

EVALUATION OF MOLDOVA'S 2004 HEALTH FINANCING REFORM



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1. Background to health financing reform in Moldova

The Republic of Moldova is a low-income country – the poorest in Europe – ranked 157th in world per capita GDP (US\$ 710) in 2004.¹ The 2004 population was 3.4 million, of which 2.9 million are permanent residents in the country and more than half live in rural areas. It is densely populated, at 129 inhabitants per square km.

Moldova became independent in 1991 after the dissolution of the Soviet Union and faced deep recession in the 1990s, when the GDP dropped by more than 60%, causing a drastic reduction in public expenditures. Around 25% of the economically active population has left the country in search of better economic opportunities, leaving the economically active portion of the population at just 41%. Since 1999 structural reforms have been implemented, and as a result real GDP has grown from 2000 at an annual rate of 7%.

This study uses the “functional approach”² for the descriptive analysis and a set of specific health finance policy objectives that are being applied by WHO across the region.³ The proposed framework covers three functions of health financing – revenue collection, pooling and purchasing – as well as policy on coverage and associated oversight (*stewardship* of financing) responsibilities. The study focuses on the institutional arrangements and resource allocation mechanisms, on their changes as a consequence of the reform, and on the effects of these changes.

Following other transitional countries, Moldova adopted a law on compulsory social health insurance (SHI) in 1998,⁴ but the financial crisis in the Commonwealth of Independent States (CIS) in that year delayed any practical implementation for several years. The intention to introduce SHI was revitalized in the end of 2001 and preparations undertaken in 2002–2003. SHI took effect in the pilot rayon Hincesti on 1 July 2003, and in the whole country on 1 January 2004.

The main reasons for the reform were:

- a significant deterioration in health status since 1990, with life expectancy decreasing from 69.1 years in 1989 to 66.6 years in 2002, and increasing incidence of infectious diseases;
- considerable inequity in access to health care and high out-of-pocket costs; and
- ineffective health care because of limited resources and out-dated practices.

The introduction of SHI initially seemed to most international experts to be an ineffective method of health care reform. It was feared that the creation of SHI would increase administrative costs, that the financial base for payroll contributions would be too narrow due to the large informal sector in the economy and that SHI contributions for the working population would increase public expenditures to the detriment of economic growth. Others argued,

¹ World Bank. *World development indicators database*. Washington, 2005

(<http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>, accessed 9 July 2007).

² Kutzin J. A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 2001, 56:171–204.

³ World Health Organization. Approaching health financing policy in the WHO European Region. Background document for the 56th session of the WHO Regional Committee for Europe. EUR/RC56/BD/1. Copenhagen, 2006.

⁴ The Law on Compulsory Health Insurance of Republic of Moldova (No.1585, 27 February 1998).

however, that the creation of SHI with new collection mechanisms, pooling and allocation was the only realistic way to start the reforms. SHI was the only tool for establishing a more efficient and equitable health finance system. Taking into account political, economic and social conditions in Moldova, it was not realistic to expect revision of the state guarantee of free health care. On the contrary, by introducing SHI it would be possible to have a more modest programme, in balance with available funds. As a consequence, the free access of poor people to minimum of health care services might in fact be assured. Health finance planning and innovation and restructured provision would be also extremely difficult without SHI.

The main objectives of introducing SHI were to extend and stabilize public health care financing and to increase access to quality health care. The Moldovan reforms had several unique aspects.

- SHI was introduced in a poor country with high share of grey economy, and the system relies predominantly on transfers from the general budget, a non-traditional arrangement for SHI.
- The government managed to increase health care accessibility by significantly revising the previous state guarantees of free health care.
- The amount of contributions from different sources was legally established.
- A high level of consensus and coordination among reform actors was achieved, and the implementation was rapid and consistent.
- Effective collaboration on implementation and monitoring took place with international donors.

The chosen health finance model was appropriate to the socioeconomic conditions of the country, and reform objectives were largely met.

Before 2004 the function of collecting health care funds was carried out by the tax service and financial bodies collecting fiscal and non-fiscal budget revenues and by private voluntary health insurance (VHI) programmes. The private health insurers combined in their activities the functions of collecting and pooling of funds and purchasing of services. The pooling of public funds was implemented in budget procedures. The pooling of funds and purchasing of services were integrated in public agencies: the Ministry of Health, judet (regional) and rayon administrations and community management bodies in villages and townships.

Health care provision included public facilities and private providers. State and municipal health care facilities administrated by public authorities integrated the functions of pooling, purchasing and provision. After reform implementation in 2004, the pooling and purchasing functions were fulfilled by the National Health Insurance Company (NHIC), which also collects health insurance contributions from self-employed and non-working people of working age. A purchaser-provider split was created. The Ministry of Health and Social Protection (MHSP) and some rayon authorities pool a small part of budget funds for targeted programmes and purchase corresponding services.

2. Collection of funds for health care

2.1 Overall public finance situation

The share of government expenditures in the GDP was very high in the 1990s (45%–50%), but decreased in real terms due to prolonged economic decline. After economic reforms in 1999 the burden of public spending on the economy was alleviated, and the share of government expenditures in GDP was cut to 29.3% in 2001, but began to increase in 2002, reaching 38.0% in 2005. Government expenditures increased by 57% in real terms from 2000 to 2005. The national debt was 79.1% of GDP in 2000 and decreased to 40.4% by the end of 2004,⁵ with interest payments of 2.4% of GDP.⁶

Table 1. Moldovan macroeconomic indicators, 1999–2005

Macroeconomic indicators	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
GDP, in millions of lei	6480	7798	8917	9122	12 322	16 020	19 052	22 556	27 619	31 992	3675
GDP growth, %		-5.9	1.6	-6.5	-3.4	2.10	6.10	7.80	6.60	7.30	7.00
CPI inflation, %	130.0	124.0	111.9	107.8	139.4	131.2	109.6	105.2	111.6	112.4	111.9
Government expenditures, millions of lei	2883	3474	4456	4099	4507	5420	5589	7057	9147	11 253	13 949
Government expenditures as % of GDP	44.5	44.5	50.0	44.9	36.6	33.8	29.3	31.3	33.1	35.2	38.0
Government expenditures in real terms, % (1995=100%)*	100	94	107	90	71	67	62	71	80	91	105

* Calculated using annual GDP index-deflators.

Sources: WHO, National Bureau of Statistics, Ministry of Finance, World Bank.

The government collected 32% of GDP in taxes in 2005, including 14.4% of GDP in direct taxes (income tax, property tax, social insurance payroll contributions, etc.) and 17.6% of GDP in indirect taxes.⁷ Other government revenues (non-fiscal revenues, special funds, grants) were 7.5% of GDP.

The rate of payroll contributions (including pensions, health, etc.) was 30%, including 28% to the social fund and 4% to the compulsory health insurance fund. Revenues from payroll tax were 9.2% of GDP in 2005. The extended informal economy, estimated as 45.1% of GNP,⁸ constrains tax revenues.

⁵ Medium-term expenditure framework 2006–2008. Chisinau, Ministry of Finance of the Republic of Moldova, 2006.

⁶ World Bank, op. cit.

⁷ Ministry of Finance, op. cit.

⁸ World Bank. Enterprise Surveys, Moldova, 2002. Washington, 2007

(<http://rru.worldbank.org/EnterpriseSurveys/ExploreEconomies/Default.aspx?economyid=129>, accessed 9 July 2007).

2.2 Health expenditures

According to official data, The Republic of Moldova spends 9.0% of GDP on health (2005), of which public expenditures are 4.3% of GDP, private expenditures 4.0%, and grants and loans 0.7%. These data do not include informal out-of-pocket payments, that are estimated at 1.2% of GDP.⁹ Taking into account the last assessment, the total volume of health care expenditure in 2005 amounted to 10.2% of GDP. However, this calculation does not take account of the large informal economy.

Table 2. Health expenditures in Moldova, 2000–2005

Monetary values in millions of lei	2000	2001	2002	2003	2004	2005
Total expenditure on health	1420.2	1569.1	2008.7	2300.2	2854.8	3310.4
Public expenditure on health	472.1	565.9	815.5	973.7	1332.0	1593.2
Private expenditure on health	929.1	972.3	1121.9	1250.0	1356.9	1457.7
Out-of-pocket payments*	919.1	954.0	1069.6	1183.6	1306.2	1401.6
VHI premiums and costs of non-profit institutions serving households	10.0	18.3	52.3	66.4	50.7	56.1
Grants and loans to government	19.0	30.9	71.3	76.4	165.9	259.4
Total expenditure on health as % of GDP	8.9	8.2	8.9	8.3	8.9	9.0
Total expenditures on health in real terms, (2000 = 100%)**	100	99	115	115	132	142

* Calculated as the sum of health facility revenues from billable medical services and out-of-pocket payments for private pharmaceuticals, minus VHI payouts.

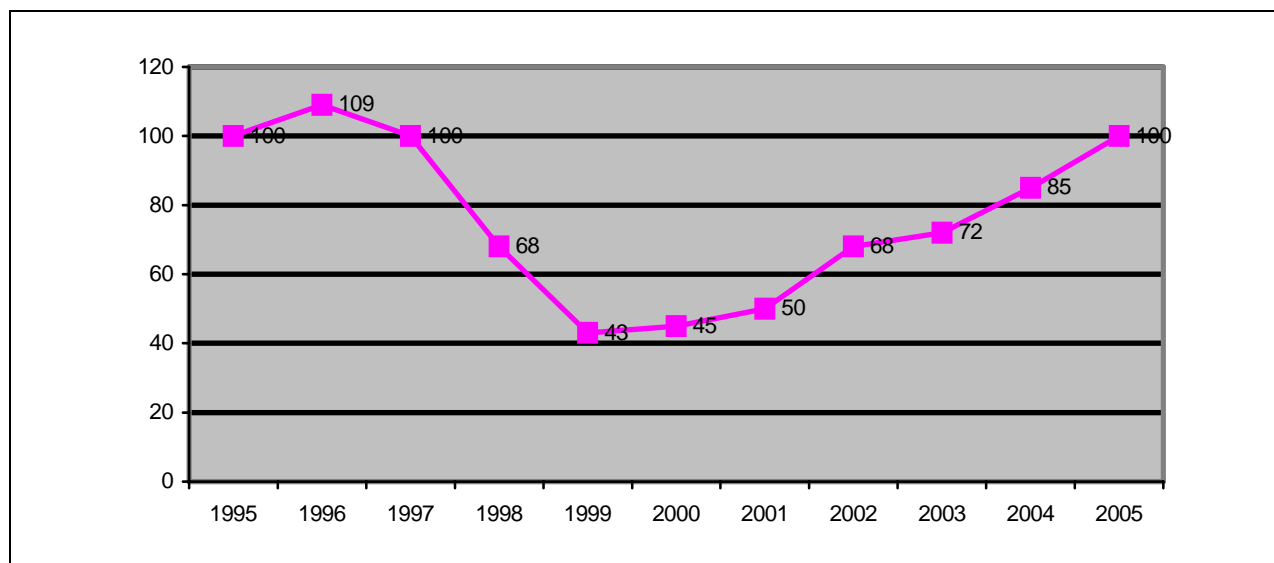
** Calculated using annual GDP index-deflators.

Source: National Bureau of Statistics, MHSP.

Officially registered health expenditure increased by 42% in real terms from 2000 to 2005. Meanwhile, public health care expenditure increased much faster during this period, by 106% in real terms. The rise was especially significant during the first two years of reform. Public spending on health, including budget expenditures and payroll tax revenues, increased by 41% in real terms in 2005 compared to 2003, but resources were still less than before the transition (see Fig. 1).

⁹ *Moldova Health Policy Note*. Chisinau, World Bank, 2006.

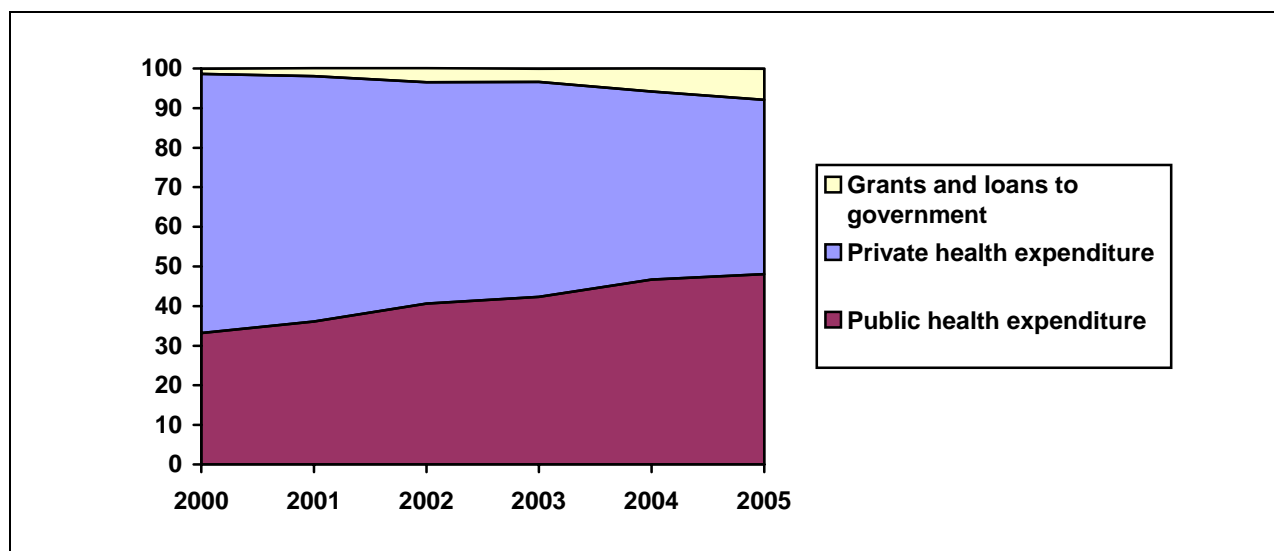
Figure 1. Public expenditure on health in real terms, ratio (1995 = 100%)*



* Calculated using annual GDP index-deflators.
Source: National Bureau of Statistics, MHSP.

The public share of the officially registered total expenditure rose from 33.2% in 2000 to 48.1% in 2005 (see Fig. 2). Grants and loans to the government have played a significant role in health funding, reaching 7.8% in 2005 (2000 = 1.3%).

Figure 2. Public and private health expenditures as a percentage of the total, 2000–2005



Source: National Bureau of Statistics and MHSP data.

2.3 Contribution and collection mechanisms for health care funding

2.3.1 Social health insurance contributions

The SHI model in Moldova has a mix of revenue sources: payroll tax, general public revenues, and flat rate contributions. Transfers from the national budget (general revenues) constitute the main part (65.5% in 2005) of total SHI revenue.

Table 3. Social health insurance contributions by sources, %

Source	2003	2004	2005
Employer and employee contributions	10.2	31.6	31.8
Other private contributions	0.0	0.4	0.7
State contributions	88.7	66.7	65.5
Other non-contributory income	0.0	1.3	2.0
Total	100	100	100
SHI income, millions of lei	12.0	976.9	1281.7

Source: NHIC.

The Law on compulsory health insurance contributions stipulates that the economically active population is obliged to contribute according to their wages (payroll tax) or pay a flat rate (self-insurance). All the rest of the population including the officially registered unemployed are exempt from contributions. There were 2.5 million people insured in 2005, including 815 000 employees, 1.69 million unemployed, and 30 000 self-insured.¹⁰ The insurance contribution was set at 2% for employers and 2% for employees. The introduction of the payroll contribution did not affect the overall tax burden on employers. The government planned to reduce payroll taxes for social contributions from 30% to 28% in 2003; in fact, the 2% was shifted to SHI. The self-employed can join the SHI system by paying a flat-rate contribution equal to the average per capita cost of the SHI benefit package, as set by the government every year.

Table 4. The flat rate contributions for self-insured/per capita budget contributions for the unemployed

	2003*	2004	2005	2006	2007**
Lei	169.7	441	664.8	816	1209
US\$	12	36	52	61	91

* for half a year for in the pilot Hincesti Rayon.

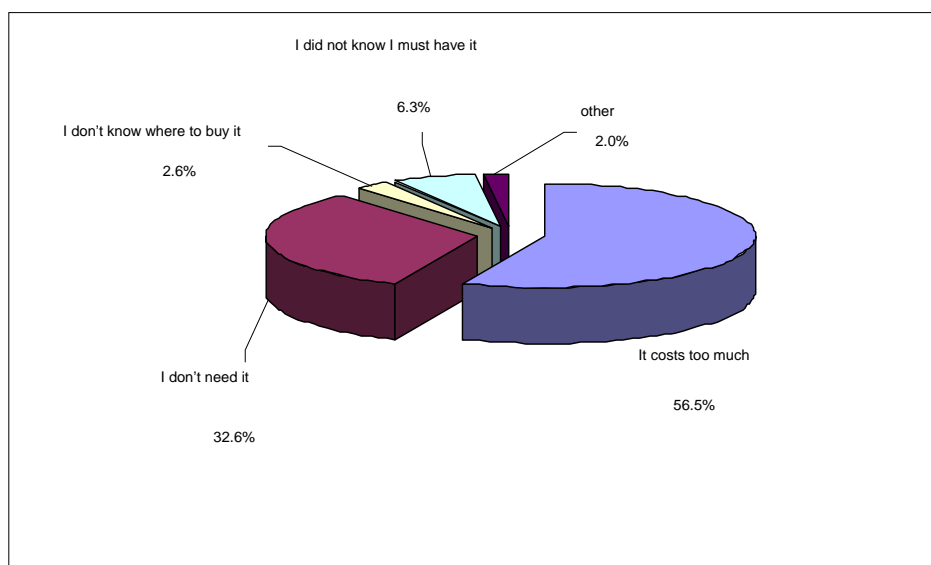
** projected

The number of such people was estimated at 400 000 in 2005 or 33% of the working age population permanently living in the country, an extremely high figure. Thirty thousand, or 7.5% of this group, bought the SHI policies. There was anecdotal evidence that people with chronic diseases prevailed in the group. Approximately 13% of Moldova's resident citizens were not covered by SHI in 2005. According to the Transparency International survey,¹¹ cost was a factor for more than half of the people not having SHI coverage (see Fig. 3).

¹⁰ NHIC data.

¹¹ The survey with the sample 1375 respondents in age 18 and more representative for the country was conducted in May-June 2006 (*Transparency International – Moldova, 2006*).

Figure 3. Reasons for not having SHI coverage (% of respondents)



Source: Transparency International – Moldova, 2006.

The high share of uninsured is the most sensitive problem facing health insurance reform in Moldova. The local (rayon) budget SHI contributions for poor, self-employed citizens has risen slightly; there were from 30 to 50 such cases in some rayons in 2005.

The contributions for employees (social tax) are transferred directly to NHIC and reported to the tax office. SHI policies are cancelled if contributions have not been paid for two months. The self-employed pay SHI contributions as a lump sum. The budget contributions for the non-working population are transferred to the NHIC by the Treasury. The collection of financial resources into the SHI fund is stable, and sustainability of the mixed model is ensured (see Table 5).

Table 5. SHI contributions, 2004–2007

Contributions	2004			2005			2006	2007
	Planned	Collected	As % of planned	Planned	Collected	As % of planned	Planned	Projected
Total revenue including:	1070.6	976.9	91.3	1319.8	1281.7	97.1	1527.7	1937.9
National budget contributions for non-working people	651.3	651.3	100.0	839.5	839.5	100.0	1001.5	1195.0
Payroll taxes of employers and employees	286.4	309	107.9	410	407.2	99.3	496.1	705.0
Contributions paid by other people and other revenues	132.9	16.6	12.5	70.3	35	49.8	30.1	37.9

Sources: MHSP, NHIC.

2.3.2 Budget funds for health care

The Republic of Moldova avoided the mistakes of some transitional countries (e.g. Kazakhstan, Russian Federation) where SHI contributions for the non-working population came from regional and local budgets and the amount was not strictly regulated by law. In contrast, Moldova made these transfers the responsibility of the central budget.

The roles of central and local governments radically changed as a consequence of the reforms. In 2003, 64% of budget expenditures on health were made by local authorities. The introduction of health insurance was accompanied by a strong centralization of budget funding. The national government's share of general government spending on health rose to 95% in 2004 and was expected to be almost 100% in 2006.

Table 6. Public health expenditures, 2000–2005 (millions of lei)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Public expenditures on health	377	523	542	399	358	472	566	816	974	1332	1593
Percentage of GDP	5.8	6.7	6.1	4.4	2.9	2.9	3.0	3.6	3.5	4.2	4.3
Percentage of overall government expenditures	13.1	15.1	12.2	9.7	8.0	8.7	10.1	11.6	10.6	11.8	11.4
Budget expenditures on health	377	523	542	399	358	472	566	816	973	1006	1151
National government budget expenditures on health	123	161	180	163	175	164	188	281	346	953	1121
Contributions to SHI for non-working population	-	-	-	-	-	-	-	-	11	651	840
Local authorities' budget expenditures on health	254	362	362	236	183	308	378	535	626	53	30
National government budget expenditures as a percentage of all budget expenditures on health	32.6	30.8	33.2	40.9	48.8	34.7	33.2	34.4	35.6	94.7	97.4
SHI contributions by the working population	-	-	-	-	-	-	-	-	1	326	425

Source: MHSP.

Centralization and a drastic increase (nominally 280%) in health expenditures from the national budget in 2004 were accompanied by a 4% decrease in total budget expenditures in real terms from 2003. However, due to the introduction of payroll taxes for SHI, total public funding increased by 27% in real terms. Thus, the SHI payroll contributions partly replaced budget funding in 2004.

Table 7. Budget expenditures on health, 2000–2004

	2000	2001	2002	2003	2004	2005
Budget expenditures as a percentage of consolidated budget health expenditures	10.7	13.2	15.0	13.6	11.9	11.0
Budget expenditures on health in real terms (2000 = 100%)**	100	107	140	146	140	149

* Without payroll contributions to social insurance.

** Calculated using annual GDP index-deflators.

Source: MHSP; Ministry of Finance, op. cit.

The effect of partial replacement of budget funds for health care by new sources of funding is typical of health finance reform. But contrary to the experiences of other CIS countries that introduced SHI, budget funding started to rise the next year – by 14% in nominal terms in 2005 (6% in real terms). The share of public health in general government expenditures varied from 1995 to 2003, but has been quite stable since 2004. This was the result of legislating the principle of SHI contribution equivalency for different kinds of insureds, and linking budget SHI contributions for the non-working population to employer/employees contributions.

2.3.3 Mechanisms to ensure SHI budget contributions

One of Moldova's achievements is the 2003 law on SHI funding, which says that the payroll tax contribution for the working population and the per capita contributions for the non-working and self-employed populations must each be equivalent to the average per capita cost of the guaranteed health care benefit package. This mechanism also provides for a yearly increase in the basic package cost, thus balancing free health care guarantees with public funding and assuring funding stability. At the same time, the law forced an increase of budget contributions according to the growth of payroll contributions if the rate of the latter had not changed. So, during 2004 the official average wage increased from 952 lei in January to 1497 lei in December. The payroll rate had not changed, so the contributions for the non-working population were increased to match the wage increase. The 2004 SHI contributions for pensioners, children, students and registered unemployed were established at a fixed sum of 441 lei (US\$ 36), from the state budget. They were raised by 51%, to 664.80 lei, in 2005 and to 816 lei in 2006 (23% over 2004).

The budget transfers to the SHI system did not cause an increase in the share of health expenditures in national budget expenditures (17.6% in 2004, 16.1% in 2005 and 15.5% in 2006). On the contrary, total budget incomes and expenditures rose faster than budget expenditures on health. Meanwhile, the increase in SHI budget contributions in real terms has caused tension between the Ministry of Finance on one hand and the MHSP and NHIC on the other. The Ministry of Finance has argued that the further growth of these contributions at a similarly high annual rate might be too much for the budget. The government faces the challenge of decreasing the payroll tax rate or revising the linkage of payroll contributions and budget contributions. The solution was to disconnect the two while keeping the latter strictly fixed. According to the recent amendments to the legislation, starting in 2007, the budget contribution for state insureds must not be less than the current three-year average ratio of public health expenditures to general government expenditure, that is 12.1% (not including the funds collected from payroll contributions). Additionally, there is debate about increasing the payroll contribution rate to 5% of wages (2.5% + 2.5%). Due to expected increases in the national budget and average wages in 2007, both flows will likely increase.

2.3.4 Private insurance

VHI has played a very small role in health financing; the collected premiums were about 0.7% of total health care funds in 2004, and the number of insureds under 57 000 or 1.7% of the total population (Table 8).

Table 8. Voluntary health insurance indicators, 2003–2005

	2003	2004	2005
Number of private insurance companies	21	20	20
Number of insureds	5 563 000	NA	5 677 000
Total insurance premiums (millions of lei)	14.35	11.58	14.36
Total insurance pay-out (millions of lei)	4.79	3.37	4.19

Source: National Bureau of Statistics.

The insurance premiums and pay-out decreased from 2003 to 2004 by 19% and 30%, respectively, because the SHI system extended the scope of free health care services and reduced the demand for VHI. This effect was temporary and pre-reform premium levels were restored in the following year.

2.3.5 Out-of-pocket payments

The dominant form of private health expenditure in Moldova is out-of-pocket payment. In 2004 only 5% of private spending consisted of VHI contributions and employers' payment of health care for their staff. Officially registered out-of-pocket payments amounted to 1.4 million lei, or 42% of total health spending in 2005, including 1.2 million lei in household expenditures on drugs and medical goods for self-treatment and outpatient care, and 178 million lei in household expenditures for services delivered by medical facilities, mostly dentistry.

Table 9. Out-of-pocket payments for health care in 2000–2005

	2000	2001	2002	2003	2004	2005
Out-of-pocket payments (millions of lei)	919	954	1070	1184	1306	1402
Drugs and medical goods	843	864	939	1045	1133	1224
Medical services*	77	90	115	139	173	178
Out-of-pocket payments in real terms (2000 = 100%)**	100	96	98	97	96	92
Out-of-pocket payments as percentage of total health expenditures	64.7	60.8	53.2	51.5	45.8	42.3

* Calculated as the volume of chargeable medical services by health care providers minus VHI pay-outs.

** Calculated using annual drug price and medical services price index-deflators for 2000–2005.

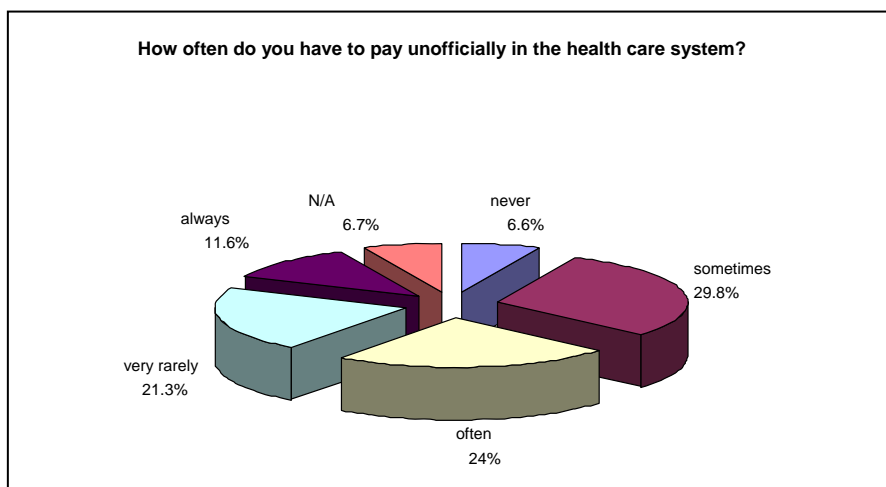
Source: National Bureau of Statistics.

Official figures seem to underestimate the real amount of informal payments for health care services. The World Bank¹² estimated the amount at 408 million lei in 2004 and 444 million in 2005 based on the National Bureau of Statistics (2006) survey data. According to Transparency International,¹³ 65.4% of respondents sometimes, often or always have to pay unofficially for health care (see Fig. 4).

¹² The Republic of Moldova health policy note. Chisinau, World Bank, 2006.

¹³ Republic of Moldova survey. Berlin, 2006.

Figure 4. The prevalence of informal payment for health care



Source: Transparency International

2.3.6 Donors

Moldova receives technical and financial support from many development agencies and various national governments (Table 10). The foreign grants and loans for government health care programmes and grants to NGOs amounted 259 million lei in 2004 or 7.8% of total health care funding.

Table 10. Donor funding of health care programmes in Moldova, in thousands of US dollars

Donor	2000	2001	2002	2003	2004	2005	2006
World Bank Health Investment Fund: primary health care (PHC) service and equipment, infrastructure repairs	16	186	804	911	6432	1917	440
Global Fund/WB International Development Association: TB, HIV/AIDS, hospital service, diagnostic services, drug procurement	-	-	-	387	2493	7237	3367
EU (TACIS Project): technical assistance for health system reform	300	300	400	900	840	1040	1225
SIDA (Swedish International Development Agency): child health protection, TB, HIV, communications	-	200	200	246	400	2692	1397
SDC (Swiss Agency for Development and Cooperation): mental health, chronic diseases, surveillance	-	85	281	160	117	506	1956
UNICEF: perinatal care, nutrition, immunization, IMCI, primary health care, public health, better parenting	-	-	185	201	216	220	226
Soros Foundation: Harm reduction, mental health, palliative care, tobacco control, etc.	300	340	340	300	200	200	181
United Kingdom Department for International Development: regulation	94	94	94	94	-	-	-
Japan: TQM, hospital evaluation	-	-	-	55	147	292	386
Stability Pact: mental health, tobacco, other	-	-	-	42	84	108	184
Caritas Luxemburg: TB and HIV/AIDS programmes for prisons	240	420	1200	320	300	240	240
UNDP: regulation	-	-	-	-	-	87	100
WHO: technical assistance	300	300	300	300	300	300	300
UNFPA: reproductive health	180	240	240	420	440	500	500
UNAIDS: regulation	100	70	35	35	50	70	-
USAID/AIHA: diagnostic services, TB, HIV/AIDS	-	-	-	250	240	2020	120
The Netherlands: PHC service and equipment, infrastructure repairs	-	1667	1177	860	1195	3157	3443
Total	1530	2402	5257	5481	13 454	20 589	14 066

Source: MHSP

3. The benefit package and associated rationing policies

The key problem facing Moldovan health care reforms was the gap between state guarantees of free minimum services and their public funding. This caused substantial shortages of supplies in health facilities, insufficient accessibility of services – including urgent care – and widespread informal payments. Therefore, during the SHI preparation phase assuring a balance between services and funds was the focus of the MHSP and WHO consultants.¹⁴

¹⁴ Shishkin S, Kacevicius G. *Summary Mission Report of the WHO Regional Office for Europe Organization and Management Programmes to The Republic of Moldova to assist with Health Systems Development as part of the BCA Implementation Process 2002–2003*, Copenhagen, 2003.

In introducing SHI, Moldova decided against patient co-payments (except for expensive heart surgery). Therefore, the SHI basic package includes the delivery of free primary and urgent secondary (outpatient and inpatient) care without any preconditions. The main rationing measures are referrals and a waiting list system. Specialist consultations and non-emergency hospitalization are only after referral by a general practitioner (GP), and the waiting list rationalizes the flow of non-emergency patients (see the text box for more information). The benefit package only includes services from contracted providers. So services obtained from other providers have to be financed privately.

According to the NHIC, the waiting time is minimal. In fact, the waiting lists serve as a patient management tool in identifying necessary services and proper venues. Eye surgery is an exception, and waiting time for cataract operations can be several weeks. A typical “market response” by providers to this type of rationing is the classification of more inpatient cases as “emergencies”. In Moldova, however, this does not appear to be the case, perhaps due to weak incentives.

The referral system and patient right of choice

In primary health care, a patient is entitled to choose a health centre/polyclinic GP within the catchment area.

By law, GPs have a gate-keeping function, thus there is a referral system for outpatient specialist and inpatient care, as well as costly tests.

After receiving a referral, patients may choose a specialist in the referred institution. There is a list of eighty diagnoses exempted from this rule, including myocardial infarction (up to 12 months after the incident) and some other cardiovascular diseases, diabetes, asthma, tuberculosis and hemoblastic, oncological and dermatovenerological diseases are entitled to specialist consultation without referral.

Patient selection for non-urgent inpatient treatment is made by special commissions (Consultative Commissions of Physicians) in out-patient departments of hospitals on the basis of referral from a GP (for a secondary hospital) or specialist (for a tertiary hospital). If the commission decides that the referral is justified, the patient must make arrangements with the designated institution.

The waiting lists are managed by hospital departments, and hospitals have a reporting obligation to the authorities on their status.

Because of a very strict regulation of non-emergency patient flow, the right to choose an inpatient provider is very limited, and this does not allow any competition among hospitals. Due to the natural monopoly, this issue is not very important for rayon inhabitants, who can choose between the local hospital and one in Chisinau or Balti. However, this becomes important in large cities where there could be several general hospitals providing similar services. Consequently, hospitals lack financial motivation to increase the quality of services, since their budgets are contractual and patient flows are frozen. This also does not support hospital restructuring, since the patient's right of choice is limited in practice, especially for inpatient care, and hence the system has very limited scope to take advantage of market mechanisms to promote restructuring.

The SHI programme adopted for 2004 seemed to be balanced with planned contributions. The programme was enlarged in 2005 and 2006. Almost all types of inpatient care were included in the benefit package, except some diagnostic services. The volume of contracted specialized outpatient care for 2006 increased twofold over 2005. However, the programme's extension has

awakened fear of imbalance between guarantees and funding and thus a resurgence of informal payments for formally free health care. The accessibility of health care in public facilities and the dynamics of out-of-pocket payments are not monitored by the government.

The inclusion of extended home care in the SHI programme since 2005, with visiting physicians providing free drugs, is a noteworthy innovation for CIS countries. The programme maintains a list of diseases qualified for home care.

4. Pooling of funds for health care

4.1 The pre-reform situation

In the Soviet era, the health care system was under the centralized control of the state, which financed services from general government revenues as part of the national social and economic development plans. After 1991, decentralization placed most responsibilities on the rayon level, where legislative and executive branches were formed. The intermediate level of authority (judets) had already existed for several years. On the lowest level, municipalities were given ownership of the major part of medical facilities and were expected to fund them through their own budgets, derived from local taxes and revenues, and to nominate health administrators. The national level (the MHSP) kept referral and teaching hospitals and some other specialized functions such as surveillance, medical education and vertical target programmes.

Thus, pooling was decentralized to the rayon level and partly overlapped with pooling on the national level. The geographic allocation mechanism was not specified for the health sector. There was a system of local budget revenue equalization, using a formula including norms for per capita expenditures for health care, education, social services, etc. But the equalizing transfers from the national to the local budgets did not include earmarked sums, and municipalities were free to allocate the transfers. As a result, public health care funds were unevenly distributed across rayons. The highest per capita rayon budget funding in 2003 was 4.6 times that of the lowest; if Chisinau and Balti, the largest cities, are excluded, the difference was 2.9 times.

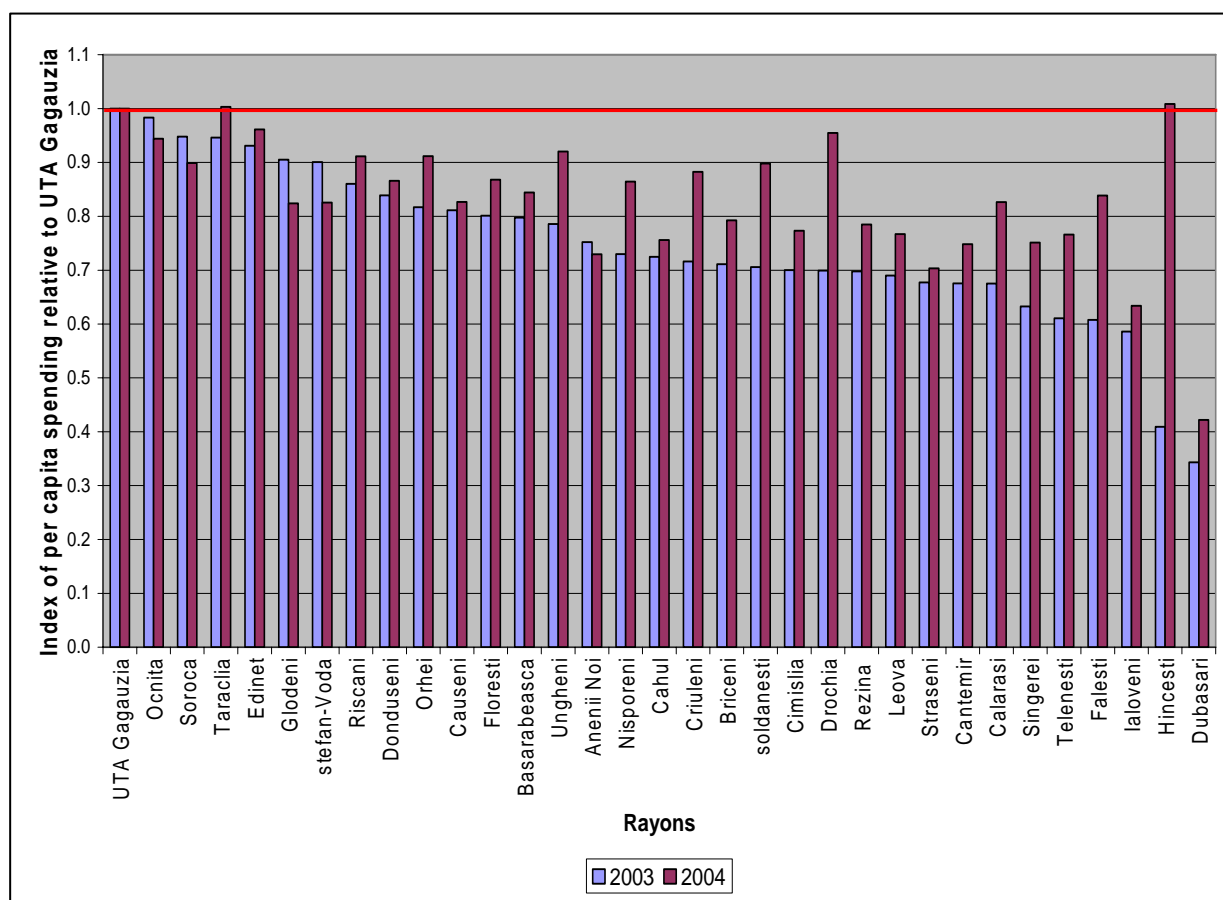
4.2 NHIC fund pooling since 2004

4.2.1 Fund pooling for the insured population

In 2004, pooling of funds for was centralized in the NHIC. The main sources of the pool were payroll taxes for the employed and general revenues for specific population groups insured by state. In this way, rayon-level pooling was fully eliminated. Therefore, the essential feature of the SHI system is the delegation by the government to the NHIC of all budget funds targeted for health care services.

The law on SHI contributions specifies that all contributions be paid into one account in the Republic of Moldova National Bank. The Ministry of Finance is responsible for contributions of the state budget, and the State Tax Office handles contributions of employers and employees. Collected amounts are divided into four SHI sub-accounts from which providers are paid directly.

Figure 5. Index of per capita public expenditures on health in the rayons of Moldova in 2003 and 2004



* - In 2003 – per capita budget funding; on 2004 – per capita funding from the NHIC.
Source: NHIC data.

4.2.2 Pooling for the uninsured population

There are two main sources for funding of health care services provided for uninsured people. According to the Law on Health Care and the Criteria for Contracting of Health Care Providers under Compulsory Health Insurance, up to 50% of the SHI reserve fund resources could be used to reimburse emergency pre-hospital care in cases of major emergencies and primary health care (clinical examination by a family physician, and follow-up) for uninsured people. Purchasing of these services for the uninsured is the responsibility of the NHIC.

A new vertical programme of state budgeting for inpatient care for uninsured with tuberculosis, psychiatric disorders, cancers and communicable diseases was introduced in 2005. The amount allocated for this programme was increased from 30 million lei in 2005 to 36 million lei in 2006. In connection with the programme, the MHSP contracts national health care institutions in Chisinau, where a large majority of specialized hospitals are concentrated. All these inpatient cases have to be validated for payment by the Ministry's Centre of Public Health Management.

4.3 Government targeted health care programmes

There are thirteen health programmes funded from the national budget and administered by the MHSP. Funding of these programmes increased steadily over the period from 2000 to 2006 (Table 11). Almost half of the financial resources within the national programmes are allocated for centralized purchasing of medical equipment for health care institutions. The second major

programme is very new (started in 2005), and is designed for reimbursing hospitals for inpatient treatment of the uninsured population.

Table 11. Expenditures of national health programmes, 2000–2006, thousands of lei

National health programme		2000	2001	2002	2003	2004	2005	2006
1	MoldDiab	37 747	3558	8224	7884	9192	11 042	16 506
2	Cancer prevention	313	450	2445	3035	2475	2813	3384
3	Tuberculosis and bronchial asthma prevention	815	1119	2317	1704	2145	1982	2927
4	Endogenous mental diseases	196	3169	1294	2583	2566	1867	3026
5	Prevention and treatment of pathologies' negative influence on human genus	3545	0.4	2256	2326	809	297	500
6	Expensive treatment, examinations and consumables	148	577	1295	2730	32 045	3110	3491
7	Expensive cardiac surgery	917	1912	5494	5123	5861	6145	7259
8	Haemodialysis service and renal transplantation	2985	2548	5014	5552	8600	13 607	18 183
9	Prevention of HIV/AIDS, sexual transmissible diseases and infections	775	997	1640	1391	518	680	866
10	Blood transfusion service	0	0	5505	5579	5495	6600	no data
11	Immunization	1161	1441	3632	3605	5351	4922	7010
12	Medical assistance to the uninsured	-	-	-	-	-	36 832	30 000
13	Consolidation of technical and material resources of medical institutions	2200	3150	3520	15 358	17 019	25 159	71 830
	Total	13 641	16 070	42 637	56 872	63 235	115 056	164 982

Source: MHSP

4.4 Departmental health care

In Moldova, a network of health facilities of other ministries and government agencies (“departmental” health facilities) exists in parallel to the services of the MHSP, thus contributing to a duplication of health service coverage. There are 35 departmental hospitals with a total of 2307 beds. These hospitals have widely ranging capacities – from 8 beds in hospitals of the Border Guard Department to 285 beds in the Railway Hospital of the Ministry of Transport. Only 3 beds of 35 hospitals were contracted by the NHIC. Bed utilization efficiency is very low, from 120 to 275 days per year. Only the hospital of the Ministry of Internal Affairs (MIA) is an exception, and bed utilization there is entirely for police pensioners, paid for by presently working MIA employees. There are also 112 departmental ambulatory institutions, 41 of which are staffed solely by medical assistants. In 2005, they counted 906 625 visits, 30% of them preventive. In total, departmental institutions are staffed by 1168 physicians; 827 of them perform clinical functions, and the rest are employed in administration and special services (epidemiology, radiology etc.). See Table 12 for more detailed information.

So, this part of the health system remains, in fact, unreformed. Integration of railway health services (Ministry of Transport) into the general scheme seems needed and realistic; the rest of the departmental facilities and programmes will most likely remain separate.

4.5 Pooling of funds on local level since 2004

There was a shift of responsibilities in health funding after the introduction of SHI, and local authorities were no longer obliged to allocate money for health purposes, but retained the right to spend. Thus, health care spending from local budgets dropped from 626 million lei in 2003 to 53 million lei in 2004 and 30 million in 2005 (see Table 3 for more detailed information). From 2004, the majority of these funds were spent for renovations and procurement of medical equipment. However, local budgets are seen also as an additional source for reimbursement of services provided to the uninsured population not covered by the new national program described in section 4.2.2. A new practice emerged in 2006, with local authorities in one rayon purchasing SHI policies for 60 uninsured people. Currently, there are some measures being considered to require local authorities to cover the health care of uninsured residents on a regular basis.

Table 12. Capacity of departmental health care facilities

Entity	Hospitals							Outpatient Institutions		Total Personnel		
	No. of units	Beds	Patients treated	Insured patients treated	Average bed use, days per year	Avg. stay	Mortality (%)	No. of units	No. of visits	Total	MDs	Medical assistants
Ministry of Transport	4	485	4986	2787	139	8.7	0.3	6	276 981	861	165	318
Border Guard Department	11	110	1680	-	120	8.1	0	12	64 654	59	30	24
Department of Penal Institutions	12	879	2714	-	232	75.0	1.8	7	63 685	258	101	137
Ministry of Internal Affairs	1	160	5286	891	358	11.0	0.1	13/41	171 543	479	136	174
Ministry of Defence	4	408	7403	-	185	10.2	0.1	31	111 857	587	246	292
Information and Security Service	1	65	768	-	146	12.4	0.5	1	66 346	115	33	41
Government Administration	1	200	6524	3570	275	8.4	0.5	1	151 559	639	116	245
Total	35	2307	32 361	7248	-	-	-	112	906 625	2998	827	1231

5. Purchasing of health care

5.1 General patterns of allocation to providers

According to SHI regulations,¹⁵ revenues are split into four funds: the main fund (94% of revenues) and reserve, preventive and administrative funds (2% of revenues each). The main fund is for reimbursement of services provided within the universal programme. The proportions and amounts allocated for various types of services in 2005, 2006 and 2007 are presented in Table 13.

Table 13. Allocation proportions of the SHI main fund, 2005–2007

Type of care	2005		2006		2007 (projected)	
	Allocation in millions of lei	Share of total expenses (%)	Allocation in millions of lei	Share of total expenses (%)	Allocation in millions of lei	Share of total expenses (%)
Emergency pre-hospital	129	10	130.1	9	158.4	9
Primary*	371.8	30	446.2	31	567.7	30
Outpatient specialized	64.6	5.2	93.3	6.5	134.7	7
High performance	19.6	1.6	20	1.4	37.6	2
Hospital	661.6	53	750.9	52	931.9	51
Home care	0	0	1.0	0.1	2.7	0.14
Total	1246.6	100%	1441.5	100%	1833.1	100%

*compensated drugs included.
Source: NHIC and MHSP data.

Due to the different structure of the pre-SHI health budgets, it is hard to compare them to those in the table, but since PHC institutions were temporarily autonomous, it is possible to make some estimations.

Table 14. Allocation proportions of the health budget, 2001–2003, in millions of lei

Type of care	2001	%	2002	%	2003	%
Emergency pre-hospital	15.3	3.1	59.5	8.4	102.3	12.3
Primary	101.6	20.5	133.5	18.9	155.8	18.8
Hospital	378.4	76.4	513.6	72.7	571.9	68.9
Total	495.3	100.0	706.6	100.0	830.0	100.0

Source: MHSP data.

We can conclude from this comparison that there were some positive shifts in health care spending after the introduction of SHI.

¹⁵ Decree of Government of Republic of Moldova No. 594 dated 14 May.2002.

5.2 Funding arrangements with providers

Two periods of pre-SHI health care funding can be identified: prior to 2001, there was a period of the old Soviet-style input-based budgeting, that is, based on numbers of hospital beds and staff. Starting in 2001, there was a shift to the capitation-based budgets in order to equalize allocations, with limited progress. After the 2004 introduction of contracting – the only funding instrument for universal programme benefits – substantial incentives came into play for service provision. While providers of primary care and secondary outpatient care did not have much incentive to increase productivity, other providers, hospitals and especially providers of emergency pre-hospital services received strong incentives, because of the payment-per-case method for inpatient services and payment-per-visit for ambulance services. Another important factor in improving productivity was the stabilization of financing flow, including advance funding and trimming of procedures. These new incentives resulted in an increase in services (see section 6.4).

Contracts are entered between the NHIC (and its eleven territorial agencies) and public health care institutions or pharmacies. In the case of public institutions, the contract has to be signed additionally by the body responsible for the institution, namely local government authorities (municipal and rayon) or the MHSP (national hospitals). Institutions are obliged to present their business plan for the coming year. However, the only business plan parameter fixed in the contract is the upper spending limit for remuneration of medical staff. For 2006, this limit was 60% for primary health care and 50% for inpatient care. This limitation is based on a desire to reserve some resources for laboratory expenses within the universal programme.

The contracts are relatively simple, consisting of a general part and separate annexes for each kind of care, and could be classified as cost-and-volume contracts. They give the NHIC the right to audit of health care institutions and refuse reimbursement if services are unjustified. The basic document for the contracting arrangements is the MHSP's 2005 "Criteria for contracting health care providers under compulsory health insurance". The criteria are in accord with the government approved universal programme and are negotiated by the MHSP and the NHIC. Their aim is to ensure transparency in all aspects of the compulsory health insurance by establishing basic principles for contracting different services, methods of payment for services and procedures for negotiation and litigation. Detailed provisions of contracting criteria are described below.

5.3 Pricing, contracting and provider payment

5.3.1 Pricing

Price setting for health care services is regulated by special decree No. 1128 of 2002, amended in July, 2003, which sets the methodology of fee calculation and procedures of approval and revision and defines the responsible parties. The calculations were based on 2001 price levels and have not been adjusted, to the chagrin of providers. According to the decree, fees for services are first calculated by health care institutions and then submitted to the MHSP. After approval by a special committee appointed by the government, the Ministry sets and publishes the fees. The fees are maximums, that is, the NHIC has the right to negotiate lower prices with providers, though this is rarely done in practice except when the capitation-based allocation results in evident discrepancy with actual needs.

5.3.2 Emergency pre-hospital care

The annual contracted sums for the territorial emergency stations consist of the per capita allocation (adjusted with reference to the predicted figure) and bonuses for achievement of quality indicators. Before 2004, there was chronic under-funding of medicines, fuel, vehicle maintenance and other expenses. Just before the introduction of SHI, emergency pre-hospital services were centralized into five provider catchments: four regional stations plus the National Scientific Practical Centre of Emergency Health Care for Chisinau. All providers are autonomous legal bodies.

In order to increase productivity of providers and guarantee sufficient public access to services, in 2004 and 2005 the main method of funding was payment per ambulance visit. Their number increased by 25% per annum, with an average of almost 253 visits per 1000 inhabitants in 2005, compared to 204 visits in 2004. In some territories, this indicator reached as high as 383 visits per 1000 inhabitants. This provoked a switch to capitation as a main payment method. Capitation is based on the population in the catchments. For 2006, payments for emergency care were as follows:

- per capita payment: 42.44 lei (88.4% of main fund resources);
- per capita annual bonus for achievement of quality indicators: 5 lei (10.45%);
- budget for national helicopter ambulance service: 1.15%; and
- per capita payment of 6.8 lei for services provided to uninsured people, from the reserve fund.

The bonus payment for quality was introduced at the beginning of 2005 in order to decrease unjustified refusals and justified complaints and to improve monitoring and feedback to PHC providers. With the switch to capitation, quality indicators were changed to stimulate providers' productivity. Thus, an emergency unit's handling of an average of 250 or more visits per 1000 insureds earns 100% of the quarterly amount stipulated in the contract for the quality indicator bonus, whereas 225 to 250 visits earn 50% of the sum. Specification of quality indicators, their value and criteria for achievement are approved by the MHSP and NHIC. Reporting is done quarterly.

5.3.3 Primary health care

Before 2000, PHC services were integral parts of hospitals, financed according to the number of staff. During the period from 2000 to 2003, PHC centres had independent legal status, and were funded by the global budget based on population. Starting from 2004, PHC providers were re-integrated into hospitals, covered by an annex in the contracts between the NHIC and hospitals. There has been a persistent problem since this re-integration, concerning distribution of funds within hospitals. There has been evidence, especially in 2004, that some funds allocated for PHC were used for other hospital services.

From very beginning, the main method of payment for hospital PHC has been capitation based on number of insureds registered to the provider during a contract year. The capitation is based on catchments rather than on patient choice. Theoretically, patients have the right to change PHC providers once a year, before the new contracting cycle. So consumer choice is very limited and does not have much impact on how public funds are distributed. The situation is different regarding the choice of family physician, as this is not limited.

In 2006, methods of payment for primary health care were the following:

- per capita payments of:
 - 84.6 lei for PHC services by family physicians
 - 25 lei for paraclinical services after referral by the family physician
 - 13.5 lei for compensated medicines
 - 18 lei as the basis of an annual quality bonus;
- 250 lei per case treated in day care/home care institutions and home care, with a ceiling of 23.5 lei per capita per institution.

PHC allocations thus consist of 78% per capita payments, 13% quality bonuses and 9% prescribed medicine payments. No risk adjustment is applied.

Limited services for uninsured people are provided at 6.8 lei per capita (6.1 million lei in total, from the reserve fund). As in the case of emergency pre-hospital care, the basis for capitation is the estimation that 80% of population is insured and 20% is not. Payment for paraclinical services represents a kind of partial fund-holding, as they are paid from the total amount allocated to PHC. Due to mixed incentives, there is chronic under-referral of patients for paraclinical services, and this is a significant problem.

Physicians working in PHC are entitled to prescribe medicines included on the positive list, and the NHIC contracts pharmacies for direct reimbursement for medicines delivered to patients. Consequently, some providers are not funded directly but are given a spending cap. There is a more complicated mechanism for rayon hospitals, which have their own pharmacies. Due to the absence of alternatives for drug supply in rural areas, the hospital pharmacies are allowed to sell drugs, including those on the compensated list, per their contracts with the NHIC. Since 2005 this mechanism has worked without significant problems, avoiding the over spending that has plagued other countries. On the contrary, the problem in 2005, the first year of introduction of drug compensation, was under-usage of allocated resources.

As in the case pre-hospital care, PHC quality bonus payments were introduced in 2005. In order to create incentives for PHC providers to increase preventive activities three composite indicators were introduced: immunization, pregnancy surveillance and prophylaxis. The quality indicators set for 2006 were:

- monitoring of pregnant women until the week 12 of pregnancy (350 lei for each reported case);
- monitoring of 1 year-old children as required, by family doctors (400 lei for each child);
- detection and ongoing treatment of tuberculosis according to DOTS standards (1500 lei per instance of each indicator); and
- primary detection of oncological diseases (1500 lei for each case of cancer identified/suspected in an early stage by the family doctor and confirmed by a specialist); and outpatient treatment of patients with restricted mobility (250 lei per case).

An important change was also made in the level of provider incentives. In 2005, there were different quality payments according to the performance of the whole institution, whereby the NHIC kept some resources designated for under-performing hospitals. For 2006 the MHSP decided that all providers would receive the contracted amounts for this purpose. So now health

care institution managers distribute these sums to family physicians according to their individual performance.

5.3.4 Outpatient specialized health care

Before 2004, outpatient specialized care was part of hospital care, and funded accordingly. The only exception was (and still is) the capital city Chisinau, where polyclinics were renamed Territorial Medical Associations (ATM) providing both primary and secondary outpatient care. From 2000 to 2004, these associations were funded on the basis of the historical budget. Since implementation of SHI there have been two methods of reimbursement. In 2004 and 2005, the historical budget was applied, that is, reimbursement was unrelated to the care provided. In fact, resources allocated were sufficient only for remuneration of staff, so existing capacities were under-funded and therefore subsidized by other kinds of health care. Since 2006, payments to national and specialized institutions have come from the global budget while regional institutions receive per capita payment and quality bonus payments. As in the previous categories, capitation is based on the estimate that 80% of the population is insured.

The sum allocated for dental care (including the institutions financed from the global budget) is 12.1 million lei, and the sum allocated for the specialized outpatient care provided within the institutions financed from the global budget (except dental care) is 20.1 million lei. The method of payment for home provided health care (annual payment per patient) is still under negotiation between the MHSP and the NHIC.

5.3.5 High technology diagnostic and treatment services

Before 2004, these services were mostly paid out-of-pocket, except by children, pensioners and the disabled, and national hospitals providing them received funds from the Ministry of Health. After the introduction of SHI, the method of payment was fee-for-service. The list of high performance health services is part of the universal programme, and includes CT, MRI, various angiographic procedures, etc. The NHIC contracts the services based on fees negotiated with providers and conforming to rates approved by the MHSP. The number of providers is increasing, and some private providers are seeking contracts with the NHIC. Providers must register patients in a waiting list; patients can avoid the wait by paying directly out-of-pocket.

5.3.6. Inpatient care

Before 2000, the inpatient services provided by all kinds of hospitals were funded by input-based budgeting, based on the numbers of hospital beds and staff. From 2001 to 2004, some limited progress in equalizing allocations was achieved via the switch to capitation on the rayon level, whereas funding of national and municipal hospitals was not changed until 2004. Since then, inpatient funding has primarily been activity-based. The provider payment methods for inpatient care are:

- *payment per treated case (case-based)*, i.e. a payment covering the total volume of hospital services provided during one hospitalization (within the limits of provisions of the Universal Program). This is the main method used to reimburse inpatient services in Moldova. All in-patient cases are grouped into one of 90 case-mix groups based on hospital structural departments. This payment method is combined with a hospital-specific budget cap of a yearly sum fixed in the contract with the NHIC; and
- *global budget* – for the admission department (for the volume of care provided for patients in this department without further hospitalization) and the haemodialysis section (including costs for public transportation from/to home for provision of the dialysis service).

The case-based payment system is under ongoing development, and the number of case-mix groups is gradually increasing. National and municipal hospitals are contracted according to profiles of approved hospital services. Rayon hospitals are contracted according to five basic profiles: therapy, communicable diseases, surgery, obstetrics and gynaecology and paediatrics; additionally, three rayon hospitals are contracted according to a tuberculosis profile. In order to adjust payment to actual costs, the basic profiles have been subdivided. For example, surgery includes cases without operations, cases with operations and orthopaedics; OB-GYN includes delivery, pregnancy pathology and gynaecology.

Such gradual development of inpatient care funding corresponds to increasing managerial and IT capacities. However, due to current pricing inconsistencies, implementation of a diagnosis-related group (DRG) system is being discussed. In order to reduce incentives for providers to hospitalize over the contracted volumes, a regressive annual payment is used. This means that there is an inverse relationship between overruns and fees per case, as presented in Table 15.

Table 15. Regressive payment for inpatient care

Overruns in case-mix categories	Deviation from standard reimbursement
up to 5%	40%
5%–10%	20%
10%–20%	10%
20%–40%	5%
over 40%	no reimbursement

Source: NHIC.

Pricing of inpatient services is based on an estimation of all actual costs, excluding capital investment and procurement of medical equipment. According to decree No. 1128, the pricing of inpatient services was based on bed-day costs. Major expenses (“basic costs” such as salaries, administrative overhead and utilities, and “auxiliary costs” such as garage, laundry, etc.) were allocated to the inpatient departments having beds and delivering direct patient services. Later, after the introduction of per-case payment, the bed-day focus was switched to a treated case standard per case-mix group. This means that first, the costs generated by the inpatient department are divided by the number of bed-days in order to calculate the costs of one bed-day, and this cost is multiplied by a standard number of days for each diagnostic category. In a next step, costs of medication, nutrition, and lab work are calculated. Costs for medication and nutrition are assessed using a normative formula for each diagnostic category, whereas lab work is broken down to a cost-per-minute. So the formula for calculating the cost of a treated case is:

$$C_{\text{treated case}} = (C_{\text{1 bed day}} \times \text{days}) + C_{\text{medication}} + C_{\text{nutrition}} + C_{\text{lab}}.$$

There are different levels of case-mix group rates for national, rayon and municipal hospitals. In 2005, the per-case rate differences between the rayon and national levels were 33% for internal disease, 50% for paediatrics and 240% for general surgery. Some weaknesses of this pricing method became evident. The calculations are still based on the 2001 price levels, and updating of the calculation formula has not been approved. Costs of paraclinical services (laboratories, physiotherapy, etc.), surgery, anaesthesia, intensive therapy and depreciation are not included in the calculations, leading to underestimation of the actual costs. It was decided to calculate individual rates for each hospital, however, in practice these were used only in pilot rayon,

Hincesti. Immediately after the introduction of SHI, individual tariffs were replaced by separate rates for national, rayon and municipal hospitals.

6. Service provision

6.1 Market structure

There are several kinds of primary health care providers in Moldova. In Chisinau, PHC is provided by family physicians of the Territorial Medical Association (AMT), who also provide specialized outpatient care. Around Chisinau there are also several autonomous Centres of Family Medicine (CMF). The city of Chisinau was the founder of both organizations. In the rayons, PHC is provided by CMF integrated into rayon hospitals under local authority. PHC providers have catchments, and patients may freely choose a family physician within their area.

By law, primary care physicians have a gate-keeping function, so there is a referral system for access to secondary and tertiary care. Patients have the right to choose a specialist in the institution to which they are referred. There are special commissions (Consultative Commissions of Physicians) in outpatient departments of hospitals that handle referrals for inpatient treatment. Patients must attend the hospital to which they are referred. Thus, patient choice and competition among providers are limited. The NHIC's strict planning of inpatient cases in rayon hospitals according to the catchment's population and the natural monopolies of the numerous specialized hospitals (mostly in Chisinau) are also limiting factors.

Health system decentralization began in 1999 on a regional level. The 1999 Law on Local Public Administration established 11 regional administrative units comprising 10 counties, one metropolitan area (the city of Chisinau) and the autonomous territorial unit of Gagauzia. The counties were given increased responsibility and scope for regional planning and administration, including health. The regional health authorities were made responsible for paying for services, with support from the central government budget and local tax revenues. Allocations from local budgets went directly to PHC units, sectoral/county hospitals and emergency services and were managed autonomously by the units, which became separate legal entities. However, the 2003 Public Administration Law 123 and the Government Decisions 688 and 689 of June 2003 developed a new public administrative structure based on 32 districts and three municipalities. The Minister of Health issued Regulation 190 regarding the new structure at the rayon and municipal levels. The new regulations abolished the county structure and stipulated that health services should be reorganized into one legal entity comprising rayon hospital, PHC, emergency and ambulatory specialist services, with separate budgets for each, but all managed by the rayon Head Physician. In spite of separate budgets and even separate sub-accounts, in practice this meant that PHC providers could no longer manage their resources, and created preconditions for open as well as hidden subsidizing of hospital services from resources formally allocated for PHC.

6.2 Changes in providers' managerial and financial autonomy

During SHI preparation, there were debates regarding the legal status of health care providers. There were strong recommendations from international consultants that providers' managerial and financial autonomy be increased, otherwise, new provider payment methods would not have much impact. In December, 2003, just two days before inception of SHI, a special government

decree was adopted transforming a majority of health care institutions (those to be contracted by NHIC for SHI) from budgetary to public non-profit status. Managers of the public non-profit institutions were appointed by the local authority and approved by the ministry. Additionally, management boards composed of representatives of the responsible authority (Chairman of the Board), NHIC, employees, non-governmental health care associations, and the head physician were established in each institution. The responsibilities of the management boards were to represent the interests of stakeholders or managing authorities, supervise work of the head physician and develop short and long-term strategies and policies. It was attempted to increase the transparency of local and central authority over the health care institutions, but the management boards have not attained the expected degree of importance, and their role is merely formal in a majority of facilities.

Nonetheless, certain positive changes have taken place. First, health care institutions contracted by the NHIC were guaranteed stable financing which has remained in place to the present. Moreover, each institution receives a major part of its funds in advance. According to regulations contracting criteria, each provider is paid a monthly advance of up to 80% of a one-twelfth share of the annual contracted sum, and quarterly (upon the presentation of an invoice) the rest of the payment, up to a quarter of the annual contracted sum. These transfers are made directly from the NHIC to the institutions.

Second, managers of health care institutions received much more autonomy in managing everyday spending according to actual needs, with some limitations. For example, medical staff in public non-profit health institutions have the same status as other employees of public budgetary institutions, and are subject to the same salary system. On the other hand, the range of rates is wide enough to provide some flexibility to a manager. A more important limitation is imposed by the MHSP's strict regulation of medical equipment procurement, in order to prevent uncoordinated purchase of costly equipment. The ceiling amount for such purchasing is 5000 lei (a bit more than 300 Euros), and to exceed that figure, the institution must apply to the MHSP, which will refer it for discussion by a governmental commission led by the prime minister. Some consider the 5000 lei figure to be far too low, and argue for an increase of seven-fold or so. This limitation also applies to cases where procurement is not funded by the hospital itself but by its administrative authority (e.g. the MHSP, a health department, finance department, etc.) Often, some amounts can be allocated at the end of budget year, but due to complicated and time-consuming procedures they cannot be used.

Presently, government regulations stipulate that the hospitals have to use 45% of their income for salaries, 27% for social insurance contributions, and 2% for health insurance, thus mandating how 74% of a hospital's funds must be used.

6.3 Geographic distribution of providers

Management of emergency pre-hospital care is undertaken by five catchment providers: four regional emergency health care stations and the National Scientific-Practical Centre of Emergency Health Care in Chisinau, which was created in 2005 from the Chisinau Municipal Emergency Clinical Hospital. There are 240 emergency health care teams (0.66 teams per 10 thousand inhabitants) located in major population centres of all rayons. The service employs 497 physicians and 907 middle health staff, and has 303 ambulances, covering 67.9% of the need.

Primary Health Care is provided by 35 rayon general practitioner agencies, composed of 392 health centres and 551 GP offices. Chisinau and Balti municipalities have 15 GP centres.

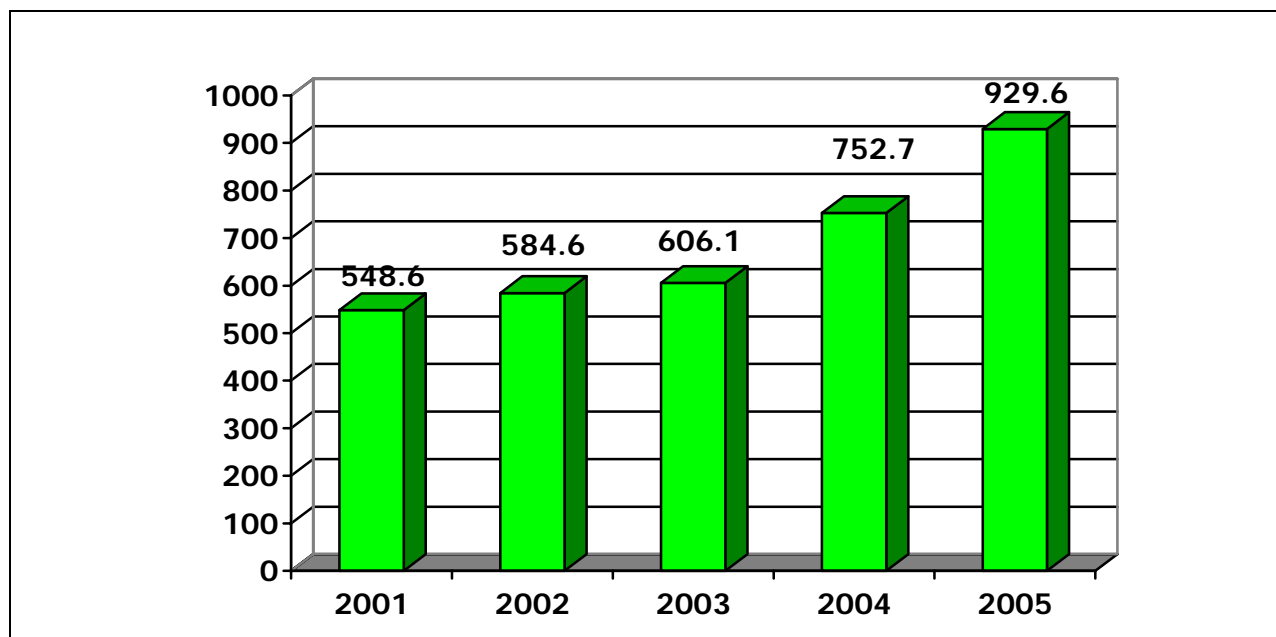
In 2005, there were 64 hospitals in Moldova: 35 rayon, 10 municipal (9 of them in Chisinau and 1 in Balti), and 19 national (16 of them in Chisinau). Thus 25 hospitals – almost 40% of all inpatient facilities – were located in capital city. Forty per cent of beds (8227) were in national health care facilities, 17% (3510) in municipal facilities and 43% (8740) in rayon hospitals. Thus, over 50% of beds were in Chisinau. The NHIC contracts 85% of inpatient capacities in Chisinau, and the remaining 15% are used for inpatient cases paid out-of-pocket. The Government has approved a ten-year restructuring plan for hospitals in Chisinau Municipality and national facilities, but it remains unimplemented, and currently regionalization of inpatient care is under discussion. This would include limiting the scope of inpatient care at the rayon hospital level (therapy, paediatrics, surgery, obstetrics and gynaecology, communicable diseases), and developing three regional hospitals (Balti in the north of the country and probably Cahul in the south) in order to ensure equal access to more specialized inpatient services.

6.4 Trends in health care utilization

6.4.1 Emergency visits

There was a gradual increase in emergency visits from 2001 to 2003, and the trend accelerated after implementation of SHI (Fig. 6). In 2005, the number of calls per 1000 inhabitants reached 253, up from 204 in 2004. Access to emergency service by the rural population also increased, but remained lower than the national average, at 159 calls per 1000 inhabitants in 2004, and 212 in 2005.

Figure 6. Emergency calls, 2001–2005 (thousands)



Source: MHSP.

The increase in 2004–2005 resulted from a switch to payment-per-visit in order to create provider incentives in the underdeveloped PHC system. In two years, this goal was achieved, and then payment method was changed to reduce productivity incentives.

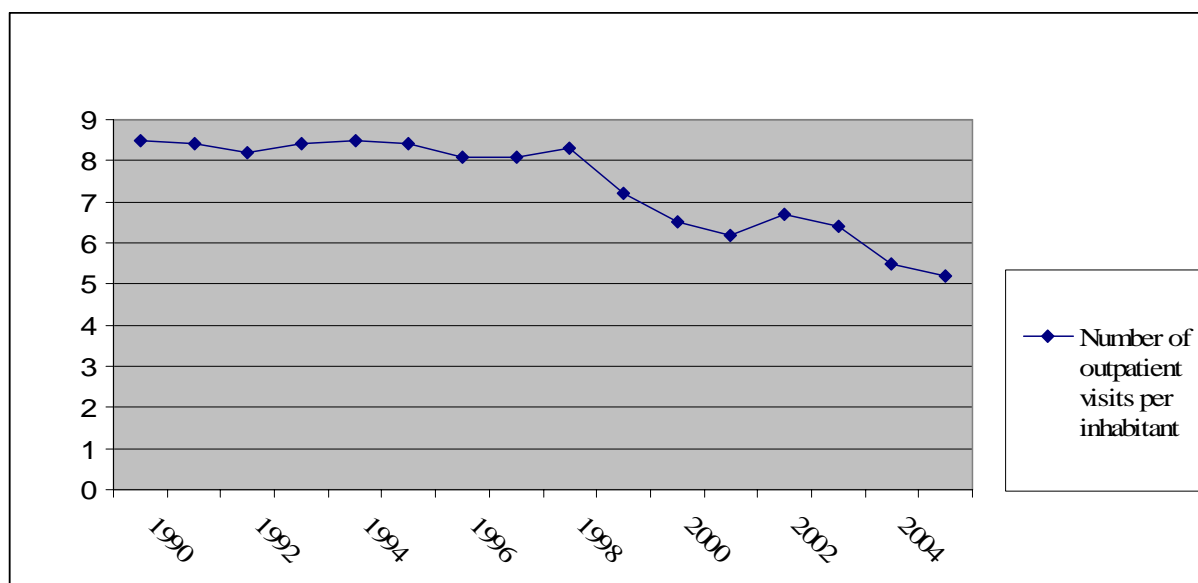
In 2005, 95% of emergency visits were made to people covered by SHI: 72.5% insured by the state budget (pensioners, invalids, preschool children, etc.), 20.6% insured by employers, and 2.0% self-insured. Thus, accessibility of the uninsured population to emergency pre-hospital care was five times lower than the average, based on an estimation that 25% of the population is uninsured.

The number of people hospitalized via emergency services also increased, from 158 112 in 2003 to 210 427 in 2005, while the number of post-surgical complications and severe consequences diminished.

6.4.2 Outpatient visits

The number of outpatient visits per inhabitant had been stable since 1990, but started to decline significantly in 1998 (Fig. 7). There were 2.7 visits to family physicians per inhabitant in 2005, 52% of all outpatient visits. Preventive PHC visits accounted for 20.9% of adult visits and 53.4% of children's. The average of PHC visits by insureds was 3.3 visits, compared to 0.9 for uninsureds in 2005.

Figure 7. Outpatient visits, 1990–2005, per inhabitant per year



Source: MHSP.

Visits to family physicians decreased in 2004, but increased in 2005, thanks to visits by insured people on the rayon and municipal levels (Table 16).

Table 16. Average number of visits to family physicians per inhabitant, 2003–2005

	Overall			Insured	
	2003	2004	2005	2004	2005
Municipalities	3.1	2.8	2.9	3.3	3.7
Rayons	2.9	2.3	2.7	2.5	3.1
National	3.0	2.4	2.7	2.7	3.3

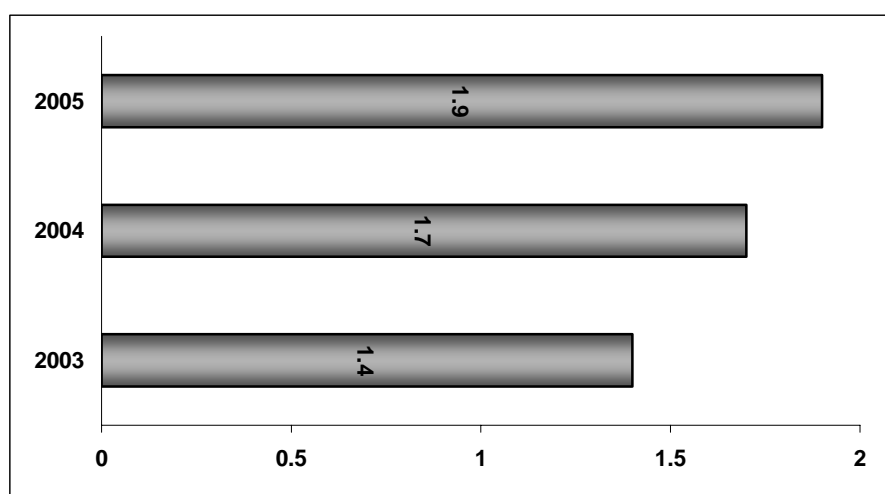
Source: NHIC, MHSP.

SHI considerably reduced access barriers for insured people to visit a doctor, and they go to the doctor more readily. At the same time, the indicator for the uninsured was 0.9 visits per inhabitant. The national average of visits to GPs among total outpatient visits was 56% in 2003 and 52% in 2005. However, if only rayon facilities providing both primary and secondary care are evaluated, the share increased from 63% to 66%.

6.4.3. Diagnostic tests

Increased allocations allowed a broader range of services to insured people in out-patient facilities. In 2005 the number of radiological examinations increased to 4313 per 10 000 inhabitants, from 4206 in 2004.

Figure 8. Average number of tests per visit



Source: MHSP.

6.4.4 Inpatient cases

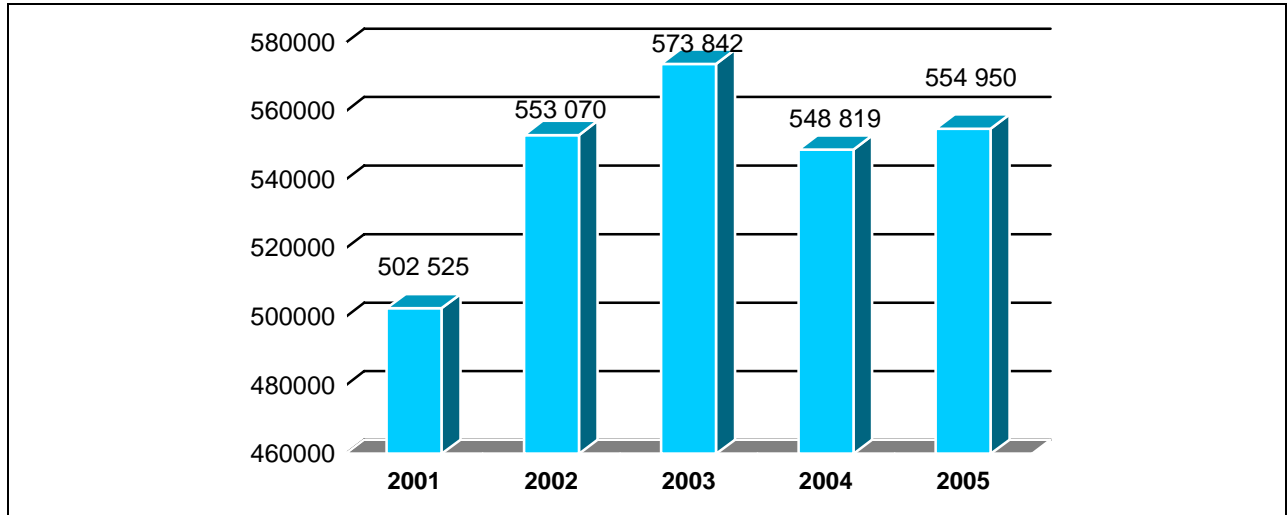
In the 1990s, the hospitalization rate dropped by almost 50%, from 23.5 cases per 100 inhabitants in 1990 to 12.5 cases in 2001.¹⁶ The number of hospitalizations started to increase in 2001 (Fig. 8), but after the introduction of SHI and contracting based on the number of inpatient cases, it decreased temporarily, rising again to 15.4 cases in 2005. In rural areas, the hospitalization rate was 13.0 per 100 inhabitants, compared to 16.6 in urban areas. Insureds were hospitalized at a rate of 18.2 per 100 inhabitants in 2005. So, insured people have better access to hospital services, as their hospitalization rate is 23% higher than the national average. The uninsured population's (estimated at 25%) hospitalization rate 7.0 per 100.

These variations could be explained as follows. In 2004, the first year of SHI functioning across the whole country, the NHIC was trying hard to ensure stability of the fund. Thus, while contracting the hospitals, the NHIC set strict limits for inpatients. To some extent, this was acceptable to the hospitals, who in their newly increased autonomy were glad for the stable financing. Therefore, despite some case overruns, in general the NHIC strategy of freezing the hospitalization rate was successful. In 2005, however, several additional factors were in play: First of all, there was an increase in SHI funds for inpatient care due to the overall growth of the fund. Second, the population became familiar with the improved access to inpatient care, and

¹⁶ European Health for All database (HFA-DB) [online database]. Copenhagen, WHO Regional Office for Europe, 2007 (<http://www.euro.who.int/hfadb>, accessed 24 July 2007).

there was an increased demand for these services; subsequently, hospitals had to react to the increased pressure from the population. Additionally, hospitals became used to the new financing system and therefore increased their pressure on the NHIC. The introduction of compensated drugs for outpatient treatment into the basic benefit package might have provoked a decrease in hospitalization, but due to the very limited number of listed drugs (32 items at the end of 2005), the additional administrative workload for GPs, and drug delivery problems, this factor did not seem important.

Figure 9. The number of patients hospitalized, 2001–2005

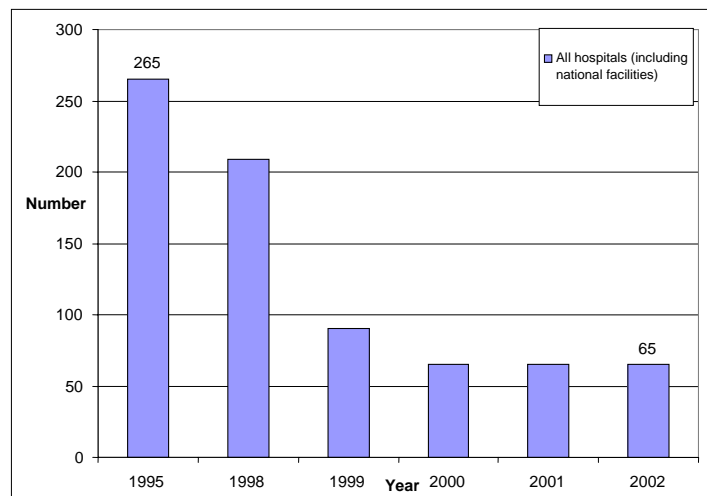


Source: MHSP.

6.4.5 Hospital indicators

Between 1995 and 2002, the number of hospitals (including national facilities) declined from 265 to 65. (Figure 10).

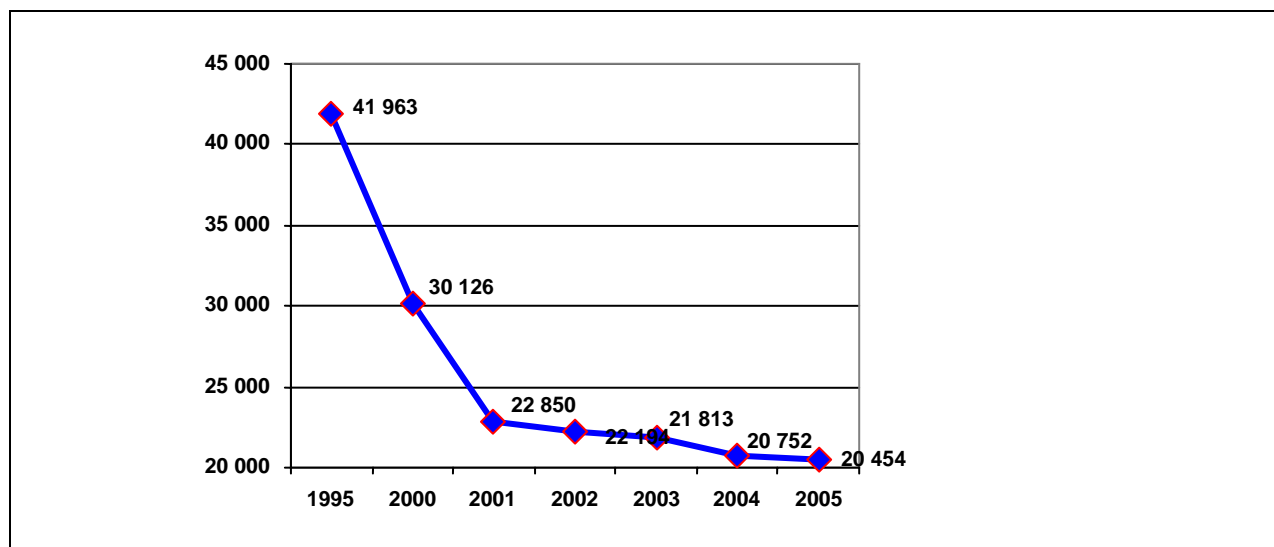
Figure 10. Number of hospitals in the Republic of Moldova



Source: Reproduced from Review of experience of family medicine in Europe and Central Asia: The Republic of Moldova case study. Washington, World Bank, 2005.

The main precondition of this dramatic decrease was the creation of a regional administrative level. A medium-term restructuring plan was approved by the Ministry of Health in December 1998, requiring the regional authorities to reduce the number of hospitals and beds previously funded by local authorities due to economic recession and chronic financial deficit in the health sector. All small-size village hospitals were closed. After 2000, there was no change in the number of hospitals, which was 64 in 2005. In the same period the number of hospital beds was reduced by 51%, from almost 42 000 to 20 500 (Fig. 11).¹⁷ As a result of this reduction, the number of hospital beds per 100 000 inhabitants decreased to 568 in 2005, one of lowest rates in Europe.

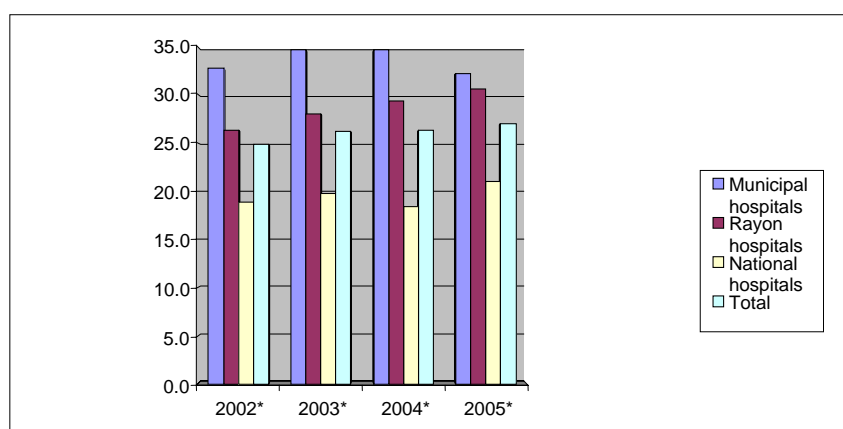
Figure 11. Number of hospital beds, 1995–2005



Source: MHSP.

From 2002 to 2005, there was gradual increase in the hospital bed turnover rate, especially in the rayon hospitals (16%) and national hospitals (11%). In total, the hospital bed turnover rate increased by 8.8% (Figure 12).

Figure 12. Overall hospital bed turnover rate, 2002–2005

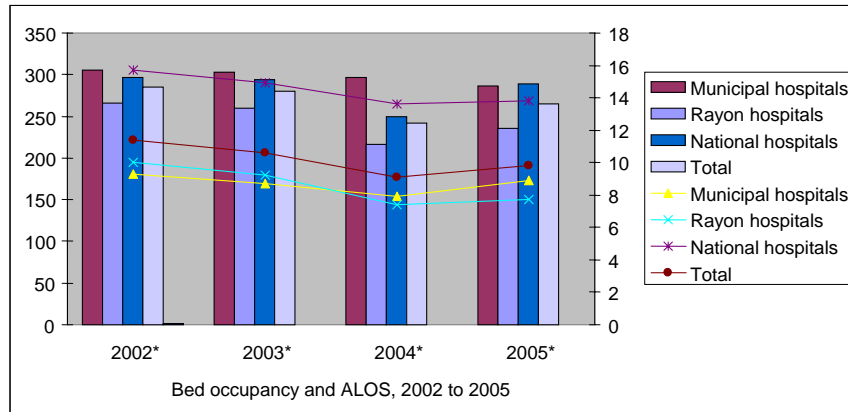


Source: MHSP.

¹⁷ Ciocanu M. Administrarea serviciilor de sanatate in cadrul asigurarilor obligatorii de asistenta medicala (Management of health services in the frame of mandatory health insurance). *Revista Sanatate Publica, Economie si Management in Medicina*, 2004, 1:9–16.

The trend in bed occupancy rates was different, with a decrease from 285 to 242 days from 2002 to 2004, and then increase to 265 days in 2005, across all hospital groups. The average length of stay decreased from 2002 to 2004, but began increasing in 2005, reaching 9.8 bed-days on average.

Figure 13. Bed occupancy across hospital groups, 2002–2005



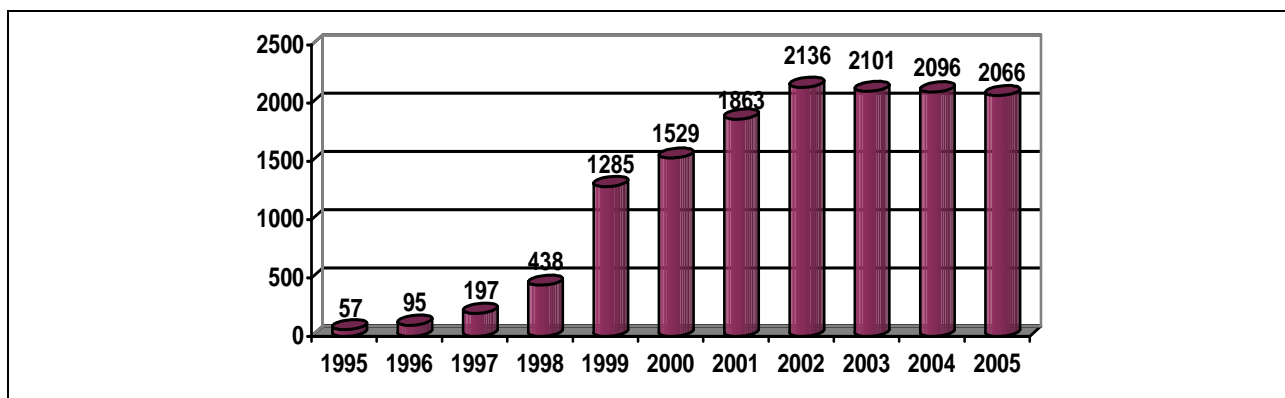
Source: MHSP.

We can conclude that there were mixed trends in the utilization of hospital beds from 2002 to 2005. On one hand, turnover increased at the same rate as total number of hospital beds decreased, so this was the result of excess capacity reduction. On the other hand, there were simultaneous negative and positive trends in bed occupancy and ALOS tightly related to each other. It is difficult to identify the role of the new financing mechanism on these processes. Theoretically, payment per treated case should stimulate hospitals to increase of productivity, but this has not exactly been the case, and a longer period is needed for evaluation.

6.4.6 Medical staff

The number of GPs in the Republic of Moldova had increased since 1995 when it started to decrease slightly in 2002. There were 2066 GPs in 2005.

Figure 14. Number of GPs, 1995–2005



Source: MHSP, 2005.

In 2005, the average national GP coverage was 89%, and the nurse coverage was 92%. In the rayons, the GP coverage was 86%. In some rural parts of the country (Cantemir, Rezina,

Cimislia, Falesti and Causeni), there was a big shortage of GPs, with only 51% to 67% of needs covered. The number of specialists was also decreased over the last three years.

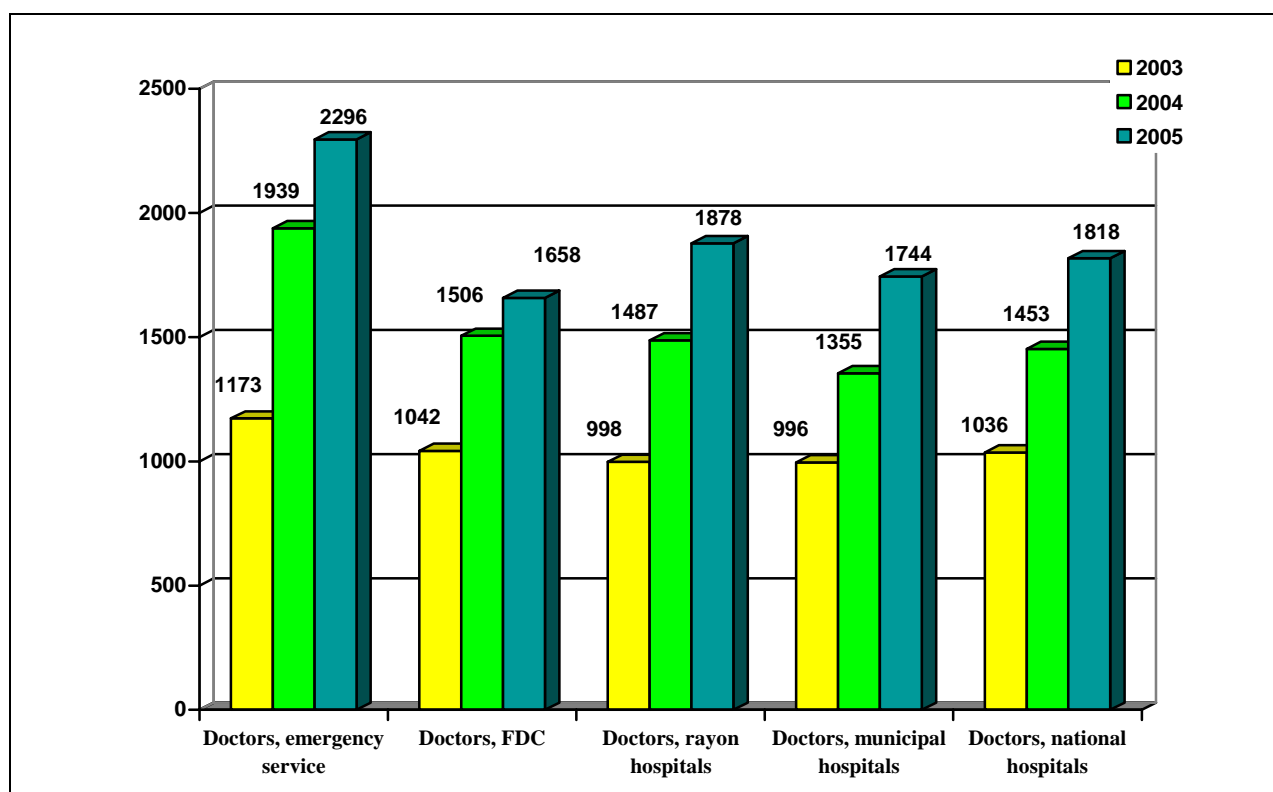
Table 17. Number of specialists, 2003–2005

	2003	2004	2005
Absolute number	8877	8661	8550
Per 10 000 inhabitants	24.6	24.1	23.8

Source: MHSP.

In spite of pay increases (see below), the health staff keeps quitting their jobs, and the vacancies are compensated for by combining functions. Presently the average cumulating coefficient at the national level stands at 1.2. The biggest shortages of health staff were registered in the emergency health care stations and rayon hospitals, with cumulating coefficients of 1.54 and 1.28, respectively.

Figure 15. Monthly salaries in PHC facilities, in lei



Source: Analytical report on the activity of the Ministry of Health and Social Protection in 2005, Chisinau, MHSP.

In 2005, the average monthly salary of a physician increased by 18% in the national health care facilities and by 31% in the rayon institutions. The average salaries of nurses increased by 13% in municipal facilities and by 23% in rayon facilities. As a result, the highest salaries were paid to the emergency services staff, averaging 2296 lei per month for physicians and 1330 lei for nurses, while the lowest salaries those in outpatient consulting sections of rayon facilities – 1127 lei for doctors and 689 lei for nurses – and municipal facilities – 1144 lei for doctors and 758 lei for nurses.

7. Stewardship of financing

The structure of the reformed health financing system is presented in Fig. 16. After the introduction of SHI, the NHIC has become the key actor in the health finance system. According to the law, the NHIC is a government-subordinated state agency consisting of an administrative council, executive board and a controlling body. The Administrative Council is the supreme body, consisting of 15 members including a representative of Parliament, a representative of the President's office, five representatives of the government (including four from the Ministries of Health and Social Protection, Finance and the Economy), three representatives of the National Confederation of Employers, three representatives of trade unions, a representative of the medical profession and a representative of patient organizations. The Administrative Council is led by the representative of the government, usually the vice-prime minister. It meets at least four times per year in order to make most important SHI decisions, including approval of NHIC reports, draft laws on SHI funds and various regulations. It also has advisory status regarding appointment or termination of the NHIC Director-General of NHIC, who is the head of the Executive Board.

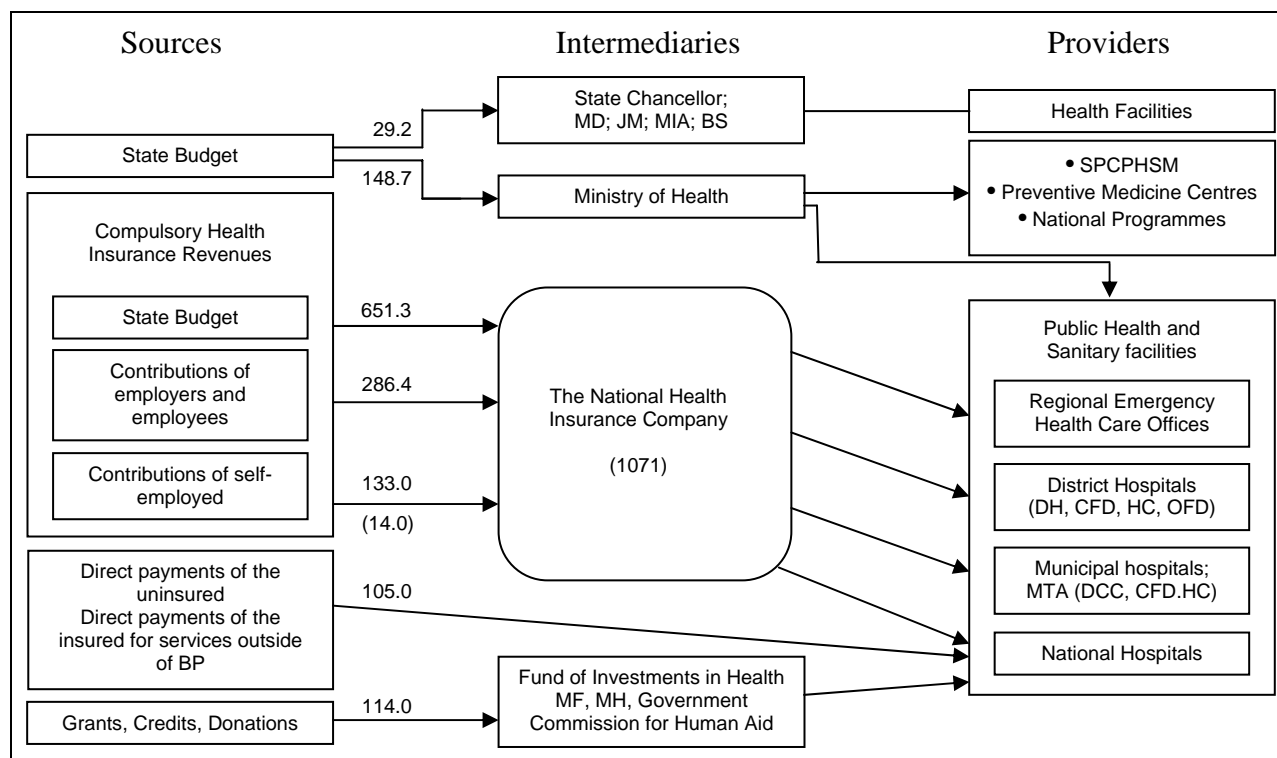
The NHIC is quite autonomous in its purchaser policy. The MHSP and Ministry of Finance make overall health financing policy, and the NHIC is responsible for implementation of the 1998 Law on Compulsory Health Insurance (amended in 2003 and 2005). However, the NHIC purchasing policy has been under heavy pressure of the MHSP and special interest groups – top managers of national clinics and heads of rayon health care systems. There are several mechanisms to maintain a balance of power between the MHSP and the NHIC, including the Administrative Council and negotiations on the content of the universal programme and contracting criteria (see section 5.3).

The NHIC may execute everyday financial operations autonomously, under the strict control of the main government financial institutions, and has the following reporting obligations:

- weekly and monthly financial reports to the Ministry of Finance
- a monthly financial report to the government, with briefing
- a monthly report for Office of the President
- monthly reports for the State Tax Office, Office of Statistics and Social Insurance Fund
- semiannual briefings to the Health Commission of Parliament
- an annual financial report to the Financial Control Department
- an annual briefing at the plenary session of Parliament.

The MHSP was the initiator of health financing reform. The strong political support for SHI by the top level of government as well as high professional level of the reform administrators should be noted. The National Expert Council on Health Care Financing also played very important role in the elaboration and implementation of the reform.

Figure 16. Health Care Financing in the Republic of Moldova in 2004 (millions of lei)



Abbreviations:

BP	Benefit package
State Chancellor	from 2005, the Government Office Administration
MD	Ministry of Defence
MJ	Ministry of Justice
MIA	Ministry of Internal Affairs
BS	Border Service
MF	Ministry of Finance
MH	Ministry of Health
SPCPHSM	Scientific Practical Centre of Public Health and Sanitary Management
DH	District Hospitals
CFD	Centres of Family Doctors
HC	Health Centres
OFD	Office of Family Doctors
MTA	Medical Territorial Associations
DCC	Diagnostic Consultative Centres

8. Evaluation of the reforms

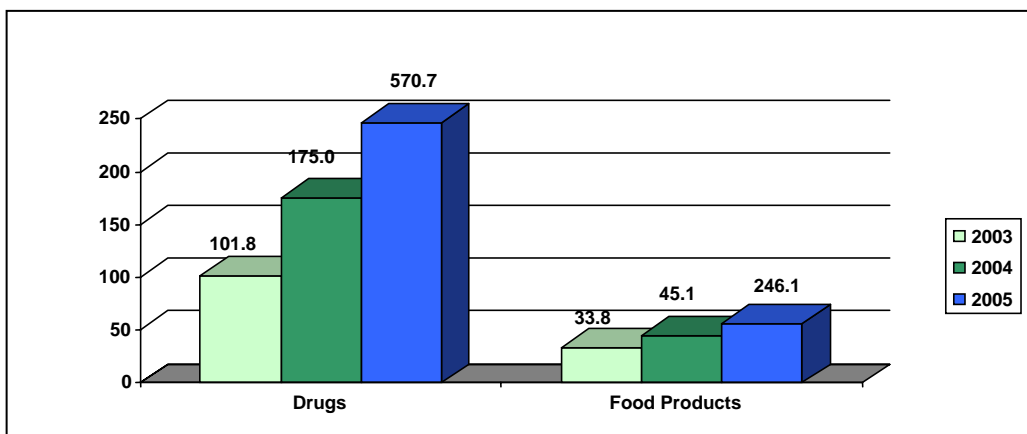
8.1 Financial risk protection and equity in finance

There is evidence that the reforms have increased protection against financial risks from medical expenses. The share of out-of-pocket payments relative to prepaid financing (including social and voluntary health insurance) might be considered an indicator of this. According to official data, the out-of-pocket share in total health expenditures decreased from 52% in 2003 to 42% in 2005. The financial resources allocated for procurement of drugs and food products rose respectively by 72% and 33% in 2004 and by 40% and 68% in 2005. Meanwhile, the volume of officially registered out-of-pocket payments decreased by 5% in real terms from 2003 to 2005

(see Table 9). The volume of informal payments in 2005 deflated by the officially registered medical services price index was 3% less than in 2004.¹⁸

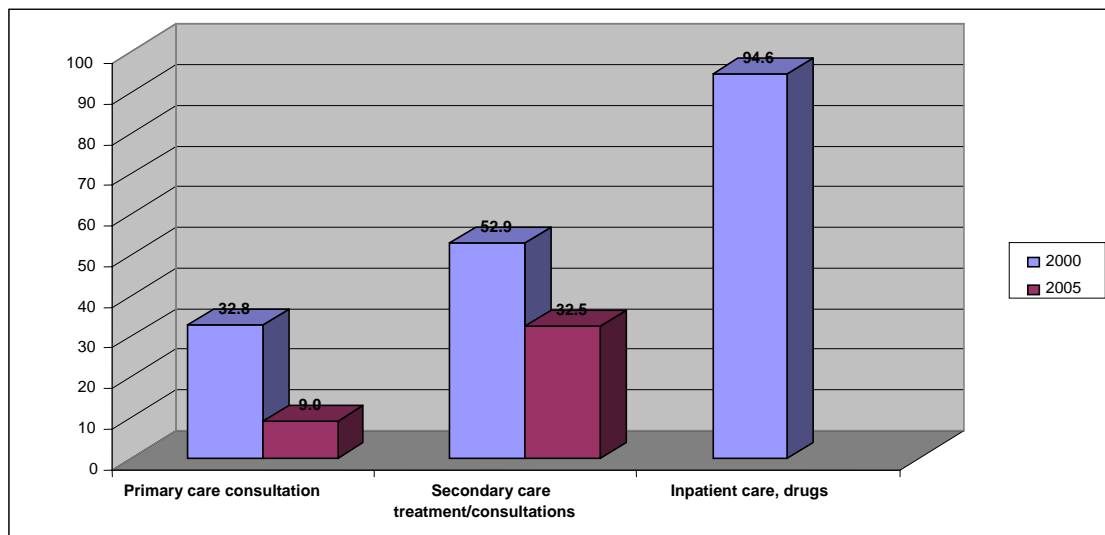
Two household surveys, from 2000 and 2005, might be used for comparison of out-of-pocket payments before and after reforms, as depicted in Fig. 18. The first one is representative of the whole county, sampling 11 540 households.¹⁹ The second one was conducted in Chisinau and Orhei rayon, sampling 1824 households.²⁰ Although the latter is representative of only two regions, the comparison shows a significant shift in the prevalence of out-of-pocket payments: 300% for those for PHC doctors, and 160% for specialists and inpatient treatment.

Figure 17. Expenditures for drugs and food products in 2003–2005, millions of lei



Source: MHSP

Figure 18. Percentage of patients paying out-of-pocket before and after reforms



The annual household budget survey conducted by the National Bureau of Statistics showed that the financial burden of health care expenditures decreased for almost all income deciles in 2004

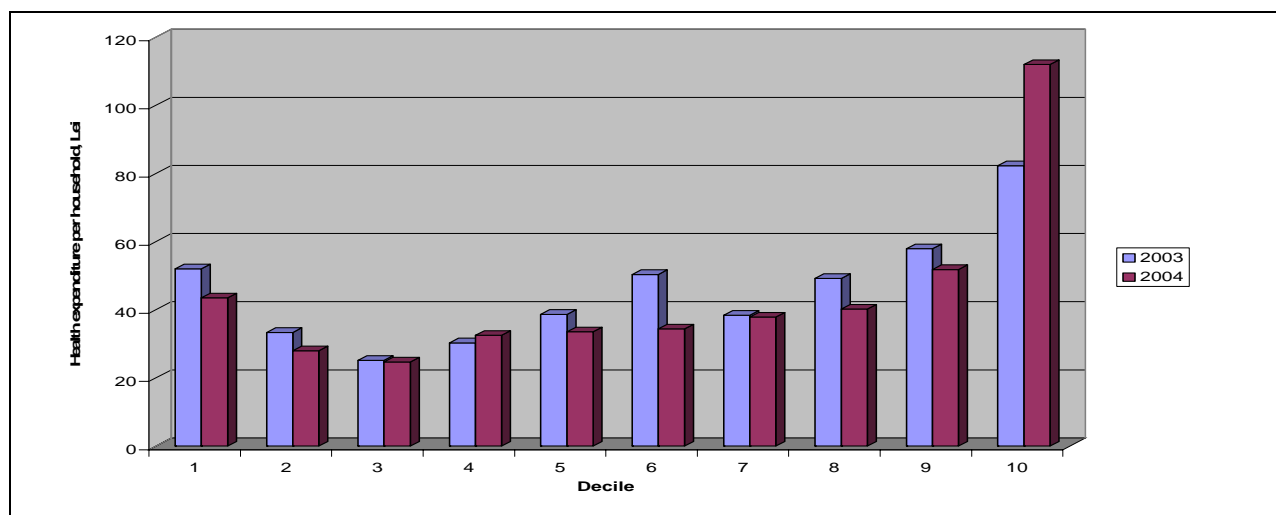
¹⁸ *Moldova Health Policy Note*. Chisinau, World Bank, 2006.

¹⁹ Berdaga V, Stefanet S, Bivol O. Access of the population of the Republic of Moldova to health services. Chisinau, 2001 (unpublished).

²⁰ Stefanet S. Report on Patient satisfaction and access to health care services in Orhei and Chisinau pilot regions. Public health reform project. Chisinau, 2005 (unpublished).

(Figure 19), and only the highest income group spent significantly more (about 18% in real terms) than in 2003. In the first year of the reform low-income households decreased health care spending from an average 4.0 lei per month to 2.7 lei. In the same time extremely poor households reduced health expenditures from 2.8 lei to 1.3 lei. The average household spent 18 lei per month on health care in 2004, or 4% of its total expenditures.²¹

Figure 19. Health expenditures by income deciles in 2003 and 2004



Source: National Bureau of Statistics, 2006.

The household surveys have shown that the poor have reduced health care spending much more than the non-poor, though they have also shown that the poor have also reduced their utilization of services, so the effect of the reforms on equity need further investigation. The non-poor spent six times as much on health care than the poor in 2003, and eight times as much as extremely poor households. After the introduction of SHI these differentiations rose to 8 times and 17 times, respectively. In a poor household's budget, health care expenditures account for 1.5% of the total, and in non-poor households for 4% (Table 18).

Table 18. Average household expenditure for health care by location and income, 2002–2004, in lei

	Total			Poor			Extremely poor			Non-poor		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Total	11.89	17.87	17.64	2.81	3.99	2.73	2.08	2.8	1.32	18.34	23.53	23.00
Urban	15.42	21.69	24.91	3.7	4.59	3.08	2.47	3.05	1.19	21.39	27.46	29.88
Rural	9.84	15.67	13.32	2.43	3.72	2.6	1.93	2.68	1.35	16.17	21.08	18.18

Source: Ministry of Economy and Trade (see footnote below).

Despite the significant decrease in the percentage of out-of-pocket payments, they remain significantly higher than in central and eastern European EU Member States (22.8% on average in 2004).²² Therefore, It must be concluded that the current system of health care financing does not ensure effective protection of population against financial risks.

²¹ *Poverty and policy impact report*. Chisinau, Ministry of Economy and Trade of the Republic of Moldova, 2004.

²² Health for All database, op. cit.

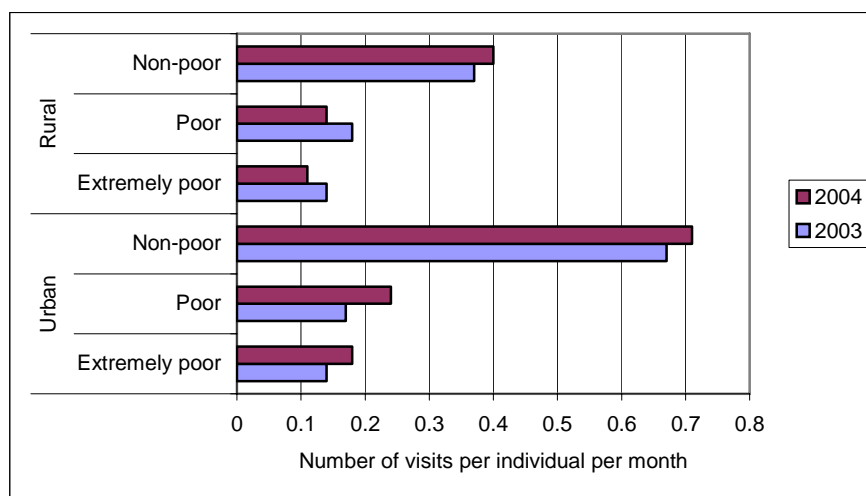
8.2 Equity in health spending and utilization of services

Due to the reform of the health fund pooling mechanism, the regional differences in per capita funding decreased (see Fig. 5). The ratio of maximum to minimum per capita budget funding was 4.6 times in 2003 and 3.5 times in 2004 (2.9 and 2.4 times without Chisinau and Balti).

From the point of view of formal health care indicators, the influence of reform on accessibility was controversial. The decreasing trend since 1998 in the average number of outpatient visits per inhabitant continued in 2004 and 2005 (see 6.4.2). But the average number of visits to GPs increased from 2004 to 2005. Therefore, the above-mentioned trends could be explained as a continuation of long-term trends. This was accompanied by an increase in emergency calls, which may have reduced visits to GPs and specialists in cases where the emergency physicians' actions were conclusive. The decrease in outpatient visits to specialists might also be explained by the introduction of per capita payments that did not include incentives for specialists to provide more services.

It should also be mentioned that there is inconsistency between the official data on registered out-patient visits and those of the household surveys. The latter show that the number of per capita out-patient visits increased for urban dwellers and non-poor households in rural areas, with only poor rural households reducing the number of outpatient visits.

Figure 20. Visits to polyclinics, medical centres or GPs in 2003–2004, from household budget surveys



Source: Ministry of Economy and Trade.

If there is no deviation from the representative sample in the household surveys, then the following hypothesis might be proposed to explain its results: The share of uninsureds is highest in poor rural households, so after the introduction of SHI the uninsured had to reduce outpatient visits because were asked to pay more often than before. Some outpatient visits are not registered by physicians asking for out-of-pocket payments. In any case, the discrepancies warrant further investigation.

There are also some evidences of positive changes in the quality of outpatient services. The average number of tests per patient in ambulatory clinics increased by 29% over two years. The number of health services provided to insured people in outpatient facilities was variable (Table 19). 89.1% of respondents were satisfied with the treatment or advice they received from health providers in 2005.²³

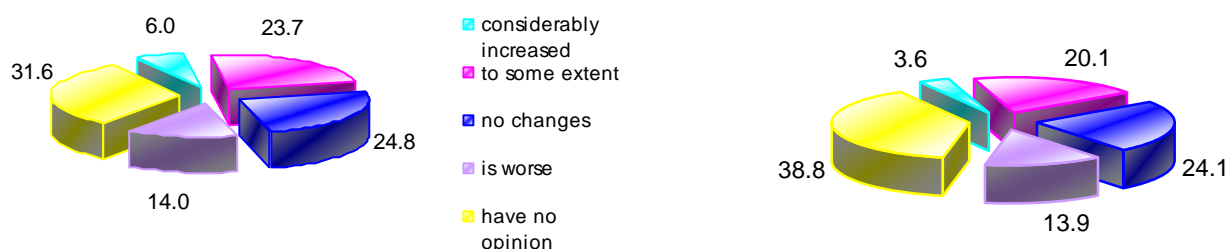
Table 19. Selected indicators of health care accessibility, 2003–2005

	2003	2004	2005
Average GP visits per inhabitant	3.0	2.4	2.7
Average GP visits per insured	-	2.7	3.3
Emergency calls per 1000 inhabitants	168	204	253
Average tests per patient in ambulatory clinics	1.7	1.9	2.2

Source: MHSP.

The reforms established separate benefit packages for insureds and non-insureds. According to the population health survey of April 2005,²⁴ about 30% of insured people and about 24% of uninsured identified some increase of access to health care after reforms. Meanwhile, practically the same share of insured and non-insured (24%–25%) did not notice any changes in accessibility of health care, and 14% of both categories noted that the access became worse.

Figure 21. Evaluation of access to medical services by insured and non-insured people, %



Source: National Bureau of Statistics.

The survey data demonstrate the significant difference of access and expense between insureds and non-insureds. The insured have outpatient treatment more often than inpatient. They also have lower per capita expenditures for medical tests, procedures and exams, spend more time in the hospital and use more hospital and specialist services. In short, the data confirm that SHI provides more financial protection for insured citizens. The only exception is higher drug expenditures by insureds, but this might be explained by uninsureds being unable to afford the drugs (Table 20).

²³ Stefanet, op. cit.

²⁴ National Bureau of Statistics, 2006. The sample was 1833 households, nationally representative.

Table 20. Differences of access and expenditure by insureds and uninsureds

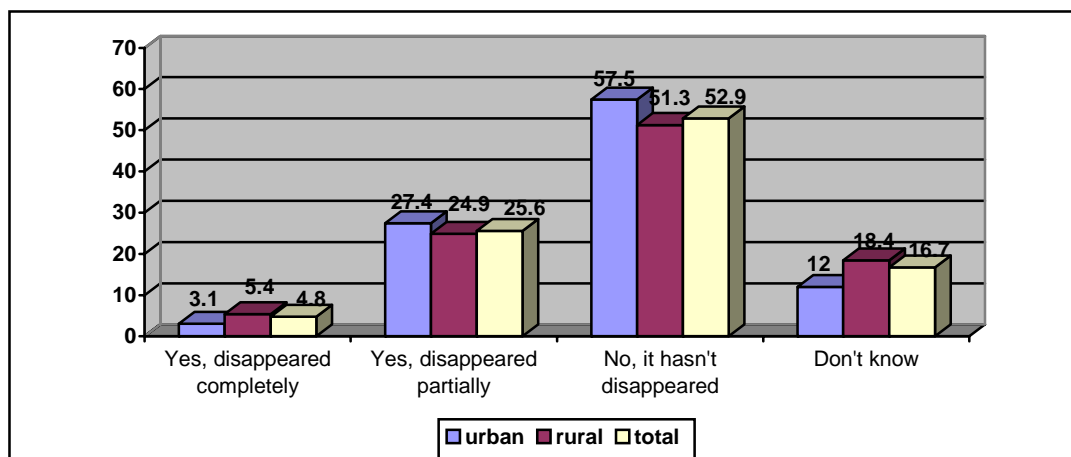
	Insured	Uninsured
Specialist consultation, % of respondents	42.3	31.1
Hospitalization, % of respondents	13.4	5.2
Inpatient days	14.5	9.1
Expenditures (lei):		
medicines	93.6	76.3
medical tests	1.2	3.9
medical procedures	1.9	2.7
cardiological exam	12.3	35.3
pneumological exam	5.1	24.1
prescriptions	8.7	17.0

Source: The Republic of Moldova health policy note. Chisinau, World Bank, 2006; National Bureau of Statistics data.

8.3 Transparency and accountability

The reduction in magnitude of informal payments has been an improvement in system transparency. Around of 30% of respondents in the 2005 household survey mentioned that informal payments had completely or partially disappeared once the SHI system was introduced, but more than a half of the respondents (53%) said that it had not disappeared.

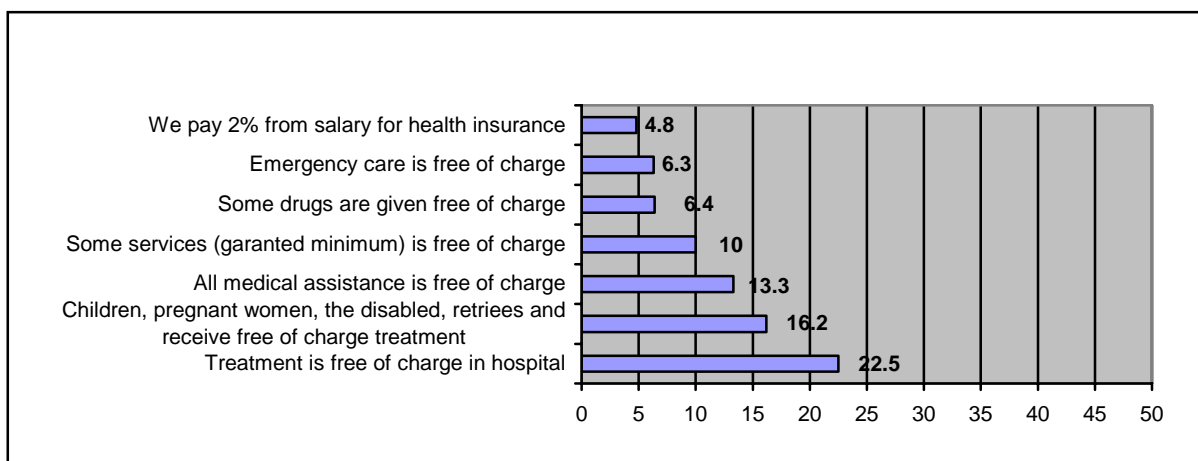
Figure 22. Respondents' perceptions of informal payment (%)



Source: Stefanet, op. cit.

At the same time this survey showed that there were not remarkable changes in accountability. The public's level of information on health insurance, understanding of the benefit package, acceptance of reform and satisfaction are very low. More than half of the respondents (52%) did not know about mandatory health insurance: 41% in urban areas and 56% in rural areas. Even the respondents who reported having knowledge of health insurance did not have a complete picture.

Figure 23. Respondents' knowledge of health insurance (%)



Source: Stefanet, op. cit.

8.4 Incentives for efficiency and quality of care

The changes in purchasing mechanisms and extension of medical facilities' rights to allocate earned money have created real incentives for increasing efficiency. Unfortunately, there is not adequate data to evaluate whether this has been realized. The real costs of medical facilities' heating, electricity and water decreased by 6.8% in 2004, but there is no evidence to show whether this was due to more efficient use of resources or to the 14% reduction in inpatient care, from 280 bed days in 2003 to 242 in 2004. Meanwhile, bed-days increased 9.5% in 2005 and medical facilities' utilities costs rose by 1.7%.

Some inefficiency may be attributable to a certain rigidity in SHI model in effect since 2005. The rates for provider payments (cost-per-day of inpatient treatment, and per capita funding of primary care) were established quite arbitrarily in 2003 and were corrected only by a planned annual price index. Salary rises caused a growth of contributions for both the working and non-working populations, since these are linked. This means the NHIC is under pressure to increase the volume of contracted inpatient care and average length of a reimbursable stay, which constitutes a less efficient use of funds.

There is abundant evidence that the administration of the new financing system has been quite efficient. First, it should be noted that the Moldavan SHI model's administrative costs are among the lowest in Europe. The ceiling for the administrative fund is set at 2% of total SHI expenditures, and in 2004 and 2005 this level was not exceeded. The centralized financing also meant an overall streamlining of work, and eliminated the need for financial administrative work at the rayon level. Second, the systemic transformation was implemented without any interruption in medical facilities' functioning. Third, the old way of funding medical facilities through the state treasury was replaced by payments from the NHIC through commercial bank accounts, shortening the procedure from two to three weeks to one to two days.

9. Summary

The introduction of SHI was one of most important reforms implemented in Moldova in recent years. The President announced in his official speech to the leaders of the governing party on 12 December 2004 that the introduction of SHI was one of three main achievements of the government during the last electoral period.

The health financing system is characterized by centralized collection and distribution of public funds. The contributions from the central government budget have predominated in SHI funding. The unique mechanism in the Moldovan model is the principle of equality of contributions for different kinds of insureds and to the estimated per capita costs of the benefit package.

SHI does not cover the self-employed but enables them to purchase coverage on a voluntary basis. As a result, we estimate that 30% of the country's economically active, resident population is uninsured.

The previous large and unrealized state guarantees of free health care were revised and replaced by the smaller SHI benefit package, and the real balance of these commitments and SHI funds was achieved in the first year of the reform, effectively extending access to free health care to the population. But in the following years the guarantees were extended under political pressure. Despite the increase of SHI funds, the balance between the benefit package and its public funding and the extent of informal payments are now in question. The data show that out-of-pocket payments by both uninsured and insured continue to take a high share of total health expenditures.

The previous fragmented system of health care financing pools was replaced by one large fund that covers most of the population. A small additional pool funds several health care services for uninsured people.

A centralized single-purchaser SHI model with a purchaser-provider split was implemented, but it was accompanied by the administrative integration of the primary and secondary health care providers on the rayon level. The rayon primary health care centres became a part of rayon hospitals after the merging of all health care institutions into one legal entity. This decision, adopted under pressure from heads of rayon hospitals, created conditions for the hidden reallocation of funds in favour of inpatient care.

The introduction of SHI had a number of positive outcomes for the health care system, medical facilities, medical professionals and the population.

The main outcomes for the health care system are:

- transformation to the new system with no interruption in service
- a 19% increase in real public funding levels in 2004, and 16% in 2005
- increased stability of public funding
- a balance between state guarantees of free health care and their public funding.

The main outcomes for health care facilities are:

- increased income
- stability of public funding
- accelerated fund transfers
- increased spending autonomy
- real incentives for increasing efficiency.

The main outcomes for the medical professionals are:

- higher salaries
- compensation in line with the real volume and quality of work.

The main outcomes for the population are:

- greater access to emergency pre-hospital and inpatient care
- lower frequency and magnitude of informal payments.

After the successful introduction of SHI and its stable functioning for two and a half years, the government faces new challenges.


1. The system needs to be made truly universal. The share of the population without SHI coverage is substantial, especially among the low-income self-employed. Increasing public knowledge of the system and its credibility are major tasks.
2. Populist extensions of free health care guarantees need to be resisted, as they promote a resurgence of informal out-of-pocket payments and jeopardize equity in financing and access.
3. The stable functioning of the present financing system needs to be further ensured. The rigidity in fund collection and disbursement that was a positive factor in the introductory stage of SHI can lead to unrealistic budget funding requests and pressure to revise the regulation of contributions for the non-working population. Therefore, the shift planned from 2007, when the budget contribution for people insured by the state will still be fixed, but disconnected from the size of the payroll contribution, seems like a reasonable approach.
4. There is a risk of reversion to the old system oriented towards inpatient care and duplication of facilities. Institutional rigidity and allocation bureaucracy are threats to efficiency. The current hospital payment system can be characterized as having a weakness inasmuch as there is an incentive for national hospitals to treat simple cases, because they will be paid more for this than would rayon hospitals. The “profit margin” (i.e. the difference between reimbursement and the average cost per case) is greater for the national hospitals, and this is a disincentive for treating the more complex cases they were designed to handle.

Reacting to any one of these challenges separately might have counterproductive effects on the others. A balanced, comprehensive policy for addressing them should be elaborated.

10. Recommendations

1. There is a need to be very consistent about the balance between guarantees and their funding, and to monitor the changes in funding responsibilities. The adoption of legislation requiring the government and NHIC to conduct a budget impact analysis of any expansion of the benefit package can be recommended.
2. The health benefit package for the uninsured should be enlarged, with funding sources clearly defined. The best approach is to adopt a state target programme funded from the state budget. If economic growth does not slow down, and government revenues continue to increase, the government should insure the self-employed with low incomes or chronic diseases.
3. Administration of the current government-targeted health care programme for the uninsured should be delegated to the NHIC.
4. The differences in the socio-demographic structure of the insured in different rayons should be taken into account in calculating the per capita insurance allocations among regions. In particular, risk adjustment principles should be applied to PHC funding. The capitation should be adjusted at least according to age and place of residence.
5. The unification all health care facilities on the rayon level into single legal entity has not created an appropriate institutional framework for shifting public funds to primary health care or increasing its effectiveness. On the contrary, it has increased the risk of redistribution of funds to secondary health care. The rayon PHC services should be separate legal entities in order to have real spending autonomy for PHC. Direct contracting with PHC providers should be developed.
6. Competition among providers should be promoted. This presumes a greater role for patients in the system in general, and more choice of providers, especially in urban areas. More flexible mechanisms of patient flow management should be introduced, entitling patients to choose hospitals upon referral. Administrative obstacles and inequitable opportunities for NHIC independent contractors should be eliminated, especially in PHC. This would lead to more efficient and fair allocation of funds among providers and stimulate quality improvement. Strengthening incentives for PHC providers would support implementation of the hospital restructuring plan.
7. Departmental health systems, at very least the railway health services, should be integrated into the general scheme and overall hospital restructuring plans.
8. An economic analysis of the SHI provider payment rates should be made. The rates were calculated in 2003 for the introduction of SHI and have not been changed, except for automatic inflation adjustments; they need to be more differentiated.
9. A DRG system for hospital service payment should be considered, so that the relative weights will reflect actual resource needs by case type, not facility type, and eventually eliminate hospital or level-specific adjusters. Other factors, for example the role of a hospital as a teaching facility, should also be factored separately into the payment system.
10. Medium and long-term restructuring plans should be elaborated. There is still scope for reducing the number of beds (and hopefully fixed costs by reducing the number of hospitals or buildings) without reducing access to inpatient care.

11. The use of quality indicators in provider payment mechanisms should be developed. The set of quality indicators should be extended to include specialized health care and should be controlled by the NHIC.
12. There is an urgent need to create an information system for collecting data on all the types of services provided to both the insured and the uninsured.



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