

**Addressing Health Challenges in the
Russian Federation:**

From Theory to Action

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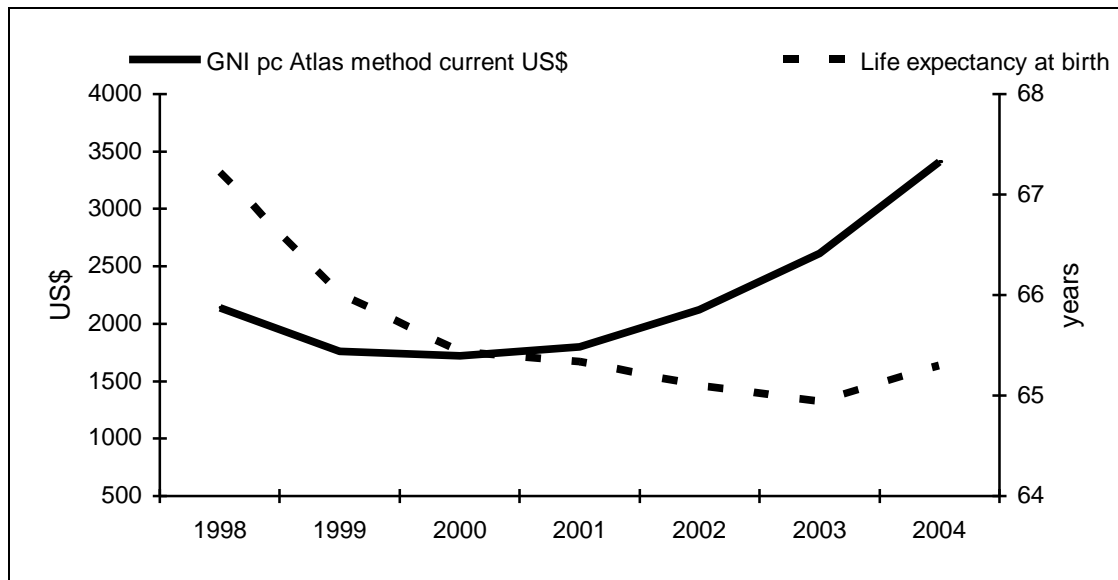
**WHO Consultation on Intersectoral Action (ISA) for
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I. Poor health outcomes in the Russian Federation

In the Russian Federation today, female life expectancy (72 years) is close to the level of 1955; male life expectancy (59 years) is four years less than what it was in that year, and is now at the same level as in Eritrea and Papua New Guinea. Until 2004, declines in life expectancy in Russia contrasted sharply with strong growth in gross national income achieved (GNI) achieved since 1998 (Figure 1). Even with the positive dynamic exhibited in 2006, average life expectancy in Russia only rebounded to the low level of 2000 (66 years). This can be compared with a 78 year average in the European Union; a 12 year difference. The gap is even more pronounced in terms of healthy life expectancy (HLE): in Russia, HLE for women is about 10 years less than in France, and 16 years less for men than in the United Kingdom. HLE is a measure of the life expectancy at full health.

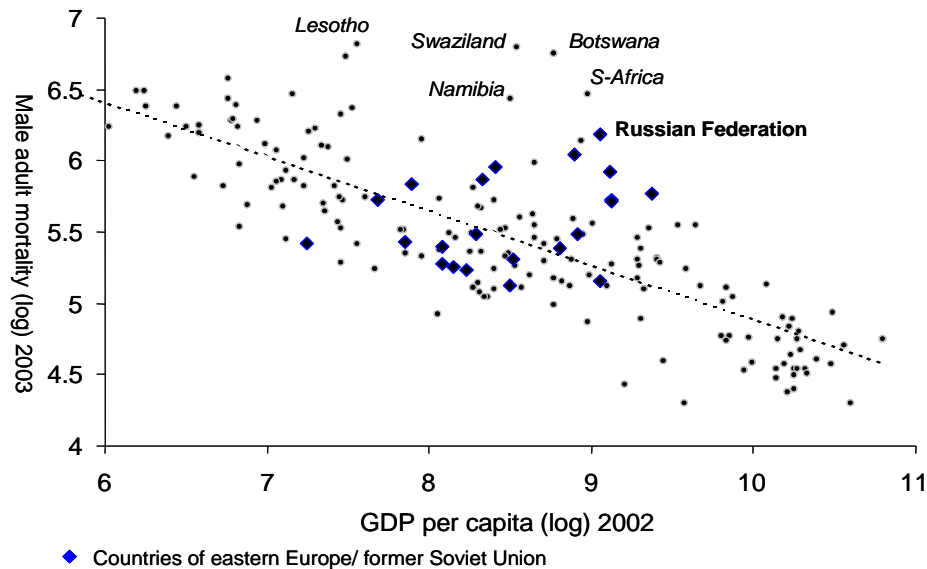
Figure 1: Gross National Income per Capita and Life Expectancy



Source: World Bank World Development Indicators 2005/WHO/EURO HFA Database 2005.

As shown in Figure 2, mortality rates for adult males are very high in Russia relative to other countries at similar income and development levels. These outcomes are often worse than that in other Eastern European and Commonwealth of Independent States (CIS) countries and similar to levels observed in several African countries severely affected by the AIDS epidemic.

Figure 2: GDP Per Capita and Male Adult Mortality in Russia and Other Countries



Source: Prepared by authors on the basis of World Bank and WHO data.

Main causes of premature death, ill health and disability in the Russian Federation

The main causes of poor health outcomes—premature death, ill health and disability—among adults in the Russian Federation, *are: (i) non-communicable diseases* (NCDs, e.g., heart attacks, strokes, cancer), and *(ii) external causes, predominantly injuries* due to traffic accidents.

In 2006, cardiovascular diseases (CVD), cancer, diseases of the digestive system (DDS), diseases of the respiratory system (DRS) and diabetes mellitus (DM) accounted for 56.9 percent, 13.1 percent, 13.1 percent, 4.1 percent, and 3.8 percent, respectively, of all deaths in the country. Collectively, their overall contribution to total deaths was estimated at 91 percent. While CVD and cancer accounted for 70 percent of all deaths in 2006, , infectious and parasitic diseases accounted for only 1.6 percent of all deaths.

External causes of death (EC), including injuries, are the second leading cause of death in Russia after non-communicable diseases—especially in women aged 1-35 years and in men aged 1-45 years. In 2006, 80 percent of all injury deaths occurred in men aged 20-24 years, and 54 percent in women aged 15-19 years. Of all injury-related deaths in 2006, industrial accidents accounted for 17-19 percent, domestic accidents for 46-46 percent, and street accidents for 28-30 percent. Road accidents accounted for up to 60 percent of the total injury-related deaths, and are among the major causes of disability in the working-age population. Some 200,000 persons are injured in road accidents each year in the Russian Federation and 30,000 of these die. The respective figures for children are

22,000 total injured and 1,500 deaths. Road-related injuries are one of the most serious socioeconomic and medical problems of Russia today.

Standardized deaths per 100,000 of population for major causes of death in the Russian Federation in 2005 far exceeded the corresponding rates in the EU countries—the mortality rates from CVD and external causes of death for Russian men are respectively four and seven times higher than those observed in the EU, while these rates for Russian women exceed the rates observed in the EU four times.

At present levels of mortality, less than six out of every ten 15-year-old Russian boys can expect to survive to the age of 60, while almost eight out of every ten Brazilian or Turkish boys and nine out of ten British boys of the same age can expect to live until 60. The survival prospects for Russian girls, while still lower than many other countries of comparable socio-economic development, do look markedly better than for Russian boys.

Life expectancy differences within the Russian Federation

Mortality rates and life expectancy at birth in Russia vary greatly by region, in part because of regional differences in socioeconomic status and health levels. These differences can be observed when analyzing the regional variation in average life expectancy at birth. The total and the gender differences however are very striking. People in a socio-economically better-off region outlive their counterparts in a socio-economically less well off region by almost 20 years. Furthermore the differences in life expectancy between men and women within regions are also large but these differences are less acute across regions. On average, women outlive men by eight years within the region with the longest life expectancy and seven years within the region with the shortest life expectancy. The within region difference suggests important variations between socio-economic population groups in addition to the variation across regions (Table 1).

Table 1. Regional Variation in Life Expectancy at Birth in Russia 2000-2006

	Life Expectancy at Birth								
	2000			2003			2006		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Region with the longest life expectancy	74,0	68,6	79,0	74,8	71,5	77,8	76,0	71,9	79,8
Region with the shortest life expectancy	56,1	50,4	63,0	54,1	47,4	60,2	55,9	52,8	59,8

Source: Rosstat, 2007.

The social and economic cost of NCDI in the Russian Federation

As documented in a recent World Bank report¹, the Russian Federation's unprecedented mortality upsurge in the last two decades, coupled with fertility rates that are well below replacement level, has several important implications beyond the socio-demographic make-up of Russia. These are discussed below.

- (i) ***Shrinking population:*** Since the beginning of the 1990s, the Russian Federation's population has declined by six million to an estimated 143 million. The average annual population growth between 1990 and 2003 was -0.3%, and continued high mortality and declines in fertility are expected to lead to further population decline. It is estimated that the population of the Russian Federation would be 17 million higher than at present if age-specific mortality rates had followed the patterns experienced by the EU-15 countries since the mid-1960s².

- (ii) ***Fewer workers:*** If these trends persist, the size of the Russian labor force will continue to shrink. A healthy population aged 65 to 75 could represent a sizable untapped workforce³. However, the high burden of ill health among surviving older Russians may limit what can be achieved.

- (iii) ***National security risks.*** The demographic and health crisis in the Russian Federation present many challenges to national security⁴. First, the number of men of conscription age will plunge rapidly in the decades ahead. Second, a growing percentage of the military budget must provide for medical, nutritional, and substance abuse programs for soldiers deemed medically unfit. Third, long-term economic growth will depend on large cohorts of healthy and skilled young and middle-aged adults engaged in productive enterprises yet the demands of the armed forces will reduce the available pool. Finally, the Government is concerned that depopulation of some border areas may have potential security implications.

- (iv) ***Impact on health care costs and the economy:*** The contribution of NCDI to the burden of illness in the Russian Federation raises two economic questions. First, as many NCDI require expensive and prolonged medical treatment, to what extent is the Russian health system burdened with the cost of treating them? Second, what are the economic consequences of premature mortality, ill health, and disability among Russian working-age adults?

¹ World Bank 2005. *Dying Too Young. Addressing Premature Mortality and Ill Health Due to Non-Communicable Diseases in the Russian Federation*, Washington, DC.

² E.M. Andreev, 2005. "Demographic Consequences of Mortality Reversal in Russia." Paper for the XXV IUSPP International Population Conference, Section 36: "Demographic and Socio-Economic Consequences of Adverse Mortality and Health Trends," Tours, France, July 18, 2005.

³ P.F. Drucker, 1999. *Management Challenges for the 21st Century*. Burlington, MA: Butterworth-Heinemann.

⁴ J. Twigg, 2004. "National Security Implications of Russia's Health and Demographic Crisis," PONARS Policy Memo 360: 1-5.

(v) **High medical treatment costs:** Estimates of expenditure from two regions in the Russian Federation (Chuvash Republic - an agricultural region - and Kemerovo Oblast - an industrial region) in 2003 were analyzed and the results extrapolated to the national level.⁵ The shares attributable to different diseases were applied to the US\$13 billion that is widely accepted as the total level of health care expenditure. This analysis showed that NCDI are the Russian Federation's highest-cost conditions. The four most costly conditions were circulatory system diseases, respiratory diseases, external causes (both intentional and unintentional injuries), and digestive system diseases. These conditions account for more than 50% of the country's total health expenditures.

(vi) **Adverse economic effects.** A summary of the main findings presented in the "Dying Too Young" report follows.

- **The cost of absenteeism due to ill health.** A conservative estimate identifies significant costs of absenteeism due to illness: on average, 10 days are lost per employee per year due to illness in the Russian Federation, while in the EU15 countries the average is 7.9 days. Sickness absence incurs the direct cost of sickness benefits paid to absent employees as well as the indirect cost of lost productivity. The overall cost associated with the reported workdays lost to illness in the Russian Federation varies between 0.55% and 1.37% of GDP (depending on whether the monetary value is calculated from the average wage rate, giving the lower value, or GDP per capita, giving the higher value). This is a significant impact, given that it excludes the many other ways that ill health impacts the labor market such as the effects of reduced productivity.
- **Adverse impact on labor supply.** Ill health also impacts labor supply because jobholders with chronic non-communicable diseases are more likely than healthy individuals to either retire early or to lose their jobs and draw on state pensions. While a hypothetical Russian male aged 55 with median income and other average characteristics⁶ would be expected to retire at age 59, having a chronic illness would lower his expected retirement age by 2 years. Similar results are obtained for females. Chronic illness, therefore, is a significant predictor of premature retirement in the Russian Federation. The effect is greatest among the poor who carry a double burden of ill health: first, they are more likely to suffer from chronic illness, and second, once ill, they suffer worse economic consequences than rich people, perpetuating socioeconomic disadvantage.
- **Adverse impact on labor productivity.** Empirical analyses adopting various estimation procedures conclude that in the Russian Federation poor health

⁵ Frid, E. 2005. "Health Care Costs in the Russian Federation." Background assessment prepared for the World Bank, Moscow, March.

⁶ The other characteristics of this hypothetical individual are that he is married, has one child, has a high school diploma, was born in the Russian Federation, and is living in an urban area.

reduces wages much more than in the Organization for Economic Co-operation and Development (OECD) countries, where poor health tends to affect mainly the number of hours worked. More precisely, from the Russian Longitudinal Monitoring Survey (RLMS) data, people reporting good health earn higher wages than those in poor health, with a 22% premium for women and 18% for men (when endogeneity of the health proxy is addressed using standard econometric techniques). The National Survey of Household Welfare and Program Participation (NOBUS) data yield similar results: men in good health earn about 30% more and women 18% more compared to those in less than good health. Finally, a panel analysis based on the RLMS 2000-2003 rounds confirms that good health status positively affects the wage rate for males, while it does not substantially affect the number of hours worked per week.

- ***Job losses.*** Alcohol abuse in the Russian Federation significantly increases the probability of being dismissed from employment.
- ***Adverse impact on the family.*** The death of a household member affects other household members' welfare and behavior in various ways. RLMS data indicate that alcohol consumption per capita increase by about 10 grams per day as a consequence of the death of an unemployed household member and by about 35 grams if the deceased was employed. The probability of suffering depression increased by 53% when controlling for other relevant factors. Chronic illness negatively affected household incomes, particularly during 1998–2002, when it is estimated that it contributed to an annual loss of 5.6% of per capita income.

The above analysis demonstrated various channels through which health has impacted economic outcomes in the Russian Federation. In each estimate presented here, the results proved statistically significant, and where effect size could be assessed, it was considerable.

II. Low Levels of Health Care Expenditure in the Russian Federation

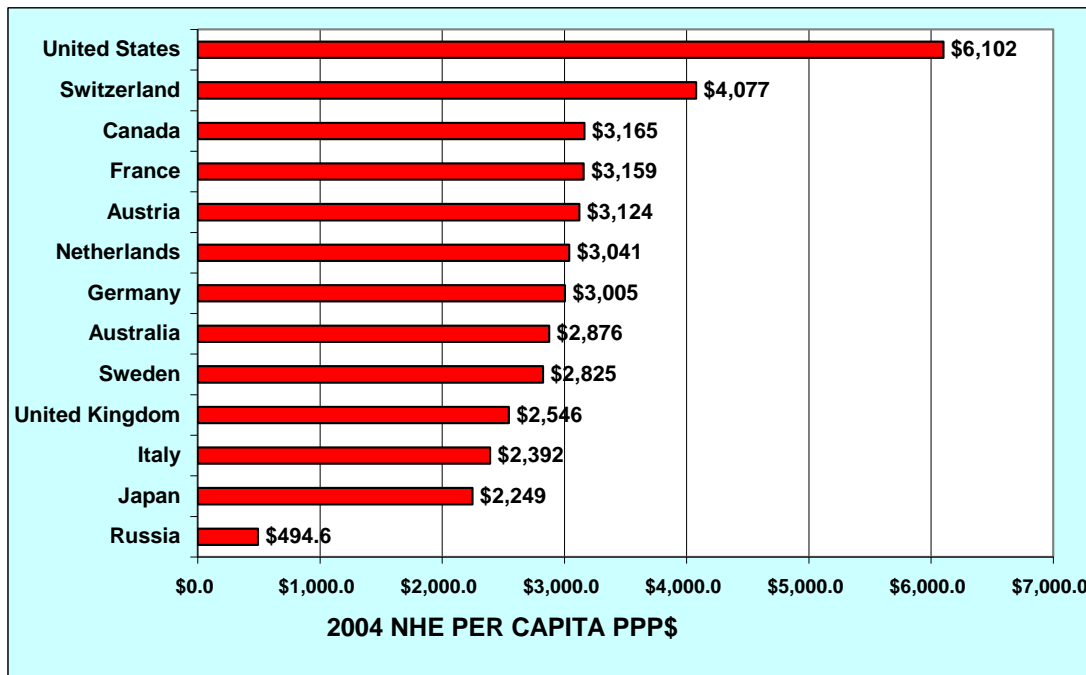
One way to understand the level of health spending in the Russian Federation is to compare this with health spending in other countries. Numerous empirical studies have shown that total health spending generally increases as the GDP increases. Whereas, the low- and middle-income countries (GDP <\$10,000 per person) allocate less than six percent of GDP, high-income countries spend around 7-10 percent of their GDP on health.

Most comparative studies on health expenditures show that the United States is an outlier amongst high-income countries: spending 17 percent of its GDP on health care. In

comparison, Russia's total health expenditure is 5.3 percent of GDP, significantly below the levels observed in countries with similar per capita income.⁷

As shown on Figure 3, Russia also spends less on health in per capita terms than in other countries in the G-8 and EU countries. These findings, coupled with poor health outcomes and rapidly growing GDP suggests a large scope for increasing overall spending for health care in the Russian Federation.

**Figure 3: Health care spending
Per Capita US\$ PPP**



Source: OECD data 2006; for Russia, GDF and WBI, Unified Survey. .

In Russia, since 2001, public sector expenditures on health, measured as a share of GDP, have fluctuated between 2.7 and 3.6 percent. This is significantly less than the expenditures of the G-8 countries and the countries which constitute the EU-15, which typically spend 6-12 percent of their GDP on health care, and with the exception of the United States, over 75 percent from the public sector sources. However, it is important to note that public sector spending for health in Russia as a share of GDP is similar to levels observed in other middle-income countries.

It is also interesting to compare the balance between public and private spending within the Russian Federation. In Russia, spending appears to be equally balanced between public and private spending. In most G-8 and EU countries public sector spending

⁷ Tompson, W. 2007. "Healthcare Reform in Russia: Problem and Prospects." OECD Economics Department Working Papers, No. 538, OECD Publishing, doi:10.1787/327014317703.

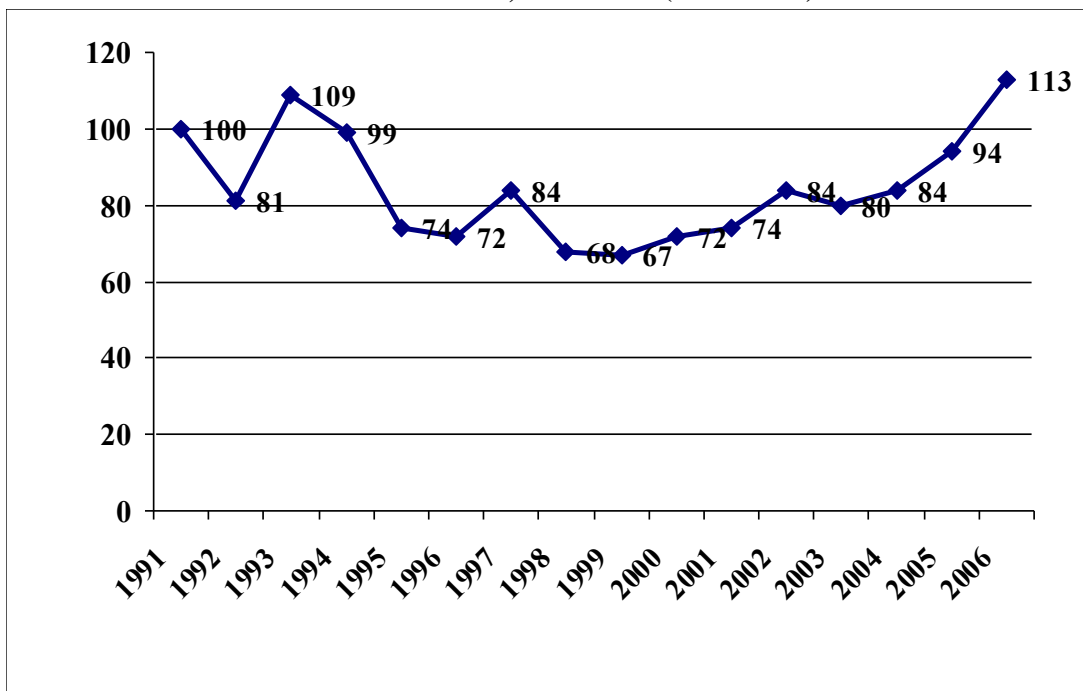
represents 75 percent of total health care spending, although in some of these countries it is as high as 90 percent. The large proportion of private expenditures in Russia reflects out-of-pocket payments for informal charges in health facilities and the purchase of pharmaceuticals. It also suggests a public willingness to spend more on health care services to cover shortcoming in the provision public health services, more importantly lack of outpatient drug benefits under the State Medical Guarantee Program.

Health care expenditures in the Russian Federation: recent trends

While health spending levels grew in most EU and G-8 countries in the 1990's and 2000's, spending levels on health care did not increase in the Russian Federation.

The decline in health status in the Russian Federation occurred simultaneously with decreases in public sector health care expenditures and worsening socio-economic status of the population. In the 1990s, Government expenditures for health care declined by one-third, as many secondary and rural facilities were closed and services discontinued. In real terms, health care spending rose above pre-transition levels only in 2006 with injection of resources from the National Priority Health Program of 2006-2007

Figure 4: Public Expenditures on Health, Russian Federation, in real terms, 1991–2006 (1991 = 100)



Note: Includes budget and health insurance contributions.

Source: Goskomstat database using index deflators of GDP. – IET, (2007) - Russian Economy in 2006. Moscow: IET, p. 495. http://www.iet.ru/files/text/trends/2006_en/2006_en.pdf

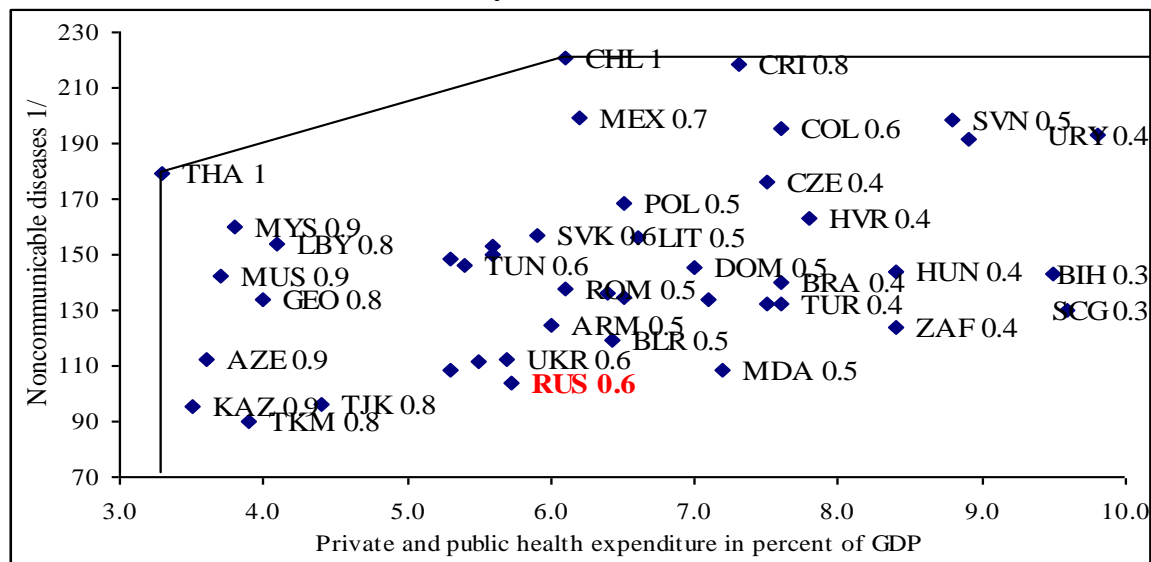
Rapidly rising incomes with real growth expected to average over five percent in the medium term, aging population, poor health outcomes and demands of the growing

middle class will continue to put pressure on demand for health services. As a result, total and public expenditures on health as a percentage of GDP are likely to increase in Russia over the medium to long term even with efficiency gains that will need to be generated within the existing health system.

Health Spending and Outcomes

Combining spending and outcomes to determine the value of spending on health care can be problematic given the lack of good data on spending and outcomes in the Russian Federation. However, in spite of these limitations a recent study⁸ assessed the efficiency of social expenditures in the Russian Federation.⁹ Although the comparisons of expenditure and mortality are imperfectly adjusted for factors that could affect mortality, the results suggest that health outcomes in Russia are similar to countries which spend 30-40% less on health (Figure 5). This finding suggests considerable inefficiency in the Russian Federation health system. A second implication of the findings of this report is that in order to improve health outcomes, additional resources for health care are needed but these additional resources must be accompanied by reforms to improve efficiency and effectiveness of health care organization and delivery.¹⁰

Figure 5. Efficiency of Private and Public Health Spending Standardized Mortality Rate Non-communicable Diseases



Sources: Adapted from Hauner (2007); data from WHO, IMF, WEO database, and IMF staff calculations.

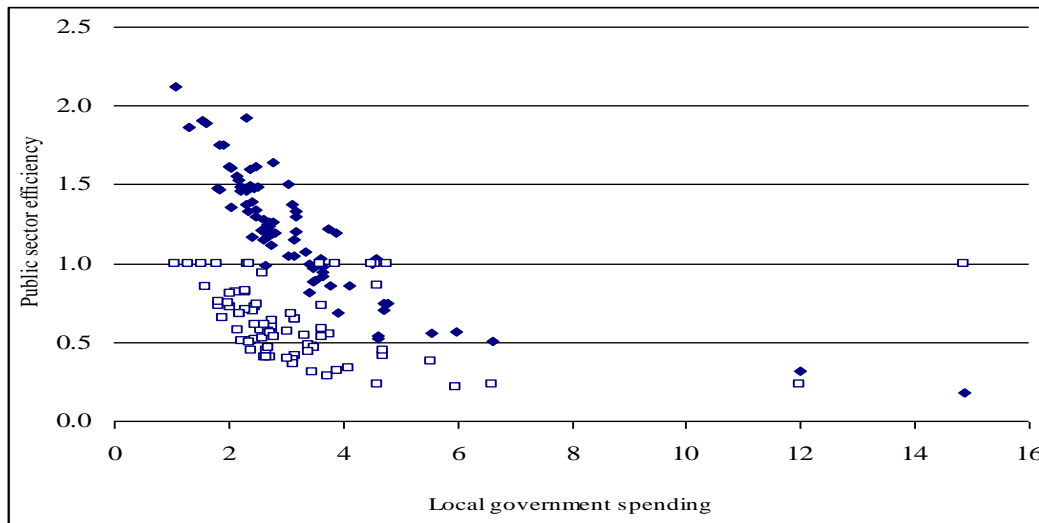
1/ Inverted (following Afonso, Schuknecht, and Tanzi 2005), because better outcomes have to be reflected in higher values.

⁸ Hauner, D. (2007) "Benchmarking the Efficiency of Public Expenditure in the Russian Federation." IMF Working Paper WP/07/246.

⁹ The efficiency of public spending is measured by comparing actual spending with the minimum spending theoretically sufficient to produce the same actual output. Inputs are measured by public spending in specific functional areas, while outputs are represented by indicators of the impact of public spending in these areas. Health outcomes are measured by indicators such as infant mortality, life expectancy. The number of hospital beds, physicians relative to population. For local governments, public sector performance (PSP) and public sector efficiency (PSE) scores are used.

This study also suggests that, at the local government level, comparing spending and outcomes across regions, on average, the current outcomes in health could again be produced with about two-thirds of the present inputs if the less efficient regions would emulate the more efficient ones. Local governments account for about 85 percent of health expenditure. Local government expenditure on health varies substantially relative to gross regional product (GRP), mostly between 2 and 4 percent of GRP, but can extend to 15 percent (Figure 6).

**Figure 6. Local Governments—
PSP, PSE, and DEA Scores vs. Spending in Percent of GRP**
PSE (filled markers) and DEA (empty markers)
Health



Sources: Adapted from Hauner (2007); Rosstat; and IMF staff calculations.

Although local government spending as a percentage of GDP varies considerably across regions, this difference in spending does not appear to translate into materially different health outcomes. Indeed, it is important to note that whether it is health, education, or social protection, outcomes are similar, regardless of the associated level of expenditures. This suggests large differences in efficiency among regions. Statistical measures also underscore the contrast between the small variation in public sector performance (with a coefficient of variation of only 0.10–0.17) and the much larger one in public sector efficiency (coefficient of variation is 0.38–0.42). However, observed minimum and maximum levels of public sector performance in regions reveals a remarkably wide range: 0.60–1.30 in health. In other words, public sector performance for health care is over 100 percent higher in the best region as that in the worst region.

III. THE IMPERATIVE OF POLICY, STRUCTURAL AND INSTITUTIONAL REFORMS TO ACHIEVE BETTER HEALTH OUTCOMES

Spending more money, while necessary, will not be sufficient to improve Russia's health outcomes on a sustainable basis. It is critical therefore that increased health investments and expenditures in the Russian health system be also accompanied by multi-sectoral *policies and programs* coupled with *structural and institutional reforms* to improve the efficiency and effectiveness of health care organization, financing and service delivery.

Key Areas for Action

Specifically, as discussed in detail in the 2008 World Bank report "*Better Outcomes through Health Reforms in the Russian Federation: The Challenge in 2008 and Beyond*"¹¹ and in the recent World Bank's *Russia Economic Report #16*,¹² the following broad lines of action should be considered and implemented:

(a) ***Tackling the broad social determinants of the health crisis in Russia.*** Reducing the high-mortality rates, ill health and disability among Russian working-age adults due to non-communicable diseases (NCDs) such as cardiovascular diseases, cancer, and diabetes, as well as injuries due to traffic accidents and other external events is likely to have a major positive impact on economic and social welfare of the country. These efforts should be seen as key investments to help improve general welfare and secure sustainable economic growth in the country. Support should be provided to participating eligible regions to implement nationally defined multi-sectoral programs targeting the entire population to deal with NCDs and injuries, but allowing for regional differences and selection of region-specific interventions according to their needs and priorities. Under these programs, legal and fiscal measures and interventions would be developed for: (i) controlling excessive alcohol consumption targeting supply (e.g., regulation of production, distribution, prices, access, and advertising) and demand (e.g., information, education and communication campaigns); (ii) controlling tobacco consumption by implementing the provisions of the International Framework Convention Against Tobacco that was ratified by the State Duma in April 2008 (e.g., development of policies for smoke-free worksites and public places, taxation, legislation for banning tobacco advertising and promotion, as well as sale to minors); (iii) promoting changes in diet and physical activity (e.g., public health policies promoting dietary guidelines for healthier eating, school programs on the importance of healthy nutrition and physical activity); and (iv) improving road safety (e.g., promotion of use of seat belts and helmets, action by the policy to prevent drunk driving, better road signaling and maintenance).

¹¹ World Bank. 2008. "Better Outcomes through Health Reforms in the Russian Federation: The Challenge in 2008 and Beyond." Policy Note. Washington, D.C.

¹² Marquez, P. 2008. "Tackling Health Reform," in *Russia Economic Report No.16*. Moscow: The World Bank.

(b) ***Increasing Level of Funding for Health in the Russian Federation.***

A key challenge facing the Russian health system is the relative lack of public sector funding at its disposal to cover the cost of services that are already promised by the Government under the Program of State Guarantees of free, medical services to the whole population. The content of the package is quite extensive for a country that spends a relatively low share of GDP on health care. Access to health care has been compromised consistently over the last 15 years as available resources have been insufficient to cover the guaranteed package (only in 2006 health care funding exceeded the formally calculated cost of this program). Indeed, Russia probably needs to spend more on health care than it currently does, and the major long-term drivers of health care spending – rising incomes,¹³ technological change and demographic change – all point to a significant, long-term rise in health care expenditure. It is reasonable to assume that part of this increase could and should be met by public provision of health service that is likely to remain an important pillar of the system, despite the expected growth of private provision and finance.

The impact of demography will be particularly important. As noted above, the Russian population is aging fast: the proportion of the population above the age of 60 is projected to rise from 17 percent in 2005 to 31 percent by 2050. Since health care spending per capita on pensioners (women over 55 and men over 60) is typically estimated to be roughly triple the level for working-age adults and double the level for children, the system will come under enormous pressure with aging unless the healthy life expectancy of Russians increases. Russian women, in particular, tend to suffer much worse health than either Russian men or western women, and the gap increases with age. This is one reason why the success of reform of the health care system will depend on broader initiatives aimed at improving Russians' health conditions. Unless healthy life expectancy (HLE) increases, the system risks becoming overburdened by a rapidly aging, increasingly ill population.

Given the above considerations, then the question that needs to be answered is ***how much should Russia spend on health, given its current epidemiological profile relative to its desired level of health status, considering the effectiveness of health inputs that would be purchased at existing prices, and taking into account the relative value and cost of other demands on social resources?***¹⁴ Two approaches could be used to address this question: (i) ***a peer approach***, focusing on whether a country is spending more or less than countries with similar characteristics, such as income levels, cultures, or epidemiological profiles, accepting that the relationship between health spending and health outcomes is difficult to specify and aiming instead to learn from comparable experiences; and (ii) ***a budget approach***, that aims to identify the desired health status changes and determine what needs to be purchased with an given level of financial

¹³ In both OECD and emerging market economies, health care expenditure exhibits a tendency to rise faster than real GDP.

¹⁴ A good discussion on this topic is presented in: Savedoff, W.D. "What Should a Country Spend on Health Care?", Health Affairs 26, no.4(2007):962-969.

resources by directly focusing on the issues of current and desired health status, prices, effectiveness, and trade-offs.

Following the “peer approach”, probably the Russian Government would need to gradually increase aggregate public funding on health above the current 3-5 percent of GDP level in 2006 to a 4.5-6.0 percent of GDP level as in other middle-income countries within the next five to twelve years (Table 2). This, if achieved, is a reasonable rate of increase. Too rapid an increase will result in inflation and an inability of the health care system to absorb the resources efficiently. As noted earlier, the level of spending in the Russian Federation is below the international average for a country with this level of income and also the public sector component of spending is below the international norms. Spending more on health care in Russia is justified in large measure by the massive past under-spending that needs to catch up and generate outcome improvements while structural reform and behavioral change and efficiency gains take time to materialize.

Private spending is also expected to increase from the current 1.8 percent of GDP to 2.5-3 percent of GDP in the long term. Russia’s health care system in the long term should rely on both strong public sector core and rising a private sector provision and finance pillar.

Table 2: Russia: Projected Public Expenditures on Health, 2008-2020
(average annual percentage of GDP)

2006-2007	2008-2010	2011-2015	2016-2020
3.5	4.5	5.5	6

Source: Authors estimations.

The increase in public expenditures would help to address some long-standing problems: (i) raise the base salaries of physicians and nurses, (ii) introduce incentives for improving performance by differentiating remuneration depending on the volume and quality of health services; (iii) ensure free drug provision for hospital care and fund targeted outpatient drug programs for children and the elderly, and (iv) rehabilitate health facilities, replace outdated equipment and train personnel.¹⁵

Where should additional public resources come from? The short answer to this question is from improved composition of public expenditures toward long-term needs of social sectors such as health, education and pensions and away from less productive categories of public expenditures (e.g., untargeted subsidies and transfers, general administration expenditures and unproductive public investments). As the Russian health care financing system is based mostly on general budget revenue rather than on earmarked payroll taxes, mechanisms should also be explored to raise additional funding from regional budgets – as contributions to mandatory health insurance (MHI) of the

¹⁵ For a detailed discussion see Vishnevskiy, A.G., Y.I. Kuzminov, V.I. Shevskiy, I.M. Sheiman, S.V. Shishkin, L.I. Yakobson, E.G. Yasin. 2007. “Russian Healthcare: Way Out of Crisis.” [Авторы: Вишневецкий А.Г., Кузьминов Я.И., Шевский В.И., Шейман И.М., Шишкин С.В., Якобсон Л.И., Ясин Е.Г. Российское здравоохранение: как выйти из кризиса Доклад Государственного университета – Высшая школа экономики]. Moscow: Report of State University - High School of Economics. Mimeo.

non-working population. Another area that merits further analysis is “sin taxes” as follows:

increase in taxes on cigarettes is another potential funding option. This option is consistent with the International Framework Convention against Tobacco that was ratified by the State Duma in April 2008. In Russia there is room to increase the taxes on cigarettes as the average price of a pack of cigarettes is less than US\$2 as compared to the prices in other cities that range from US\$12.95 in New York to US\$16.80 in London.¹⁶ Most of the high cost in these cities is due to taxes (about 70% of the price). A good international example of the use of this option is the recent decision in February 2009 by US President Obama and the US Congress authorizing the renewal and extension of the Children’s Health Insurance Program (CHIP) for poor children by using a 62-cent per-pack increase in the federal taxes of cigarettes to fully fund the program.

increase the excise tax on hard liquor, including beer as beer is considered a beverage that is not taxed as liquor in Russia. Alternatively, this tax could simply be adjusted for inflation. In the United States, for example, it has been estimated that merely adjusting the excise tax on alcohol would raise US\$5 billion annually to help pay for universal health insurance.¹⁷

taxing high-sugar soft drinks. This could, along with increases in the taxes of cigarettes and alcohol, simultaneously raise revenue and improve public health by reducing obesity. In the United States, as part of the current debate on how to pay for health reform, it has been estimated that more than US\$10 billion annually could be raised by introducing a tax of a penny per ounce.¹⁸

Some of these taxes, which should also contribute towards curbing risky behaviors, could, in principle, be earmarked to fund the proposed essential drug benefit. But even without earmarking, they would contribute to higher general government revenues, thereby raising general capacity of the government to fund additional health expenditures such as these.

How to allocate additional financial resources for health care? It should be clear that any discussion on future spending on health in the Russian Federation has to depart from an understanding of the moral values or distributive ethic guiding the health system. That is, unless the ethical goals of the system are articulated in terms of whether health care is a pure social good to be available to all on equal terms, a pure social good for all but a small moneyed elite, or a private consumption good like food or housing, the minimum expenditure of real resources needed to achieve those goals cannot be defined.¹⁹

¹⁶ For a good discussion on this option see Ross, HZ, Shariff, S., Gilmore, A., *Economics of Tobacco Taxation in Russia* (Paris: International Union Against Tuberculosis and Lung Disease, 2008).

¹⁷ “*Paying for Health Reform*”, The Washington Post, May 19, 2009.

¹⁸ Ibid.

¹⁹ Presentation by Prof. Uwe Reinhart at the Opening Session of the European Health Ministers Meeting in Tallinn, Estonia, that was organized by WHO-EURO on June 24-27, 2008.

Following the second approach to address the question “*what should Russia spend on health care*”, one could conclude that the short and medium term challenge is to allocate additional funding for health effectively and efficiently in order to operationalize the universal coverage mandate of the Russian Constitution. As noted earlier, there is considerable regional variation in spending and efficiency. One possibility is to define a minimum set of services and then allocate resources to insure that all regions have the necessary resources to provide a guaranteed minimum level of services following evidence-based clinical standards. As shown by the experience under the UK’s National Health Service, and in middle-income countries such as Brazil and Chile, there are a number of complementary ways to achieve this objective.

The starting point could be the development of standards targeting high priority disease areas in terms of high burden of disease and capacity to benefit; high unwarranted variation across socioeconomic groups and regions; and high spending clinical areas. The World Bank report “Dying Too Young” provides arguments to concentrate on tackling NCD, particularly cardiovascular diseases, cancer, cancer, diseases of the digestive system, diseases of the respiratory system and diabetes, along with HIV/TB, as the initial priority set of diseases given their relative high contribution to the burden of disease in Russia.

The UK’s National Institute for Health and Clinical Excellence (NICE) has established guidelines for the management of most clinical diseases and these have been used by many countries to determine how to allocate resources. The challenge is to adapt the NICE guidelines to the situation and medical practice in the country. In order to improve the likelihood of implementation at the local level, the adaptation process should be led by clinicians and the academic institutions operating in the Russian Federation. Such guidelines could then be used to determine high priority services and how resources should be allocated to fund those. The funds need to be allocated in a way that assures that the services will be available when they are needed, which, in turn, requires that clinicians should work together with health economists to decide the cost-effectiveness and affordability of the needed services.

Using international guidelines adapted to the Russian environment would be one way to develop and update standards for treatment in high priority diseases. Any new funding should support the development and implementation of standards in these areas both through the uptake of effective and cost effective medical technologies and public health interventions and through improving process of care delivery (e.g. reducing waiting times and ensuring access to a basic package of services for all citizens). A continuous process of monitoring and prioritization of clinical and public health areas will also mean that as more resources become available and/or priorities change, additional disease areas will be identified and added in the high priority list.

(c) ***Establishing a single source of funding for public health services.*** The health financing system in Russia is very fragmented and much more decentralized than in most middle- or high-income countries. It is also inefficient as it unnecessarily duplicates administrative efforts and increases transaction costs. Funding comes from

federal, regional, and municipality budgets, in addition to the MHI established in 1993. In Russia, budget funding accounts for around 60 percent of total public spend for health and MHI funding accounts for the rest. Most public sector funds, over 85 percent, are raised and allocated at the regional level through general revenues and the 3.1% rate of payroll tax. The equalization of budget transfers from the Federal level, however, have never been earmarked for health, and regions have mostly been unwilling to either contribute for nonworking groups or to pool necessary funds under the regional health insurance funds, as called for in the legislation. The gradual integration of financial resources from federal and regional government transfers and the MHI would enable the establishment of a single-payer funding for public health services. This would enable development of more meaningful strategic plans for the regional health systems as a whole, encourage integration and coordination, reduce barriers to intra-sectoral activities, and provide greater flexibility with transfer of funds between services.

(d) ***Revising the state guaranteed medical benefits package.*** While health care spending is expected to go on rising, both in absolute terms and relative to GDP, the balance between commitments and resources cannot be restored merely by increasing the latter. The guaranteed package of medical benefits will have to be re-examined. This will involve more than an assessment of what the Russian state can actually afford, although resource constraints will clearly be a critical factor. If the state guarantee is to be meaningful, the package must be transparent to both providers and patients by specifying the types, volumes, procedures and conditions of health care provision. A set of services and drugs should be established for priority diseases to be provided free based on the government guarantees. It must also provide mechanisms for citizens to assert their rights if the commitments in the package are not met.

Recent evidence indicates that drug affordability has likely fallen²⁰. Contributing were an increase in drug prices and a nine-year high unemployment rate of 10.2%, as out-of-pocket drug purchases have already posted three consecutive quarters of declines since 2008. This may imply that many Russian are now unable to purchase needed medications with negative short and medium term effects for the patients and society at large. In the absence of coverage for outpatient drugs under the Medical Program of State Guarantees, price increases might simply deter Russians in need of medicines to access drugs required to control chronic diseases at an early stage (e.g., hypertensive who have to take medications on a daily basis) and may require more expensive medical care later (e.g., unnecessary hospital admissions due to strokes). ***It is obvious, therefore, that poor or average households in Russia stand to benefit greatly not only in terms of reducing their current cost of drugs but also due to fewer hospitalizations and higher productivity if an outpatient drug benefit under the Medical Program of State Guarantees were to be introduced.***

(d) ***Addressing the Structural Imbalances in the Organization of Health Care Services.*** Russian regions need significant capital investment to restructure, renew and appropriately equip its health infrastructure. Although there are special issues

²⁰ Marquez, P. et al. “*Testing Times in Russia: how to facilitate access to essential drugs and get more value out of pharmaceutical expenditures?*” World Bank Russian Economic Report #19, June 23, 2009.

of geographic dispersion and severe climatic conditions, making some additional health infrastructure necessary, this does not necessarily mean building new facilities, but rather *modernizing the existing network*. Judicious investment in hospital, intermediate care centers, primary care facilities, emergency medical services, upgrading competences of human resources, and strengthening management systems, including the widespread introduction of electronic medical records, the number of admissions and the length of stay in Russian hospitals can be substantially reduced while expanding the coverage of ambulatory services.

(e) ***Developing new payment mechanisms for health services***. Per capita payments should be combined with performance related pay linked to achieving quality standards or providing new services. For example, additional (bonus) target payments could be provided for reaching certain quality and efficiency targets (such as expanded coverage for immunization, cervical screening, annual health promotion advice, smoking cessation, alcohol reduction). Hospitals in Russia are paid mostly per treated case but some items of expenditure (mostly fixed) are not included in MHI tariffs and covered directly from budgets controlled by governments of various levels. This combination is inefficient as line item budgeting pays for inputs providing little incentive for providers to improve efficiency. Funds provided through line item budgeting should be incorporated into tariffs that incorporate quality and efficiency standards (for example tariffs that stipulate average length of stay in line cost-effective medical interventions).

(f) ***Expanding the role for the businesses community***. Involvement of the private sector is also of particular importance. Since private firms bear much of the costs from the poor health of employees, they also have a direct incentive to invest in their health. Private and public/private initiatives can reduce the cost and increase the effectiveness of programs aimed at protecting the health of the population. Companies can also have a strong influence on the behavior of their staff and can make them aware of the health risks in ways not open to the government. Tax benefits could be used to encourage private businesses involvement as it is done in several G-8 countries.

The way forward

The new administration of the Russian Federation has made a commitment to increasing public spending in healthcare. In order for the additional funding to help deliver better outcomes it is crucial that current and extra investment (a) targets high priority disease areas (b) is driven by evidence of comparative clinical and cost effectiveness of alternative clinical and public health interventions and (c) the appropriate institutions and structures are put in place to develop and help implement such evidence based investment decisions by regional and federal governments.

It should be clear, however, that most health challenges in the Russian Federation need to be addressed through broad policy and institutional reforms at the federal, regional, and municipal levels covering many sectors and not only the health system. Improving health outcomes by implementing the proposed reforms in *tandem* to ensure overall coherence

of effort is a very complex, medium- to long-term undertaking that should begin to be addressed forcefully today.

To conclude it is worth reiterating the importance of investing on health in a society by quoting Herophilus, Physician to Alexander the Great, who in the year 325 B.C. advised that *“when health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied.”*