

ANALYSIS OF STRUCTURAL/FUNCTIONAL REFORM OF THE HEALTH CARE SYSTEM IN RUSSIA

A more efficient use of the health care system's resources is increasingly being considered as a top priority of Russia's health care reforms as a result of insufficient public health funding and unfavorable demographic trends (e.g., population aging, growing disease prevalence and dramatic increase in chronic cases). Long-term investment and improved managerial skills are needed to implement modern preventative, diagnostic and treatment techniques in Russia.

Health care reforms which started in early 1980-s and were designed to increase the effectiveness and efficiency of the country's health care providers, had the following objectives: a) a search of new sources of funding; b) more rational use of available human, material and financial resources in a free market and health insurance environment and, consequently; c) restructuring of the health sector with the focus on primary health care development.

However, analysis of the actual changes which occurred during the 1990s shows that there has been some significant gap between the theory (i.e., "Health care and Medical Science Development Concept", 1997) and practice, that is, implementation of health care reforms in general, and provider network restructuring in particular.

DEMOGRAPHIC AND HEALTH STATISTICS

Russia's population reached its peak value of 148,5 mln in 1991 (including children – 34,0 mln, 23%, and people over retirement age – 28,2 mln, 19 %). 38,7 million people (26.1% of the population) were rural residents (see Table 1).

Table 1

Population of the Russian Federation

Year	Total population (mln. residents)	Children		Rural residents		Residents aged > 60 (55) (mln.)	
		Absolute number (mln.)	%	Absolute number (mln.)	%	Absolute number (mln.)	%
1985	143,1	30,9	21,6%	39,2	27,4%	-	-
1990	148,0	34,0	23,0%	38,8	26,2%	-	-
1991	148,5	34,0	22,9%	38,7	26,1%	28,2	19,0%
1994	148,0	32,4	21,9%	40,0	27,0%	29,7	20,1%
1999	146,3	27,8	19,0%	39,6	27,1%	30,6	20,9%

As a result of natural depopulation, Russia's population decreased by 2.2 mln between 1992 and 1999 (146.3 mln. residents in 1999). In 1999, the share of children in the overall population was 19% (27.8 mln), and that of people older than workable age – 20.9% (30.6 mln.). Rural residents comprised 27.1% of the country's population (39.6 mln.).

Absolute number of children decreased by 6.2 mln. between 1991 and 1999 (by 0.8 mln. in 1995, 2 mln. in 1996 and 1997, and 1.2 mln. in 1998).

Absolute number of people over 70 years of age increased by 2.3 mln. and reached 11.8 mln. in 1999 (8.1% of the total population).

Number of people of workable age fluctuated between 83.8 and 84.8 mln. during the same period and even increased somewhat due to immigration.

Birth rate in the Russian Federation decreased by 34.3% between 1990 and 1998 (from 13.4 to 8.8 per 1000 residents) while death rate increased by 21.4% (from 11.2 to 13.6 per 1000 residents). Russian population decreased by 4.9 mln. between 1992 and 1998, and by 668.3 thousand in the first 9 months of 1999.

Mortality due to all causes was 1119.6/100,000 in 1990, reached its maximum value in 1994 (1566.9/100,000 – 40.5% increase) and then decreased by 12.9% (1364.5/100,000) by 1998.

Diseases of the circulatory system have been the main cause of death in Russia: 618.9/100,000 in 1990, 837.7/100,000 in 1994 and 750.7/100,000 in 1998 (55.3%, 53.5% and 55.0% of all deaths, respectively).

Malignant neoplasms traditionally rank second, injuries and poisoning – third. However, between 1993 and 1996 injuries and poisoning were the second leading cause of death (134.1/100,000 in 1990, 250.7/100,000 in 1994 and 188.0/100,000 in 1998; 12.0%, 16.0% and 13.8% of all deaths, respectively).

Mortality due to malignant neoplasms was registered at 192.3/100,000 in 1990, 204.6/100,000 in 1994 and 201.2/100,000 in 1998 (17.2%, 13.1% and 14.7% of all deaths, respectively).

Infant mortality (per 1000 live births) was 17.4 in 1990, 19.9 in 1993 and then decreased to 16.5 in 1998 (in developed countries that indicator ranged from 4.0 to 8.0).

Maternal mortality (deaths per 100,000 live births) has been 5 to 10 times higher than in economically developed nations: 47.4 in 1990 and 53.6 in 1995.

Death rate due to tuberculosis increased from 7.9/100,000 residents in 1990 to 15.5/100,000 in 1998. Mortality from that cause among men of workable age is 8 times higher, and in men aged 55-59 – 17 times higher than in women from respective age groups.

Life expectancy at birth reached its minimum value of 64 years in 1994 (57.6 for men and 71.2 for women). Some increase began in 1996, so that in 1998 life expectancy reached 67.0 years (61.3 years in men and 72.9 in women). However, these values are still 1.4 – 2.5 years lower than they were in 1990 (69.2, 63.8 and 74.3, respectively). In 1990, 1994 and 1998 men were expected to live 10.5, 13.6 and 11.6 years less than women, respectively. In economically developed nations this difference was 2-4 times less.

Between 1992 and 1998, total disease prevalence increased by 11.1% in adults, 38.7% in adolescents and by 23.9% in children and was registered at 108072.0, 132991.0 and 161298.3 per 100,000 residents, respectively, in 1998.

Temporary disability rate reduced by 42.6% between 1990 and 1998 (from 109.5 to 62.8 cases per 100 working residents; and by 31.2% in days – from 1246.2 to 857.5), including 34.1% (from 79.1 to 52.1) – due to disease. This demonstrates that people have become more reluctant to obtain health services, even in case of illness. However, the average duration of one case of temporary disability increased by 20.2% (from 11.4 to 13.7 days), including that due to disease – by 15.9% (from 12.6 to 14.6 days).

Almost 6 million people received formal disability certificates between 1993 and 1997. Primary disability rate (disability certificates granted per 10,000 residents) was 50.0 in 1985, 75.7 in 1992, 91.1 in 1995 and 77.6 in 1997. Main causes of primary disability included: circulatory diseases, malignant neoplasms, diseases and of the nervous system and sense organs, mental disorders and trauma (48.5%, 11.2%, 7.3%, 5.9% and 5.9% of all cases, respectively).

PROVIDER NETWORK IN RUSSIA

By the year 2000, Russia had 9094 hospitals and 1101 inpatient units at outpatient clinics (“Hospital Dispensaries” – See Table 2) with 1623 thousand beds. 30184 thousand residents were hospitalized in 1999, including 4219 thousand (14.0%) to inpatient units at outpatient clinics. 28.7% of all hospitalized patients (8.7 mln.) were rural residents, and 17.7% (5.4 mln.) -- children.

Russian hospitals have 9280 outpatient departments (units) which served 672621.3 thousand patients in 1999 (59.4% of all outpatient visits and visits to hospitals). In 1999, 1569 outpatient follow-up units served 82541.1 thousand patients (7.3%), and 6250 outpatient clinics (“polyclinics”) received 377304.7 thousand patients (33.3% of all outpatient visits).

Dental services are provided by 942 free-standing dental clinics and by more than 10600 dental units at larger facilities. 147181.8 dental patients were served at the above-mentioned facilities in 1999 (1 visit per each Russia’s resident, on the average).

Provider network has undergone significant changes since 1990. E.g., 1586 inpatient facilities (14.5%) were closed between 1990 and 1998, including 1210 rural community and district hospitals (76.3% of all closed hospitals). This has made secondary care less accessible in rural areas.

Table 2

Provider Network in the Russian Federation

Facility, by type	1990	1995	1999	99/90
Hospitals, total:	10936	10280	9094	- 16,8%
Including rural hospitals	5711	5382	4442	- 22,2%
Inpatient units at outpatient clinics	1286	1107	1101	- 14,5%
Outpatient facilities, total:	18878	18839	17778	- 5,8%
Including:				
- Outpatient units at hospitals	10899	10193	8974	- 17,7%
- Outpatient units at specialty follow-up clinics	1814	1601	1561	- 13,9%
- Free-standing outpatient facilities	5281	6107	6307	+ 19,4%
Including: rural outpatient clinics	3337	3853	3986	+ 19,4%
Free-standing dental facilities	884	938	936	+ 5,9%

While the share of rural residents did not change between 1990 and 1998 (27% of the total population), the number of rural (community) hospitals and beds reduced by 23.9% and 35.1% (54,000), respectively.

At the same time, the number of regional general, regional pediatric hospitals and eye clinics increased by 4.8%, 6.9% and 15.9%, respectively, and 41 new perinatal centers were opened. Also, facilities providing treatment and care of various intensity levels have been established. For example, the number of rehabilitation hospitals increased 2.1 times, and 100 new nursing homes (2445 beds in total) were established. The number of day hospitals of various types increased twofold, and their bed capacity – 2.3 times between 1991 and 1998 (3613 hospitals and 53074 beds in total).

All in all, 277328 hospital beds (15.7%) have been closed since 1990. In 1999, the country had 1484428 hospital beds (16.2% of them were deployed in rural areas). However, given that most of the closed hospitals were low-capacity community inpatient facilities, the average hospital capacity remained stable and fluctuated around the value of 160 beds per 1 urban and 51-53 beds per 1 rural hospital in 1990-1998. Average bed capacity of regional hospitals reduced from 980 in 1990 to 902 in 1998, that of emergency care hospitals – from 722 to 677, and central district hospitals – from 250 in 1990 to 216 in 1998. An average community hospital had only 27 beds in 1999.

Consequently, bed supply per 10,000 residents has also been decreasing: from 130.5 in 1990 to 118.2 in 1995 and 110.9 in 1998. However, hospital utilization analysis shows that further reduction of hospital beds may be recommended.

Health care institutions in Russia have 45.1 thousand buildings and, despite certain improvements during the last five years, 17.5 thousand of the (39.1% of all buildings) require capital renovation, reconstruction or demolition. Almost 40% of the buildings do not have hot water supply, 1/6 of the buildings are not connected to centralized sewage system, 12.5% do not have centralized heating and water supply, and 8.3% are not equipped with telephone lines.

Since 1990, outpatient services have become somewhat more available. However, 1881 (14.7%) outpatient hospital departments were closed between 1990 and 1998 (70% of them were closed in rural areas). At the same time, 969 new free-standing outpatient clinics were established (18.3% increase), including 108 children's polyclinics and 649 rural outpatient centers. New diagnostic centers were established in the 1990s. In 1998, new facilities were established, including: 36 medical diagnostic centers, 12 pediatric diagnostic centers, 33 family planning centers and 71 HIV/AIDS Prevention Centers. However, they accounted for only 0.7% of all outpatient visits in 1998.

By and large, total planned capacity of outpatient facilities in Russia increased by 1% between 1995 and 1998, and was 3179 outpatient visits per shift in 1998.

Complex socio-economic conditions of the last decade have had a negative impact on factory-based clinics, many of which have been closed or transferred to the national (MoH-controlled) health care system. Implementation of MHI has also contributed to that, since many enterprises have found it unreasonable to maintain their own health care facilities while paying MHI contributions and, thus, doubling their health expenses. As a result, the number of factory-based clinics ("Medico-Sanitary Units") decreased from 920 in 1991 to 367 in 1998 (X2.5 reduction). During the same time, the number of hospital beds at such clinics reduced from 168 to 50 thousand, and physician FTEs – from 72 to 26 thousand.

HUMAN RESOURCES

In 2000, FMoH-controlled health and other facilities had 4454.1 thousand full time employees (as compared to 4008.1 thousand in 1991).

The share of health professionals (doctors, physicians, nurses, etc.) in the overall staff decreased from 83.6% in 1991 to 81.1% in 1999. "Other staff" increased its share from 15.6% to 17.9%, and the number of pharmacists and non-medical specialists increased 2.6 and 2.0 times, respectively. However, the latter accounted for only 0.61% and 0.36%, respectively, of all FTEs in 2000.

As for medical staff, the share of physician FTEs increased from 17.6% in 1991 to 18.2 % in 1999, and that of mid-level and junior medical staff decreased from 42.5% to 40.9% and 23.4% to 22.0%, respectively.

Most health system's employees work at "inpatient institutions, leproseries and maternity hospitals" (hereafter -- hospitals), specialty clinics with screening and monitoring functions ("dispensaries") and outpatient facilities. In 2000, these three main types of health institutions had 2,823,600, 268,800 and 492,400 FTEs, respectively.

The share of physician FTEs in hospitals is less than that in "dispensaries" and outpatient facilities (17.0%, 19.1% and 24.9%, respectively). However, during the last ten years it increased in hospitals and dispensaries (from 16.6% and 18.5% in 1999), and decreased in outpatient facilities (from 26.1% in 1991).

Mid-level medical staff accounts for 47.3% of all FTEs in outpatient facilities, 41.2% in hospitals and 37% in dispensaries. The share of junior medical staff in hospitals and dispensaries is 24% , and in outpatient facilities – 14.7% of all FTEs.

Between 1991 and 1999, the share of “other staff” increased from 15.0% to 17.2% in hospitals; from 15.4% to 18.6% in dispensaries; and from 8.2% to 12.6% in outpatient facilities. The share of non-medical specialists with higher (university-level) education and pharmacists increased 2-3 times in all facility groups and was, respectively: 0.45% and 0.51% in hospitals, 1.23% and 0.25% in dispensaries and 0.62% and 0.04% in outpatient facilities.

In 2000, FMOH-controlled facilities had 808,400 physician FTEs: 80.8% of them were employed by hospitals, 15.2% by outpatient facilities, and the rest – by dispensaries (6.4%).

Between 1991 and 1999, total number of physician FTEs in all health care institutions increased by 15%, including: by 5.9% in hospitals, 12.5% in outpatient facilities and 15.9% in dispensaries. The number of physicians (i.e., physical persons) employed by public health institutions increased from 482,100 in 1991 to 528,900 in 2000 (+ 9.7%).

The overall physician supply/demand ratio in state-funded health institutions did not change significantly between 1991 and 2000 (93.1% and 94.0%, respectively). However, it increased somewhat in hospitals (from 94.2% to 95.0%), outpatient facilities (from 93.1% to 94.7%) and dispensaries (from 92.2% to 94.0%). The growth of this indicator can be explained by the fact that one physician/doctor tends to occupy more than one FTE. FTE/physical person ratio in 1991, 1995 and 1999 was: for all state-funded health institutions and hospitals -- 1.36, 1.45 and 1.44, respectively; for dispensaries – 1.41, 1.51 and 1.50, respectively and; for outpatient facilities – 1.30, 1.37 and 1.33, respectively.

As a result, physical persons/FTEs ratio has also been deteriorating. In 1991, 1995 and 1999 it had the following values: all state-funded health institutions – 68.6%, 64.3% and 65.4%, respectively; hospitals – 69.3%, 65.1% and 66.1%, respectively; dispensaries – 65.3%, 61.3% and 62.8%, respectively; outpatient facilities – 71.9%, 68.3% and 71.4%, respectively.

As of the beginning of 2000, all state-funded health institutions had 1,803,900 mid-level medical FTEs. Most of them (82.5%) were employed by hospitals (64.1%), outpatient facilities (12.9%) and dispensaries (5.5%).

In 2000, the share of physicians in rural health institutions was 30% less than that in all other health facilities. As for mid-level and junior medical FTEs, their shares in rural facilities’ manning tables are higher as compared to urban health institutions (43.2% and 23.2%, respectively, in 2000). “Other staff” had a greater share in rural facilities’ manning tables (20.5% of all FTEs), and the share of non-medical specialists with higher education and pharmacists was 3-4 times less than that in urban facilities (0.14% and 0.12%, respectively).

Between 1991 and 1999, the share of physician FTEs in hospitals increased by 15.9%, and that in hospitals’ outpatient units reduced from 44.5% to 40.1%.

There was some significant increase (+ 35%) in hospital physician FTEs/100 beds: from 15.0 in 1991 to 20.3 in 1998, as a result of hospital bed reduction.

At the same time, the number of employed physicians (physical persons) increased only by 1.75%, and physician/FTE ratio decreased from 69.2% to 65.6%. Although demand/supply ratio did not change significantly between 1991 and 1998 (94.2% and 94.7%, respectively), the FTE/physician ratio increased from 1.36 to 1.44 over the same period.

The number of physician FTEs in free-standing outpatient facilities increased by 14.1% between 1991 and 1998. Physician demand/supply ratio increased from 92.3% to 94.4%; FTE/physician ratio increased from 1.3 to 1.33, and physician/FTE ratio decreased from 71.1% to 70.8%.

Thus, the following changes occurred between 1991 and 1998: the overall number of hospital beds decreased by 13.9%; the number of physician FTEs increased by 9.1%; physician demand/supply ratio did not change significantly (93.7% and 94.6%, respectively); FTE/physician ratio increased from 1.35 to 1.43, and physician/FTE ratio decreased from 69.3% to 66.3% (see Table 3).

Physician supply per 10,000 residents has been improving (40.6/10,000 in 1990, 38.4/10,000 in 1995 and 42.0 in 1998). However, only 20-25% of all physicians are directly involved in the provision of primary health care.

At the same time, there has been a growing gap between urban and rural areas in terms of physician supply. Although the absolute number of physicians has been increasing, the share of rural community hospitals where no physician positions were filled by trained doctors increased to 8.8% between 1991 and 1998 (that is, hospitals with no doctors in them). In 1998, 312 hospitals and 676 rural outpatient facilities (17.0% of all Russia's rural outpatient clinics) found themselves in such situation.

Supply of mid-level medical staff has not changed significantly (99.9/10,000 residents in 1990, 95.3/10,000 in 1995 and 100.1 in 1998). Physician/nurse ratio has been decreasing and was 1 : 2.38 in 1998, which differs from that in many foreign countries.

PROVIDER PERFORMANCE FACTS

By and large, hospital and outpatient provider performance indicators have not changed since 1990. In the 1990s, 60 to 70 percent of the overall public health funding was allocated to hospitals, 25% -- to outpatient facilities, and up to 10% -- to ambulance services.

The following changes occurred between 1991 and 1998: total number of hospital beds reduced by 13.9%, total number of hospital admissions decreased by 7.2%; total number of outpatient visits decreased by 10.6%. These facts demonstrate that people have become more reluctant to apply for health care, first of all, as a result of unfavorable economic and social environment.

Hospital admission rate (admissions per 100 residents) decreased from 24.4 in 1985 to 22.8 in 1990 and 21.8 in 1991. In 1996-1998 it became lower than 21 (20.7, 20.5 and 20.7, respectively). 30,184 patients were hospitalized in 1998 (see Table 4).

Average bed occupancy rate (days/year) was 322 in 1985, 289 in 1990, 303 in 1995 and 305 in 1998, which is much lower than the normative rate. In 1998, beds in pediatric city hospitals, central district hospitals district, community hospitals, narcology clinics and maternity hospitals worked less than 300 days/year, on the average. Bed occupancy rate in infectious hospitals was 220 – 232 days/year.

Average length of stay has remained almost the same since 1985 (17.0 days in 1985, 16.6 days in 1990 - 1997). It dropped to 16.3 days in 1998, which is still too long and demonstrates the lack of treatment intensity and insufficient motivation to introduce new organizational and clinical technologies.

Bed days/1000 residents ratio was 3784.8 in 1990, 3561.6 in 1995 and 3374.1 in 1998, which exceeds the normative rate of 2812.5 days specified in the "Program of State Guarantees Regarding Provision of Free Health Care to the Population of the Russian Federation" (1999).

Hospital mortality rate (deaths per all discharges per year) was 1.6% in 1993-1995, 1.4% in 1997-1998. However, that is still higher than in 1985 (1.1%) and 1990-1991 (1.3%). Mortality in children's hospitals decreased from 0.6% in 1990 to 0.4% in 1998. It should be noted that, hospital mortality indicators may reflect both quality of care and reluctance of the population to apply for inpatient services resulting in a growing share of severe chronic cases in the overall case mix.

Average number of outpatient visits per 1 resident (including telephone calls to the ambulance service) was 9.5 in 1990 and 9.1 in 1995-1998 (see Table 5). No less than 30% of patients seen by catchment area internists were referred to physician specialists.

Total number of outpatient visits decreased by 3.1% between 1991 and 1998. Rural outpatient clinics account for 10.8% of all outpatient visits.

The number of outpatient visits to free-standing outpatient facilities increased by 10.2% between 1991 and 1998, which may be explained by certain increase in the number of such facilities and closure of hospitals' outpatient units.

Preventive screening coverage of adults and adolescents decreased by 4-6%, and that of children – by 15.4% between 1985 and 1998. That also had a negative impact on early detection of diseases.

In 1998, 1,616,000 patients were treated at day hospitals of various types (2.1 times more than in 1991). However, that was only 5.4% of all hospital admissions that occurred in that year.

The number of surgical interventions performed at polyclinics increased from 4,479,000 in 1990 to 5,803,000 in 1998 (+ 29.6%). However 50% of them were operations on the skin and subcutaneous tissue.

The absolute number of admissions to hospitals and dispensaries decreased by 10.4% (3,492,000 cases) between 1990 and 1998, and the number of surgical interventions performed at hospitals increased by 8.5% (537,000) over the same period. The number of surgeries per 1000 admissions increased from 188 in 1990 to 228 in 1998.

Total number of surgical operations (per year) performed at hospitals and outpatient facilities increased by 17.2% (1,861,000 interventions) between 1990 and 1998. Total number of operations per 1000 residents per 1 year increased from 73 in 1990 to 87 in 1998.

CONCLUSIONS

The above data demonstrates the need for a better-coordinated and vigorous implementation of the health care reform in Russia.

Both effectiveness and efficiency of the health care system may only be improved, if a better interaction and continuity of care across all levels of the system is assured, a shift is made towards outpatient services, and resources and activities are adequately re-distributed between hospital, outpatient and community services.

Further gradual reduction of excessive physician FTEs, as well as optimization of physician supply and distribution among facilities and specialties may be strongly recommended.

Primary health care practitioners' share in the overall medical staff should be increased to 45-50%. Primary health care facilities should provide a wide range of services, including disease prevention, treatment, rehabilitation and health promotion. However, without sufficient infrastructure and resources in place, PHC practitioners can not and should not assume functions of other HC providers.

Only a clear cut delineation and reasonable shifting of responsibilities and resources will provide for the desired improvement of the HC quality.

Further development of hospital-substituting facilities (day-case hospitals, home service, etc.) and specialized outpatient surgery centers is required.

Reduction of hospital beds should be accompanied by actions to improve utilization of hospital services (i.e., better bed turnover ratio, better timing of admission and examination of patients during hospital stay, reduced ALOS, improved bed occupancy rate). However, any further reduction in hospital beds should be preceded by activities to develop outpatient and community services.

Hospital beds should be differentiated by intensity of care provided to patients (e.g., intensive/acute beds, chronic beds, rehabilitation). Consequently, hospital bed stock should be restructured and optimized at all levels – starting from the level of the Russian Federation, and ending with that of each health care facility (or its unit).

As has been the case in many countries, it is not the content of reforms that causes the problem, but a lack of planning and implementation gap. That is why, strategic planning should be seen as a mandatory part of the reform process.

The overall reform process, including planning, definition of goals, objectives and targets, should be supported by legislative, regulatory and managerial initiatives at national, regional and local levels.

Table 3.

Russia's Health Care Providers: Performance Facts and Human Resources

	1991	1998	1999	99/91
Hospitals				
Beds, total:	1724074	1484428	1440563	- 13,9%
Hospital admissions (X 1000)	31076,9	28833,0	29060,1	- 7,2%
Outpatient visits, total (X 1000):	751988,5	672621,3	687287,3	- 10,6%
FTEs, total	467131	501723	499500	+ 7,4%
Including – Hospitals:	259263	300591	299811	+ 15,9%
-- Hospitals' Polyclinics	207868	201132	199689	- 3,2%
FTE's per 100 beds	15,0	20,3	20,8	+ 35,3%
Physicians (physical persons)	323327	328997	328304	+ 1,75%
FTE's/1 staff member	1,36	1,44	1,44	+ 5,9%
Staff member/FTE ratio	69,2%	65,6%	65,7%	- 5,2%
Free-Standing Outpatient Facilities				
Visits, total:	342528,2	377304,7	386405,1	+ 10,2%
FTEs, total	114202	130350	130006	+ 14,1%
Staff members (physical persons)	81246	92294	92242	+ 13,6%
FTE's/1 staff member	1,3	1,33	1,33	+ 2,3%
Staff member/FTE ratio	71,1%	70,8%	71,0%	- 0,4%

Table 5.

Non-hospital Services in the Russian Federation

	1985	1990	1994	1995	1996	1997	1998	1999	99/85
Visits per 1 resident per 1 year	11,1	9,5	9,2	9,1	9,1	9,1	9,1	9,3	-16,2%
Preventive screening coverage rate: adults	94,7	87,8	86,5	87,1	88,0	89,0	89,2	90,3	- 4,4%
- adolescents	98,6	97,3	93,8	94,1	94,1	94,5	94,2	94,6	- 4,0%
- children	97,5	88,1	80,9	81,4	82,0	82,3	83,8	79,1	-18,4%
Surgical interventions at polyclinics (X 1000)	-	4479,2	5389,4	5819,5	5678,7	5642,8	5803,6	5572,8	+28,8%
Same, per 1000 residents	-	30	36	39	39	38	40	40	+21,3%
Temporary disability cases, per 1000 working residents	-	109,5	72,4	74,9	62,3	62,7	66,0	69,1	-36,9%
Temporary disability, days	-	1246,2	882,2	951,9	1023,0	956,3	900,3	908,4	-27,1%

Table 4.

Hospital Services in the Russian Federation

	1985	1990	1994	1995	1996	1997	1998	1999	99/85
Hospital Admissions per 100 residents	24,4	22,8	21,5	21,2	20,7	20,5	20,7	20,9	-14,3%
Hospital admissions (mln. cases)	34,8	33,6	31,8	31,3	30,3	29,9	30,2	30,5	-12,4%
Surgical interventions, total:	-	6,3	6,4	6,5	6,6	6,6	6,9	7,0	+10,2%
Same, per 1000 admissions	-	188	203	208	217	222	228	229	+21,8%
ALOS	17,0	16,6	16,8	16,8	16,6	16,6	16,3	15,8	-7,1%
Hospital mortality rate, total	1,1	1,3	1,6	1,6	1,5	1,4	1,4	1,5	+36,3%
Hospital mortality, children	0,8	0,6	0,5	0,5	0,5	0,4	0,4	0,4	-50,0%
Bed days per 1000 residents	4148,0	3784,8	3612,0	3561,6	3436,2	3403,0	3374,1	3302,2	-20,4%
Bed occupancy rate (days/year)	322	289	304	303	300	301	305	307	-4,7%

Indicator	Moscow Region	Kemerovo Region	Omsk Region	Murmansk Region	Saratov Region	Russia
Hospitals	-11,2	-4,5	-23,8	-13,6	-16,2	-16,4
Including: - Central District Hospitals	-38,5	-5,9	+3,3	No changes	-5,3	-2,3
- District Hospitals	+72,7	-66,7	No changes	0	-20,0	-22,2
- Community Hospitals	-22,8	-38,6	-36,6	-50,0	-25,9	-27,9
- Maternity Hospitals	-23,1	+33,3	+50,0	-20,0	No changes	-16,8
Hospital Beds	-12,7	-33,0	-29,0	-20,6	-18,3	-16,4
Hospital admissions	-3,7	-21,5	-18,6	-8,3	+2,9	-6,5
Physician FTEs in Hospitals	+4,5	-4,2	+2,8	-2,3	+11,6	+6,9
Free-Standing Outpatient Facilities	-9,3	+75,0	+43,4	-27,3	+76,3	+12,0
Outpatient Clinics at Hospitals	-7,4	+2,0	-23,3	-44,4	-20,6	-17,1
Outpatient Visits to Free-Standing Outpatient Facilities	+2,3	+10,7	+13,3	-29,2	+62,4	+13,6
Outpatient Visits to Outpatient Clinics at Hospitals	-19,6	-13,3	-10,8	-14,5	-23,6	-8,3
Physician FTEs in Free-Standing Outpatient Facilities	+60,1	-4,9	+34,0	-15,8	+82,8	+13,8
Physician FTEs in Outpatient Clinics at Hospitals	-7,3	-13,4	-16,3	-17,1	-16,6	-3,9