2	56.0	42.5	44.0	n.a.

Source: State Committee for Statistics of Ukraine, op. cit., 2001, 2002, 2003, 2004, 2005.

Sickness funds reduce the burden of patients' pharmaceutical and medical supplies expenditures, and a system of prescription controls results from their establishment. However, since sickness fund members comprise only 1.4% of the population, the funds do not influence significantly affect the financial situation of the health care sector: their share of overall health care expenditure is just 0.2%. Nonetheless, it should be mentioned that in small towns, where health funds are created with active support of local authorities, both the population and health care facilities positively evaluate their improvement of care availability and quality.[22]

[22] Bondarenko VV et al. Больничные кассы Кировоградщины. *Главный врач* [Health funds of the Kirovograd Oblast. *Head Physician*], 2003, 7:40–42; Popov AP et al. Городская больничная касса как инструмент политики власти в здравоохранении. *Главный врач* [City health funds as a powerful policy tool in health care. *Head Physician]*, 2003. 7:42–44 .

3. Service procurement

3.1 Budgetary financing of facilities

Payment for health care services is realized by public authorities responsible for budgetary funds allocation. The major part of subnational budget funds (55.3%) are directed to financing inpatient care. Outpatient care and day inpatient care[23] account for 27.6% of general expenditure (see table 13).

Table 13. Allocation of subnational budget funds to functional lines of expenditures in 2004

Expenditures	**Millions of hryvnias**	**%**
Subnational budgets, total	*8 673.5*	*100.0*
Inpatient care	4 794.9	55.3
Day inpatient care	75.8	0.9
Outpatient care	2 311.7	26.7
Rehabilitation services (sanatorium care)	250.4	2.9
Long-term nursing services	25.8	0.3
Auxiliary care services [24]	257.6	2.9
Public health care administration	360.5	4.1
Other services[25]	596.8	6.9

Source: State Committee for Statistics of Ukraine, op. cit., 2005; National Health Accounts, 2003–2004.

Aside from the allocations presented in table 13, a range of regional targeted programmes are financed from regional budgets: immunoprophylaxis, tuberculosis control, AIDS control, insulin provision for patients with diabetes and centralized measures for treatment of oncological patients. In 2004, almost two thirds (62.7%) of subnational budget health care expenditures were for payroll and payroll taxes.

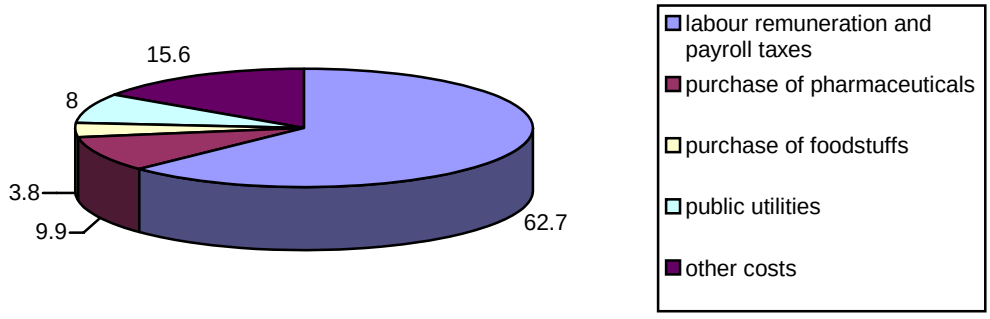
[23] Under the current legislation day inpatient departments may be attached only to polyclinics and ambulatories.
[24] Patient transportation and life-saving in emergencies.
[25] Preventive and protective services, in particular, family planning, assessment of blood safety etc.

Table 14. Allocation of subnational budget funds to types of health care facilities, 2004

Budgets	**Object of financing**	**Amount of financing in millions of hryvnias**	**Percentage of subnational budget health care expenditure**
Regional budgets	Oblast general practice hospitals	954.4	41.2
	Oblast and municipal specialized hospitals and dispensaries	1 332.6	57.5
	Oblast targeted programmes	31.3	1.3
	Total	**2 318.3**	**100.0**
City budgets	City general practice hospitals	2 195.6	63.4
	Maternity hospitals	233.1	6.7
	Polyclinics and ambulatory care centres	582.8	16.8
	First-aid emergency stations	257.6	7.4
	Stomatological polyclinics	195.2	5.6
	Total	**3 464.3**	**100.0**
Rayon budgets	Central rayon hospitals and rayon hospitals	2 064.0	100.0
Village/township budgets	Rural district hospitals	198.4	38.4
	Rural ambulatories	168.7	32.6
	Medical attendant and obstetrician stations	150,0	29.0
	Total	**517.1**	**100.0**

Source: State Committee for Statistics of Ukraine, op. cit., 2005; National Health Accounts 2003–2004.

Figure 2. Health care cost structure of subnational budgets in 2004, percentages



Source: State Committee for Statistics of Ukraine, op. cit., 2005; National Health Accounts 2003–2004.

Almost two thirds (62.7%) of health care expenditure financed from sub-national budgets in 2004 comprised salaries and payroll taxes (see figure 2). The low share of expenditures for public utilities (only 8%) was explained by a combination of factors, including low prices on gas from the Russian Federation prior to 2006 and government controlled public utility rates, with particularly subsidies of budgetary facilities. Since 2006, utility rates do not distinguish between public and private institutions.

The overwhelming majority of public and communal health care facilities in Ukraine have the status of budget organizations, and, therefore, in accordance with the requirements of the budget code, have line-item incomes and expenditures.

In Ukraine, there is a practice of administrators purchasing goods for organizations within their jurisdiction with budgetary funds. The objects of such centralized purchases are:

- vaccines for immunoprophylaxis
- pharmaceuticals for tuberculosis control, AIDS and oncology
- pacemakers, endoprostheses
- high-value medical equipment
- ambulances for rural health care facilities and
- other goods for targeted public programmes.

3.2 Experimental financing mechanisms

There have only been a few experimental projects for new financing mechanisms such as capitation and global budget, carried out through local initiative and with support from international donor organizations. For example, since 1998 in the town of Komsomolsk (population about 50 000) in Poltava Oblast a primary care organization has been tested by municipal authorities and the medical community. Currently, 11 family physicians cooperate on a contractual basis with the Municipal Council Health Care Administration. These contracts are based on per capita payment (depending on the number of patients), as opposed to the traditional fixed salary in a polyclinic. A community audit and surveys conducted among Komsomolsk residents in 2003 showed the model to be more cost-efficient than the traditional model, and it also provides higher quality and availability of health care. In particular, the utilization rate for specialist consultations has decreased by 36%, the hospitalization rate for adults is 16% lower and the rate of emergency calls per 10 000 population is 46.4% lower. Residents expressed satisfaction with the new model at a rate of 33.5%, compared to 10% for traditional district physicians' care and 10.9% for polyclinical care. The dissatisfaction rate with the new system is 11.7% compared to 20.6% and 31.5%, respectively, for traditional physicians and polyclinics.[26]

From the beginning of 2005 the European Union project "Health Financing and Management in Ukraine" has aimed at changing the mechanisms of health care facilities financing in two pilot rayons in Kharkiv and Zhytomir Oblasts, each with a population of approximately 35 000. It should be noted that from an international perspective the regional level of health finance reform is more pertinent, but the choice of the rayon level was conditioned by political feasibility.

Financing in the pilot hospitals was via a global budget mechanism with line-item accounting. It is essential that when the global budget mechanism is applied, the previously agreed volume of health care services is financed, but in contrast to the line-item model, the funds are assigned to a health care facility without allocation to specific expenses, and the total amount of financing does not depend on the facility's capacity. The financing is done on the basis of a contract for public procurement of services, the most simple form of block contract. The functions of the health care service purchaser are performed by rayon administrative departments especially established in the course of the project.[27] The purchaser agrees with the health care service provider (central rayon hospital) on the volume of outpatient and inpatient care to be provided for the year and on the total amount of funds to be transferred for the purpose. Having received the funds, the hospital independently undertakes expenditures.

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[26] Nadutaya GM (2004). Роль громадських організацій у реформуванні охорони здоров'я міста. [Role of public organizations in the municipal health care reform]. Materials of the extended field seminar of the Ministry of Health of Ukraine *"Досвід реформування первинної медико-санітарної допомоги на муніципальному рівні"* [Experience of health care reform on municipal level], Komsomolsk, Poltavsky region, 26–27 May 2004, Kiev, Poltava, Komsomolsk:35–39; Nadutaya GM, Nadutiy KA, Zhalilo LI. Порівняння економічної ефективності двох організаційних моделей первинної медико-санітарної допомоги на засадах сімейної медицини [Comparative study of the cost-efficiency of two primary care organization models based on the family medicine principles]. Materials of all-Ukrainian scientific and applied conference *"Підвищення ефективності державного управління охороною здоров'я на регіональному рівні та на рівні місцевого самоврядування на засадах принципів громадянського суспільства"* [Increasing efficiency of public health care administration on the regional level and on the level of local self-government based on civil society principles], 6–7 November, 2003, Komsomolsk, Poltavsky region, Kremenchug, 2004:61–66.

[27] The agreements on public procurement of health services are based on provisions of the civil, commercial and budgetary codes, and the law "On public procurement of goods, works and services".

It is noteworthy that testing new methods of remuneration met strong resistance from oblast and local authorities, tax collection agencies and treasurers who focus on detailed expenditures and revenues of budgetary institutions rather than on management for higher efficiency. In July, 2005 the local authorities of the pilot rayon in Kharkiv Oblast decided on the separation of primary and secondary care financing and on creation of two independent health care providers responsible for provision of the corresponding types of care. Separate contracts were planned for health service procurement with a newly created rayon primary care centre, which was to have the autonomous status of a communal non-profit enterprise, and with the central rayon hospital. In the secondary care contract (including inpatient and specialized ambulatory care) to be provided by the central rayon hospital, a global budget mechanism was envisioned, while a per capita payment mechanism was planned for the primary care contract.

However, in May–June 2006, when the programme should have started, the central rayon hospital administration, medical specialists of the inpatient department and the polyclinic strongly opposed it, putting pressure on the rayon council, including mass demonstrations of union members. In their arguments they mostly referred to an inevitable collapse of secondary care resulting from the partial loss of hospital financing and to the inexpediency of any transformations in the existing deficit in public financing. An underlying motive behind the resistance of central rayon hospital administrations may have been their unwillingness to lose resources and property to the primary care centre. Hospital physicians and medical specialists employed in policlinics are concerned that the work of an independent primary care centre will reduce the need for their services, thus leading to the reduction of medical specialist staff and their revenues, including the unofficial ones. As a result, the procurement system change has been postponed.

Another component of the programme proved more successful: centralization of rayon health care financing was carried out in the pilot rayon of Kharkiv Oblast. All rural councils ratified the decision to transfer their health care budget funds to the rayon. Also, all rural health care facilities (rural ambulatories, medical attendant and obstetrician stations etc.) were transferred to joint ownership of all communities of the rayon, and were integrated as organizational subdivisions of the communal non-profit enterprise established under the central rayon hospital, thus losing the status of independent legal entities.

3.3 Out-of-pocket payments

An all-Ukrainian poll with 48 200 participants conducted by the State Committee for Statistics from October 2000 to October 2002 showed that 93% of all hospital patients had to provide their own pharmaceuticals and 83% their own food (cf. section 2.3). In addition to official payments for pharmaceuticals and medical services, there are informal payments to medical staff and pharmaceutical purchases that amount to an additional 40%–60% over the officially registered payments.

A 2000 study[28] showed that about half the costs of inpatient facility and polyclinic care were for the purchase of medicines, 25% for unofficial payments to staff, 6%–12% for examinations and procedures (see Table 15). The unofficial payments amounted to about 40% when unofficial pharmaceutical costs were added.

[28] Litvak, op. cit.

Table 15. Patients' inpatient and outpatient costs per treatment in 2000, as percentages per category[29]

Type of Payment	Inpatient facility	Polyclinic
Pharmaceuticals	43	51
Doctors' fees	20	21
Contributions to charity funds of health facilities	15	10
Payments to administrative staff	12	-
Examination and procedures	6	12
Payments to nurses and orderlies	4	6
Total	100	100

4. Provision of services

4.1 Review of the health care facilities network

At the end of 2004, public health care included 7662 outpatient and polyclinic facilities, 2933 hospitals, 989 first-aid emergency stations and about 16 000 medical attendant and obstetrician stations.[30] In addition, according to the Ministry of Health, there are about 3500 private health facilities; the overwhelming majority of them are only small private practices and account for a rather insignificant portion of the total volume of health care (excluding dental care).

At present, most of health care facilities in Ukraine are local monopolies. However there are a lot of duplicated medical facilities in big cities (regional centres and some others) with the same or overlapping service mandates: oblast and city hospitals, oblast and city children's hospitals, municipal and departmental public facilities, etc. But there isn't real competition among them for public funds because duplicated public facilities usually belong to different levels of authority; each facility is funded from its budget level and can't compete for money from other levels. Practically all public (state and communal) medical organizations have the status of budgetary institutions. This means an extremely low level of administrative autonomy with respect to reallocating funds for emerging needs and priorities. Private facilities have no possibility of obtaining public funding.

4.2 Trial expansion of health care facilities' rights

Within the framework of the EU project "Health Financing and Management in Ukraine", testing of a new model of health facilities autonomy has been underway since 2005, as part of measures aiming to split the functions of health care purchasers and providers (cf. section 4.3). Budgetary health facilities in pilot rayons have been transformed into communal non-profit enterprises.[31] Such forms of economic activity make it possible to avoid line-item financing of health facilities, to conclude contracts for health care service provision and allow more room for independent spending of allocated funds. However, there are a number of legal and administrative barriers to the programme. Due to conflict between the commercial code and tax legislation, tax authorities refused to register non-profit enterprises as profit-tax exempt non-commercial organization.

[29] Litvak, op. cit.
[30] Data in this paragraph are from the State Committee for Statistics of Ukraine, op. cit., if otherwise not stated.
[31] This form of organization is provided for in the Commercial Code of Ukraine.

Budgetary institutions are exempt from land tax, but non-profit enterprises are not. There is a risk that reorganized health facilities will have to pay much more for public utilities than do budget institutions. In addition, financial authorities opposed any transformation of budget institution status because they fear losing control over their financing.[32]

5. Functional responsibilities

5.1 Allocation of functional responsibilities in the financing system

In Ukraine, collection of public funds for health care is performed by tax authorities, and collection of nongovernmental funds is done by health insurance organizations, health funds, and health facilities. In health insurance organizations, this function is combined with pooling funds and purchasing medical services.

The pooling of public funds for health care is part of the budgetary process. Pooling funds and purchasing services are done by public authorities at various levels: the Ministry of Health, oblast and municipal health authorities, rayon administrations and village and township administrations. Health care provision is performed by public, communal and private health care organizations of various types. Administratively, public health facilities are administratively subordinated to national and subordinate bodies. The responsibilities of these bodies include health care provision through the direct administration of institutions within their jurisdictions.

5.2 Financial stewardship

Financial policy in health care is largely determined by current budgetary procedures, networks of recipients of budgetary funds and historic allocation priorities. Financial authorities exert strong influence on allocation decisions and alterations. The Ministry of Health and oblast and municipal health authorities control financing of entities directly subordinated to them and control spending of targeted vertical programme funds. Ministry policies often reflect the positions of special interest groups: the largest health facilities, the Academy of Medical Science, heads of regional health care authorities and large pharmaceutical distributors. A similar phenomenon is observed on the regional level.

6. Summary assessment of health financing performance

6.1 Equity in financing

The current system of health care financing does not ensure protection of the population against financial losses from having to pay for medical services in the case of illness. The share of out-of-pocket payments compared to prepaid financing (including public expenditure, voluntary health insurance, and other schemes) serves as indicator of the level of financial protection. Even according to officially registered data, the share of out-of-pocket payment for health care in total

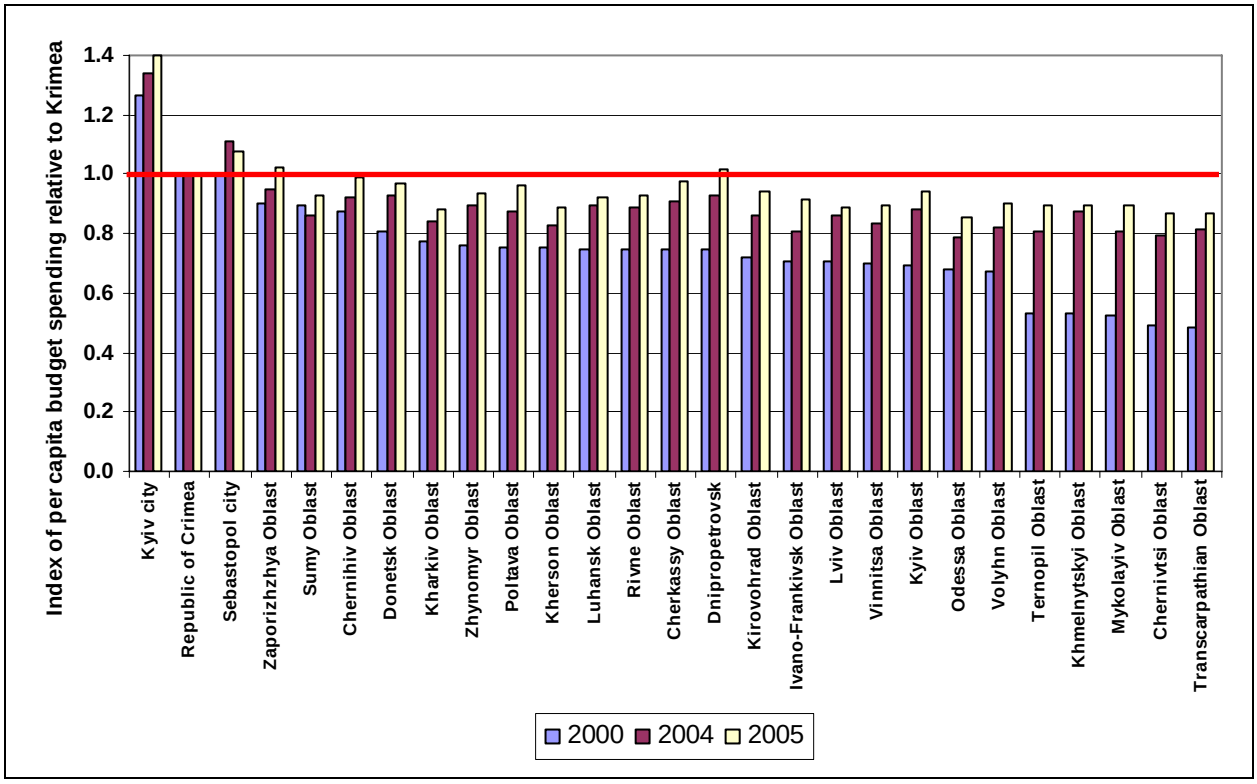
[32] Rudiy VM. Законодавче забезпечення реформи системи охорони здоров'я в Україні [Legislative framework for health care reform in Ukraine]. Kiev, Sphera, 2005; Державне регулювання автономізації закладів охорони здоров'я в Україні. Автореферат дис.канд. наук з державного управління [Public Regulation of the Autonomization of Health care Institutions in Ukraine]. Dissertation abstract. Kiev, National Academy of Public Administration under the President of Ukraine, 2006.

health expenditure reached 27.5% in 2004. If we consider informal payments, this share rises to 39.2%, more than in the other central and eastern European EU member states, whose 2004 average was 27.2%.[33]

There is inequity in health care funding in the country's regions. Before the budgetary reform of 2000 (see sections 3.1 and 3.2), the difference between the highest regional per capita budget was 2.1 times greater then the lowest and, without counting the city of Kiev, 1.6 times greater (see figure 3). After the budget code was enacted and a new formula for interbudgetary transfers was introduced, the difference decreased to 1.6 times greater in 2005, 1.3 times without Kiev. The inequality of per capita public spending on health care measured by the Gini coefficient, decreased from 0.087 in 2000 to 0.053 in 2005. This significant reduction testifies to the efficiency of the implemented pooling reform. At the same time, remaining differences in per capita financing reflect the demographics of patients in departmental health care institutions, for whom funds are allocated from the national budget rather than from subnational budgets. Significant regional inequalities remain.

[33] WHO Regional Office for Europe. Health for all database. Copenhagen, 2007.

Figure 3. Index of per capita budget spending in the regions of Ukraine[34]



6.2 Equity in the provision and utilization of health services

Ukraine's system of health financing does not ensure equitable access to health care. An all-Ukrainian poll with 48 200 respondents, conducted by the State Committee for Statistics from October 2000 to October 2001 showed that 28.7% of households were not able to receive necessary health care for a member.[35] This figure was somewhat lower than that for 1999–2000 (35.3%) but it still high. The main explanation offered by respondents (88%–96%), was high prices for pharmaceuticals, home care necessities and health care services. In 10% of households a sick person had not been able to afford a doctor's appointment, and in 6% of households someone had not been able to receive necessary treatment in inpatient facilities.

6.3 Transparency and accountability

Regulation of the governmental obligation to provide free health care is insufficiently transparent. The range of guaranteed free health services is extremely wide, but the right of making decisions about the volume of health care provided free of charge or paid is given to the service providers. This results in insufficient transparency between consumers and providers and furthers the practice of informal payments. The state fails to control a significant portion of funds that could be invested in health care.

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[34] Sources: Calculations based on data from: Стан здоров'я населення України та результати діяльності закладів охорони здоров'я. Щорічна доповідь. 2000 рік. [Health status of the population of Ukraine and performance of health care facilities. Annual report 2000]. Kiev, Ministry of Health of Ukraine, 2001:152.

[35] Distribution of households according to access to health care provision, ability to purchase medical products in 2000-2001 (data on selective research of households in Ukraine). *Statistical Bulletin.* Kiev, State Committee for Statistics of Ukraine, 2002.

A majority of the population is not satisfied with the quality of health care services.[36] According to the data of a poll conducted by the Ukrainian Institute of Social Research, 63.6% of respondents had noted a considerable deterioration in health care service provision since the Soviet period. According to the data of another study carried out by Social Monitoring and sponsored by the United Nations Development Programme in 2002, half of respondents assessed the quality of health care services as essentially low, and a third as very low.

6.4 Health financing inefficiency

Despite the intergovernmental financial reforms, pooling fragmentation and service overlapping persist. For example, it was estimated that about 36% of patients admitted to regional hospitals for tertiary care in fact need secondary care.[37] Their treatment in regional hospital is financed from regional budgets and costs more than treatment in municipal hospitals financed by municipal budgets.

The patient flows are poorly regulated. For example, patient can consult with specialists or be hospitalized without going through a general practitioner. This contributes to inefficient use of resources. Thirty per cent of patients independently sought secondary care, and a third of them were denied; seventeen percent applied directly for inpatient care. As a result, the level of care was higher then needed for 43.2% of patients.[38] The study of hospital use revealed that 55% of patients in gastroenterology departments and 11% of patients in cardiology departments did not need in inpatient care.[39]

Efficient allocation of resources is hindered by a significant volume of out-of-pocket payment for health care services[40] (Lekhan, Rudiy, 2005) and large-scale practice of informal payment, as a result of which control becomes lost for a significant part of financial resources which circulate in the system of health care.

There is a lack of incentives for a better quality of health care services and more efficient use of resources, as well as a lack of responsibility for the state of public health. At the micro-level, health professionals who receive their salaries for the time at work, without taking into account real results of their work, are not interested in an efficient use of resources, in obtaining as high rate of public health as possible per one unit of invested funds, in building their professional activities on the basis of the principles of evidence-based medicine, and in searching for an optimal balance between costs and quality, etc.

Similarly, the managers of health care facilities are not interested in structural changes within these organizations, for under the current mode of management and financing such changes (for example, the reduction of the number of inpatient beds, of the staff, etc.) may result in smaller

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[36] Lekhan V, Rudiy V, op. cit.

[37] Jarosh NP. Наукове *обгрунтування ролі і місця обласної лікарні в системі охорони здоров'я на сучасному етапі реформування галузі: Автореферат дис.канд.мед наук* [Scientific substantiation of the oblast hospital role in the health care system on the contemporary stage of service sector reform]. Dissertation abstract. Kiev, 2001.

[38] Kryachkova LV. Аналіз медичних маршрутів пацієнтів кардіологічного профілю [Analysis of the health routes of cardiological patients]. *Вісник соціальної гігієни та організації охорони здоров'я України [Bulletin of Social Hygiene and Health Care Organization in Ukraine]*, 2003, 4:61–64.

[39] Lekhan V, Voltchek V. Питання оптимізації структури стаціонарного сектору охорнои здоровья терапевтичного профілю [Optimization of inpatient therapeutic sector structure]. .Paper given at the XI Congress of World Ukrainian Association of Medical Societies. Poltava, Kiev, Chicago, 2006:37.

[40] Lekhan V, Rudiy V, op. cit.

volumes of budgetary funds allocated for the maintenance of institutions. Because of the practical absence of competition among health care service providers, their managers do not have any incentives to efficiently control quality or reduce costs.

One more important reason for a low efficiency of managing resources is the practical absence in the country of an institute of health care managers as such. Management of health care authorities and medical organizations continues to be performed by physicians who have a certain empirical experience of management within the framework of the Semashko model and post graduate extension courses according to a Semashko-inspired syllabus. Special preparatory programmes for health care managers launched lately in higher education still lag behind international standards, and graduates of them remain unused in the public sector. There is also an extremely low IT level on the part of both suppliers and procurers of health care.

Health care financing in Ukraine does not provide for effective protection of the population against financial loss from medical expenses, nor does it provide for equalization of the health care cost burden. State guarantees of free health care are not supported by financing. Health fund pools are fragmented and overlapping. Neither health care organizations nor health care professionals have incentives to increase efficiency. Care outcomes are not as positive as they should be, given the existing resources. There is widespread dissatisfaction and agreement on the need for reform, starting with the financing system.

7. Priorities for health financing system reform

7.1 The declared priorities

Due to political instability, frequent changes of government and top administrators of the Ministry of Health, decisions on institutional changes in health care – for example the introduction of social health insurance (SHI) and higher education reform – were postponed. SHI has been on the agenda for all 15 years of independence. The declared health care reform has been firmly associated with the introduction of social health insurance. The first relevant law was drafted by the first government of independent Ukraine in 1991. In 2003, another draft law was considered by Parliament, adopted in the second reading but turned down on the third reading. At present, there are several variations of this draft law on the table in Parliament.

After the victory of the "Orange Revolution" in October 2005, the government adopted the "Meeting People" action plan, with a section guaranteeing a list of free health care services for all people, the introduction of social health insurance, the immediate development of primary health care and the promotion of an institute of family physicians. The president proclaimed health care a top priority, and in December 2005 he issued a decree providing for:

- elaboration of an action plan on health care reform;
- adoption of measures to introduce up-to-date economic mechanisms for health care organizations and clear-cut budget allocations for primary, secondary and tertiary health care; and
- a draft law on health care and health facilities and a number of targeted state-sponsored programs: development of family medicine, creation of a unified system of emergency medical aid, prevention of cardiovascular and cerebrovascular diseases, control of tuberculosis, oncological diseases, etc.

Despite the executive impetus, there is no wide consensus on this issue; the reforms have been talked about for a while, but not much is being done.

7.2. The key challenges for health finance reform

Ineffective protection of the population against health expenditure risks and health finance inefficiency are core problems for Ukrainian health sector development. The inefficiency results from fragmented health fund pooling and a lack of incentives for higher efficiency in providers' performance. These are in many ways products of the health care system inherited from the Soviet era, but they have been aggravated over the last 15 years. Despite reform of interbudgetary relations, the decentralized four-level budget system is marked by fragmentation and overlapping pools. The presence of departmental financing systems has aggravated fund fragmentation. The existing system preserves an inefficient allocation of capacity and distribution of patient flows and inequitable access to health care. The item-based funding of health facilities and their legal status as budgetary institutions reproduce existing spending patterns and increase demand for budget funding without increased efficiency.

The public sector in Ukraine benefited for a long time from low-priced public utilities due to low export gas prices and governmental subsidies, but the situation began to change in 2006, and health care facilities must spend much more on energy. The health financing system should be adapted to the new economic conditions. Progress requires ending the fragmented, decentralized and overlapping pooling arrangements and also ending input-based budgeting. Otherwise, any attempts to improve quality and accessibility of health care will be too costly. Pooling and purchasing reforms would help alleviate the problems of financial exposure due to medical costs and disparities of access to care, but changes in the balance of procurement between the state and the public are also needed.

The serious challenge to health finance reform is rigidity in the public finance system. There are strong institutional obstacles to needed reforms. Too many actors are more interested in preserving existing practices than in transforming them. Reform requires a careful choice of feasible innovations and a strong political will to implement them.

7.3 Elimination of funds pooling fragmentation

To eliminate the fragmentation arising from the four-level budget system, single pools should be created at the regional level to facilitate concentrated purchasing of primary and secondary care. This would enable significant progress in equalizing access for various subgroups of the regional population, by securing more efficient distribution of funds between primary and secondary care, and creating incentives for providers to increase quality and efficiency. Creation of single, regional-level purchasers might become an effective tool of restructuring the medical facilities network, one of the priorities of health care reform. It would also create opportunities to overcome duplication of capacities and coverage.

From an institutional point of view, one can create a single oblast pool by either centralizing budget funds in the oblast health department or creating an extra-budgetary fund on the oblast level. The latter might be a quasi-governmental agency, getting all revenues from the regional health fund or the insurer in the social health insurance system, and insurance contributions from different sources (regional health insurance funds). Each of the options would require significant

changes in the budge law and other legislation. The choice depends on the legislative consistency and political feasibility of the alternatives. The creation of single regional health budget pools administrated by oblast health departments and quasi-governmental agencies faces high political and legislative barriers. Creation of a social health insurance system might be a bit easier, but faces economic constraints on the sources of insurance contributions due to the high tax burden. The latter option would require strong government oversight to regulate insurers.

Fragmentation of health funds pooling on the national level also needs to be eliminated or at least alleviated. The decision to preserve or eliminate separate health care for employees of selected ministries and departments is totally political. If the preservation of current inequality were to be recognized as counter to the policy of making Ukrainian society more democratic (as initiated by the "Orange Revolution"), then it would logically entail the elimination of departmental systems of health care financing. In that case, all health care would be financed by sub-national budgets. But if the preservation of the rights of some to better health care is considered politically justifiable, then it will be necessary to change the allocation mechanism. Financing of departmental health facilities should be replaced by purchasing health services included in departmental health benefits packages.

7.4 Provider payment incentives and autonomy

The other key elements of financing reform are new methods of payment to providers and more provider autonomy in responding to the new methods. The options for provider payment methods differ by the strength of the incentives they create for providers to act in accordance with four objectives: preventing health problems of citizens; delivering services to and solving health problems of patients; being responsive to people's legitimate expectations, and containing costs.[41] No single provider payment method is best from the point of view of achieving the objectives.[42] The line item budget payment method used in Ukraine is effective for containing public costs, but has not created strong incentives for provider to meet the other objectives. To increase their performance efficiency, it is necessary to switch from input-based to output-based funding of health care facilities.

Disease prevention, shifting emphasis from inpatient care to outpatient care and enhancing the role of primary care are the most important reform tasks. Financing of primary care providers on a per capita basis combined with partial fund holding would best contribute to completing these tasks. However, the shift from line item budget demands high administrative capacity of regional and municipal authorities and places a lot of responsibility on the primary health care level. That's why the introduction of partial fund-holding might occur in the next stages of health reform after pilot approval. Capitation payment for primary care providers might be accompanied by bonuses for achieving targeted indicators as fee-for-service payments.

Global budgeting and case-based payment methods are real alternatives to line-item budgeting of inpatient care. Global budgeting is effective in controlling costs; it gives flexibility for providers, creates incentives for prevention of post-treatment complications and repeated hospitalization. However, global budgeting might maintain excess capacity of medical facilities rather than reduce it. The per-case payment method has created strong incentives for providers to reduce excess capacity and to increase productivity. As a tool of inpatient care contracting for citizens

[41] World Health Organization, 2000, op.cit.

[42] Barnum H, Kutzin J, Saxenian H. Incentives and Provider Payment Methods. *International Journal of Health Planning and Management,* 1995, 10.1: 23 – 45.

covered by a single oblast pool, it might contribute to more efficient allocation of funds among providers and restructuring of the hospital network. But the lack of a detailed classification of medical services or a data base of per-case rates and low level of IT facilities create obstacles to large-scale introduction of this method. The shift to global budgeting is easier to introduce and seems to be preferable in the first stage of reforms. A combination of the two methods might be developed in the next stages.

The separation of procurement and provision roles is crucial to the success of reform. Changing the legal status of most existing medical facilities to that of public non-profit organizations is necessary for the new payment methods and for assuring some autonomy in spending. There are alternative ways to give more autonomy to existing providers of health care services with the status of budget facilities:

- preserving their legal status while changing the budget code and other legislation that requires mandatory budget procedures; or
- changing budget facilities into public non-profit enterprises.

Realization of the first option will face a strong opposition on the part of financial authorities. Clear advantages of the second option are that it can be implemented without revising budget legislation, can ensure a higher level of managerial and financial autonomy for providers and can incentivize providers to increase quality and efficiency while preserving the non-profit nature of their activities. This option requires careful elaboration of legislation creating new public entities and means of oversight. The medical institutions that changed their status from budgetary units to public non-profit enterprises should have the same tax benefits, utility subsidies, etc. as institutions did not reorganize.

7.5. Equal access to care with less out-of-pocket payment

Two methods are available for attaining the stated goals: increasing public health care funding or altering the current informal sharing of responsibility between the state and its citizens in paying for health care services. The first will depend mainly on economic reforms and growth rates. Under any realistic economic forecasts, the development of state guarantees and a public-private mix in funding are prerequisites for success. The second, a radical revision of the free health care benefit package as done in some CIS countries, is hardly feasible in Ukraine. The alternative is incremental reforms, including balancing of selected benefits with pooled public and private funds.

The following ways of actions might be recommended in this respect:

- State guarantees of free health care could be specified consistent with a realistic assessment of their public funding. The development of clinical and economic standards for the most common diseases with a definite package of publicly financed services and pharmaceuticals would be a step in this direction. Standards should be periodically revised to reflect reduction of fixed costs due to efficiency-oriented reforms.
- Legal patient cost-sharing for selected components of guaranteed health care could be introduced.

- Legislation on health funds needs to be elaborated to ensure that benefits will supplement or complement but not replace the public health benefit package. The activities of health funds should be transparent to their members.
- Mixed health insurance could be developed, implying co-financing from the funds of national, regional and municipal budgets, citizens and employers.
- The introduction of tax exemptions for the contributions of employers for their employees' VHI would be central to increasing VHI's role.

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