

**Document of
The World Bank**

Report No.: 39099

PROJECT PERFORMANCE ASSESSMENT REPORT

RUSSIAN FEDERATION

**HEALTH REFORM PILOT PROJECT
(LOAN NO. 4182)**

March 27, 2007

*Sector, Thematic and Global Evaluation Division
Independent Evaluation Group*

Currency Equivalents (annual averages)

Currency Unit = Russian Ruble

(Exchange Rate Effective October 18, 2004)

US\$1.00 RR 29.1
1.00 RR US\$ 0.034

Abbreviations and Acronyms

ALOS	Average length of stay
CAS	Country Assistance Strategy
CDC	U.S. Centers for Disease Control and Prevention
CPHRI	Central Public Health Research Institute
CSG	Clinical statistical groups
CSU	Central Support Unit
CTDC	Consultation, Diagnosis and Treatment Center
CVD	Cardiovascular disease
DRG	Diagnosis-related groups
FHIF	Federal Health Insurance Fund
FP	Family planning
GP	General Practitioner
HRIP	Health Reform Implementation Project
HRPP	Health Reform Pilot Project
ICR	Implementation Completion Report
IEG	Independent Evaluation Group
M&E	Monitoring and evaluation
MCH	Maternal and child health
MMA	Moscow Medical Academy
MOF	Ministry of Finance
MOH	Ministry of Health
MSEI	MedSocEconInform
MTR	Mid-term review
OECD	Organization for Economic Cooperation and Development
PAD	Project Appraisal Document
PCC	Project Coordination Committee
PMU	Project Management Unit
PPAR	Project Performance Assessment Report
PSR	Project Status Report
SAR	Staff Appraisal Report
QAG	Quality Assurance Group
THIF	Territorial Health Insurance Fund
TMA	Tver Medical Academy
TTL	Task team leader
USAID	United States Agency for International Development
WHO	World Health Organization

Fiscal Year

Government: January 1 —December 31

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A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by IEGWB. To prepare PPARs, IEGWB staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country to discuss the operation with staff of the Bank and the government, other stakeholders, and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader IEGWB studies.

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Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance of objectives, efficacy, and efficiency. *Relevance of objectives* is the extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). *Efficacy* is the extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings:* High Significant, Moderate, Negligible to Low, Not Evaluable.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. The rating has two dimensions: government performance and implementing agency performance. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

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Principal Ratings

	<i>ICR*</i>	<i>ICR Review*</i>	<i>PPAR</i>
<i>Health Reform Pilot Project (Loan 4182)</i>			
Outcome	Satisfactory	Moderately Unsatisfactory	Unsatisfactory
Risk to Development Outcome **	--	--	Modest
Sustainability **	Likely	Non-evaluable	--
Institutional Development Impact ***	Modest	Modest	--
Bank Performance	Satisfactory	Satisfactory	Moderately Unsatisfactory
Borrower Performance	Satisfactory	Unsatisfactory	Moderately Unsatisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The Evaluation Summary (ES) is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.

**As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the definitions of the two differ, they are not directly comparable ratings.

*** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.

Key Staff Responsible

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Preface

This is a Project Performance Assessment Report (PPAR) for the Russian Federation Health Reform Pilot Project (HRPP, US\$98.4 million). The HRPP was the first World Bank-supported health reform project in Russia. It was approved on June 5, 1997 and became effective on April 17, 1998. The World Bank loan was to have financed US\$66 million, with the Federal Government providing a counterpart contribution of US\$1.3 million, the Kaluga Oblast Administration US\$19.2 million, and the Tver Oblast Administration US\$11.8 million. The project formally closed as scheduled on April 30, 2004, although the government of Russia had suspended all contracts in August 2003, with only half of the loan (US\$32.7 million, 49.5 percent) disbursed.

This PPAR was prepared by Judyth Twigg, IEG consultant. The findings are based on a review of project files; the project's Mid-Term Review and Implementation Completion Report; published and unpublished literature on health status and health reform in Russia; health statistics released by the Government of Russia; interviews with the project task managers, other World Bank managers, staff, and consultants who worked on the project, and officials from the Russian, Tver Oblast, and Kaluga Oblast Ministries or Departments of Health; and interviews with staff from the oblast- and federal-level Project Management Units and Central Support Unit. During a ten-day mission to Russia in June 2006, government and World Bank staff were interviewed in Moscow, Tver, and Kaluga. A list of those consulted is in Annex B. IEG would like to express appreciation to those interviewed and to the World Bank Resident Mission staff, particularly Tatyana Loginova and Irina Reshetnikova, who helped make appointments, arranged for transportation, and assembled key documents.

The findings from this PPAR will serve as input for a forthcoming IEG evaluation of the World Bank's support for the health, nutrition, and population sector. A timeline of events with respect to Russian health reform is in Annex E.

Following standard IEG procedures, copies of the draft PPAR were sent to government officials and agencies for their review and comments. However, no comments were received.

Summary

The objective of the Health Reform Pilot Project (HRPP) was to improve the quality and efficiency of health care and reproductive and cardiovascular health outcomes in two oblasts (regions) on a pilot basis to enable the Borrower to make decisions about national adoption of specific reform measures. The project was to focus on three high-priority reforms: (a) changing incentive systems through the introduction of output-driven, cost-conscious provider payment mechanisms, accompanied by information-based quality assurance schemes; (b) reorienting health care by strengthening primary care, centered on a network of family physicians, and reducing inpatient care services; and (c) improving practices in maternal and child health and cardiovascular health, with an emphasis on promoting healthy lifestyles and offering better-quality, cost-effective, and affordable prevention, diagnosis, and treatment.

The project, which was approved in June 1997 and became effective in April 1998, was slow to disburse. The start-up was delayed by almost two years because of the August 1998 financial crisis. Disbursements were unilaterally and unexpectedly frozen by the government a year before its closing date. Government commitment at the national level was never high, and although there was initially very strong ownership of the project by the oblasts, one of them eventually suspended project activities for a nine-month period after mid-term. By the date of closure, the political and economic context had changed considerably. Russia was weaning itself from international financial assistance and paying off many of its debt obligations early. Roughly half of the loan (US\$33.3 million) was cancelled, with several project activities not completed.

Despite these constraints, the project did finance equipment and training that likely contributed to improving the quality of health care within the two oblasts. Family practitioners were trained and their offices equipped, with the Moscow Medical Academy developing what is now the standard Russian curriculum for family medicine. New practices of care were introduced in maternal and child health (MCH) and cardiovascular disease prevention.

However, obstetrics, gynecology, and MCH were excluded from the family medicine curriculum, international technical assistance was scarcely used, and very little of the loan was spent on health promotion. The project did not document whether the training in this new field resulted in changed practices and better quality health care. New models of health care financing were not uniformly implemented, and where introduced locally, they continued to co-exist with the old, Soviet-era system and eventually proved to have little staying power.

Several indicators of interest to the project improved in the two oblasts – a reduction in the average length of hospital stay, hospital beds (Kaluga only), the infant mortality and abortion rates. However, attribution to the HRPP is doubtful. Aside from evidence of incomplete implementation of some of the innovations, these outcomes also improved over the same time frame in similar oblasts (same region or same economic level) throughout the country. Furthermore, some indicators worsened, counter to the project's objectives. Mortality from cardiovascular disease increased significantly in both project

and in non-project oblasts, with Tver maintaining one of the highest rates, and the hospital beds per capita increased in Tver. The hospital admission rate and the percent of pregnant women with hypertension linked to pregnancy were basically unchanged in Tver and *increased* in Kaluga.

The project failed to achieve the objective of evaluating the pilot interventions, on the basis of which to make informed decisions on expanding them nation-wide. The project design included no systematic framework to assess the impact of project interventions against control groups and/or against the counterfactual. The overall quality of monitoring, evaluation, and dissemination, as implemented, was poor. There was no systematic plan to disseminate the lessons learned from the implementation of the pilots. The implementation of M&E was also adversely affected by numerous institutional and organizational changes, including the cancellation of a planned international technical assistance contract. The envisioned analysis and national scale-up from the oblasts was therefore impossible. Because of the failure to implement a vigorous evaluation design, it is impossible to discern the extent to which the positive outcomes experienced in the project oblasts can be attributed to the activities and reforms of the pilot project as opposed to other nationwide reforms and socioeconomic changes throughout Russia.

The outcome of the HRPP is rated **unsatisfactory** overall, based on the moderately unsatisfactory outcome in improving reproductive and cardiovascular health and the quality and efficiency of health care, and the highly unsatisfactory effort to monitor, evaluate, and disseminate project outcomes.

Bank performance was **moderately unsatisfactory**, with important and successful efforts to put and keep health reform on the agenda under chaotic circumstances, but less success in minimizing risks and addressing deficiencies within specific components and a failure to provide for a suitable evaluation framework for the pilot project. Borrower performance was **moderately unsatisfactory**, with important constituencies in each of the pilot regions remaining committed to reform throughout, but other key players disengaged. The risk to development outcome is **modest**. The project contributed to changes in ways of thinking about health services delivery and health reform among the counterparts at all levels, many of its principles have been incorporated into recently-adopted national policy, and its lessons have been incorporated into the Bank's subsequent Health Reform Implementation Project. However, it is still vulnerable to policy changes that could emerge under a new government, in the areas of centralization of health administration and the priority accorded structural and institutional reform.

Lessons

- **Political commitment is important at all levels, throughout the life of the reform process.** Government priorities and regional political leadership will change; new personnel will occupy important positions at key ministries. Continuous policy dialogue is crucial to assessing and maintaining commitment. The probability of changes in political environment should be taken into account during project design. Counterpart project staffing should, to the extent possible, be not only good but deep in order to accommodate probable changes, and the Bank's overall relationship with a country and the country context must constantly be reassessed in terms of its impact on specific projects.

- **Monitoring, evaluation, and dissemination are critical elements of a pilot project.** Even if other objectives are not met, implementation of a rigorous evaluation design capable of isolating impact can contribute important lessons about why that may have been the case. Data collection and analysis cannot be designed prospectively over the course of a pilot project; the design and resources to implement it must be in place at the project's inception.
- **Even under conditions of decentralized governance, the national level is a key player in the health sector.** In Russia, federal regulatory and legal requirements still govern much local activity. An oblast-level project can be complicated because of the time-consuming legal and regulatory issues that have to be addressed. On the other hand, if legal issues connected to the center are not involved, the project risks becoming a separate exercise unrelated to events in the rest of the country so that scale-up is impossible.
- **Health reform projects that are complex face increased risk of failure.** The HRPP involved multiple layers of government and a large number of separate health and health policy challenges. A project with narrower scope might encourage tighter focus and more demonstrable results.
- **Local ownership is important, but there's still a need to prioritize.** The complexity and "patchy" nature of the HRPP was due to the deliberate strategy of generating ownership by encouraging the oblasts to prepare reform proposals. The potential contribution of the Bank in helping the oblasts to prioritize activities linked to a coherent reform framework was not realized.
- **Health reform operations – even when not totally successful in meeting their objectives – can nevertheless help plant key ideas on new ways of doing things.** While the HRPP provided financing for urgently needed inputs for the health system, the real value added was to introduce new ideas into the national dialogue on health reform. New and sustained constituencies in favor of reform involving international best practices were created in many areas.

Ajay Chhibber
Acting Director-General
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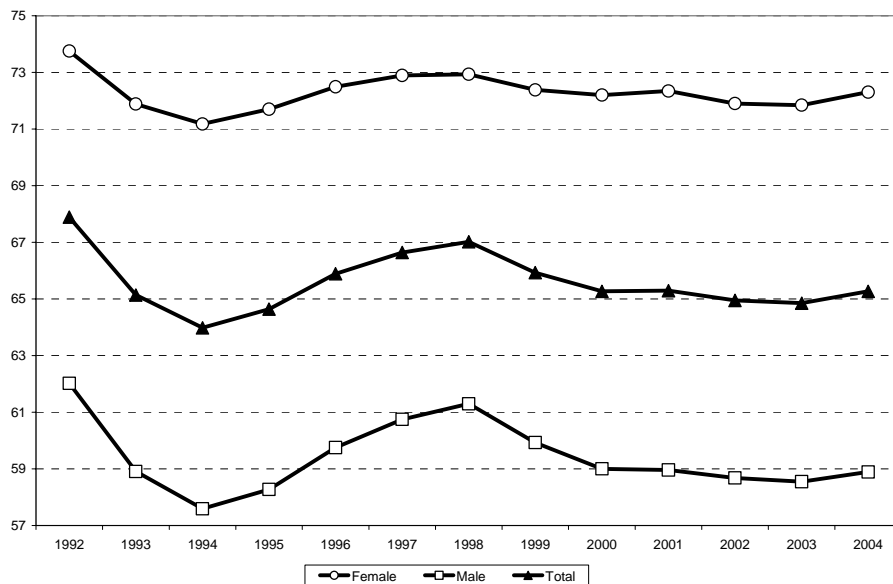
1. Background and Context

GENERAL BACKGROUND/SECTOR SITUATION

1.1 Preparation for the HRPP took place during the early and mid 1990s, a time of considerable chaos and upheaval in Russia. The Soviet Union had collapsed in late 1991, after which an independent Russia embarked on an economic program of “shock therapy” that entailed dramatic cuts in social spending. General health and social welfare suffered a downturn unprecedented in peacetime. The population began to shrink at an alarming rate, with deaths exceeding births by over fifty percent. Adult male mortality increases were particularly shocking, with annual death rates among men ages 15 to 64 climbing by 35 percent from 1990 through 1993, and an increase of over fifty percent for men ages 45 to 54 over that same time period (DaVanzo and Grammich, 2001; Feshbach, 2003).

1.2 Life expectancy was dramatically affected as well (Figure 1). Excess death in the 1990s was mainly due to cardiovascular disease and “external causes” (trauma/injuries, homicide, suicide, poisonings, etc.) Alcohol abuse was widely considered to play a key proximate role behind both of these factors (McKee and others, 2001). Per capita alcohol consumption among males more than doubled between 1992-94, from already high levels. Smoking was a second risk factor: about 60 percent of men and 15 percent of women were smokers. The gap between male and female life expectancy was the largest in the world. Men were (and remain) over twice as likely as women to die at an economically productive age: they were more than twice as likely to die from cancer, three times as likely to die from respiratory disease, and five times as likely to die from trauma and poisoning.

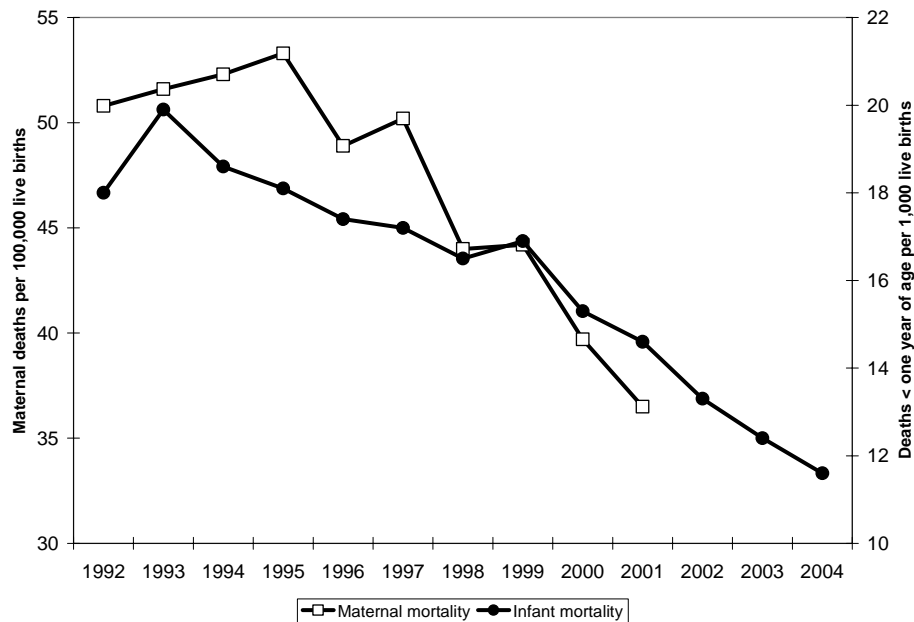
Figure 1. Life expectancy at birth, 1992-2004



Source: Goskomstat 2005a.

1.3 Maternal and child health also worsened soon after independence, with significant improvements in infant mortality and maternal mortality since 1993-95 (Figure 2). Nevertheless, infant mortality remains well over twice that in most OECD countries, and maternal mortality five to ten times higher than in other industrialized countries. The main causes of maternal mortality were complications from abortions, post-partum bleeding, and toxemia. Contraceptive prevalence was low and reliance on abortion high: in 1994, only 3.6 percent of women of childbearing age used oral contraceptives and 1.9 percent used IUDs. In 1993 there were 235 abortions for every 100 live births.

Figure 2. Maternal and infant mortality, 1992-2004



Source: Goskomstat 2005a

1.4 Russia's health care system was ill equipped to deal with this situation. Chronically under-funded during Soviet times and with state budgets cut to barely more than half of Soviet-era levels by the mid-1990s, Russian hospitals and clinics existed on a shoestring. The 1992 *State Report on the Status of Health of the Population of the Russian Federation* revealed that 23 percent of hospitals had no running water, 33 percent had no sewerage system, 60 percent did not have hot running water, 23 percent of buildings needed major repairs, and two percent were considered unsafe. Much of the equipment in health facilities was run-down, out-of-date, or unusable for lack of spare parts. Patients suffered long waits even for urgently needed care. Essential medications were not only unaffordable, but unavailable. Although comprehensive free medical care was constitutionally guaranteed, quality services were reportedly available only to the few people with the ability to pay for them. It has been reported that State-owned facilities were requesting payment for a place at the head of the queue, accurate diagnoses, routine attention from ward nurses, anesthetics, and other drugs. In short, health care was subject to unchecked market forces in a chaotic and uncontrolled manner that left the most vulnerable parts of the population unprotected. One of the hallmarks of

the Soviet system, universal access to some level of free medical care, was destroyed (Twigg, 2002).

1.5 Since 1992, delivery and financing of health care have been decentralized to the oblasts (regions). At the oblast level, a typical health care system has a central oblast hospital (a tertiary-level general hospital with perhaps 1,000 beds), several specialty hospitals, one or two maternity homes, and several free-standing polyclinics. Each rayon (the administrative subdivision below the oblast level) typically has a central rayon hospital (200 to 300 beds), one or more smaller district hospitals, one or more ambulatories (small polyclinics), and numerous feldsher stations.¹

1.6 The number and capacity of health care facilities in the 1990s was excessive. Hospital beds-to-population and physician-to-population ratios were much higher than in OECD countries, as were lengths of stay and admission rates. Throughout the 1990s, there was a gradual reduction in the number of hospital beds, but health care in Russia continued to rely excessively on curative and inpatient care. Medical practice was dominated by a complex, inflexible, and often outdated set of norms and standards covering a broad range of items, from the management of specific medical conditions to standards for the layout of rooms in hospitals. Strictly enforced by the federal health authorities, they served as the principal mechanism for quality “control,” leaving little room for professional judgment or accountability by individual practitioners, their peers, or their managers. There was little evidence that costs or affordability were factored into their application.

1.7 The result of this culture of care was a highly cost-ineffective, unresponsive system unable to produce the maximum benefits possible from an already extremely limited resource envelope. Hospitals and polyclinics were paid on the basis of fixed budgets that were determined largely by the facilities’ staffing and infrastructure. In turn, salaries, numbers of personnel, and numbers of beds were dictated by federal input norms that bore little relationship to service levels or the relative cost-effectiveness of services. The payment system pressured facilities to expand capacity, while offering no incentive to providers to use resources effectively or to offer quality care.

GOVERNMENT’S POLICY/STRATEGY

1.8 Following the experience with the New Economic Mechanism in the late 1980s (Box 1), a series of laws and decrees were passed from 1991-93 that brought sweeping changes to the health sector. They confirmed the Government’s intent to guarantee universal access to health services, created a framework for both mandatory and voluntary health insurance, decentralized management and finance of health services, authorized new provider payment mechanisms, and gave individuals the right to choose an insurer (Government of Russia, 1997; Shishkin, 1999; Twigg, 2001). Family medicine was approved as a form of medical practice in 1992. As the decade progressed, it was increasingly recognized that reform would require years to complete.

1. Primary health facilities, particularly in rural areas, are usually staffed by medical personnel known as feldshers, whose level of training falls between that of a nurse and a physician.

Box 1. The New Economic Mechanism

In the late 1980s, dissatisfaction with the health system's performance led to a search for new ways to organize and manage care. The city of St. Petersburg and Kemerovo and Samara oblasts were the sites of experiments with a "New Economic Mechanism" that partially decentralized health care management and introduced new payment mechanisms. Instead of receiving budgets determined mainly by input levels, health facilities were paid on the basis of performance. Polyclinics became "fundholders," responsible for managing a capitation-based allocation on behalf of the registered population, in return for which all necessary care was guaranteed. This discouraged unnecessary use of services and excessively high-cost care. Hospitals were reimbursed for treating patients according to the type and complexity of illness, classified into Clinical Statistical Groups (CSG), much like the diagnosis-related group (DRG) system in the United States. The system had serious flaws, including the absence of quality assurance mechanisms to counteract the incentive to reduce service levels and the lack of a cap to contain total hospital costs. However, the experiment was perceived to be a success in reducing hospital admissions, length of stay, and bed capacity.

Sources: Bennett and Paterson (2003); Scheiber (1993); Sheiman (1993); Telyukov (1997); Tragakes and Lessof (2003).

1.9 Russia's Law on Self-Governance (1993) markedly decentralized the health sector, devolving authority and responsibility for many policy areas to the oblasts. In essence, Russia's 89 oblasts developed 89 different systems of health care, with wide variation in the extent to which they implemented federal law (like the compulsory medical insurance program) and other reform measures. However, when the new administration took office seven years later, in 2000, he took steps to recentralize most sectors, including health, providing fiscal incentives for oblasts to conform with federal law and penalties for those that did not.

1.10 Because of this chaotic policy environment, health reform in Russia has proceeded in fits and starts, with significant geographic and temporal variation. Many key actors remain committed to Soviet-era health system principles and continue to reject market-oriented reforms intended to improve quality and efficiency of care.

WORLD BANK SUPPORT

1.11 Dialogue on health between the World Bank and the government of Russia began in 1992. The Bank provided technical assistance under the Technical Cooperation Program, which contributed to the development of the Russian Federation's Health Insurance Law in 1993. In the context of these discussions, the Ministry of Health (MOH) identified nine priority program areas in need of investment: pharmaceutical manufacture and distribution; implementation of the health insurance law; maternal and child health (MCH), including family planning (FP); immunization; medical education; public health and health care management training; emergency care; catastrophic care; and facilities upgrading. Working Groups of Russian and foreign specialists were formed on each of these topics, with the understanding that only some of the program areas could eventually benefit from a first Bank-assisted health project.

1.12 Formal preparation of the Health Reform Pilot Project (HRPP) began in 1993. Early in the process, it became clear that the extreme decentralization taking place in Russia required the full involvement of oblast-level authorities, who had been granted

substantial autonomy for health administration and financing. It also became evident that any health reform program would be extremely complex and could only be implemented in a step-wise fashion. A decision was therefore made in early 1994 to focus the project on a small number of oblasts that would serve as pilot areas for testing new approaches to reform.

1.13 A short list of six oblasts was drawn up jointly by the Ministry of Finance (MOF), the MOH, and the Bank. The oblasts were to have “average” income levels and health patterns, ready accessibility (proximity to Moscow), demonstrated interest in establishing new provider payment mechanisms, oblast administrations committed to health care reform, and willingness to share the debt service burden with the federal government and provide counterpart funds. These six oblasts were invited to present their respective programs at a workshop in Moscow in October 1994. Three oblasts were originally selected based on the strength of their presentations. Eventually only two were chosen (Kaluga and Tver), when it became apparent that three separate sub-projects would be too difficult to prepare and supervise.²

1.14 Of the nine original Working Groups at the federal level, two had direct influence on the project. The Working Group on MCH prepared a completely updated set of protocols and tested them successfully in a clinic in Lubertsy Oblast near Moscow; they formed the backbone for the MCH components in Kaluga and Tver. The Working Group on Family Medicine prepared a national program, which became a federal component of the HRPP. It appears that the Bank did not carry out independent analytic and pre-pilot testing work on provider payment mechanisms, nor did it carry out formal institutional and political analysis of the environment within which the project would be implemented.

1.15 The Country Assistance Strategy (CAS) presented to the Board on September 25, 1996, contained a major objective of supporting human resource development and poverty alleviation, in part by facilitating health reform to improve the quality and efficiency of health care provision. It also aimed to develop public sector institutions and procedures supportive of open and competitive markets. The Social Sector Strategy Note used as a background document to the CAS cited as priority areas for systemic change in health an integrated approach to reform focused at the oblast level, combining investments in equipment and facilities with fundamental reorganization of health services, changes in clinical practice, and new provider payment and quality assurance mechanisms.

1.16 Concurrently with the HRPP, the Bank was also developing a Medical Equipment Project (January 1997 - April 2001, US\$305 million) and a Community Social Infrastructure Project (January 1997 - December 2002, US\$288 million), to address investments in medical equipment and physical infrastructure respectively.³ Both

2. Smolensk Oblast was eliminated, based on a judgment that the quality of and commitment to its proposed program was not as high as in the other two. Kaluga has a population of 1 million and Tver 1.4 million; Russia's 2005 population was 143.5 million.

3. The Community Social Infrastructure Project focused on two oblasts – Rostov and Novosibirsk – and allocated \$72 million of the total to health infrastructure. The Medical Equipment Project covered some 42 oblasts or republics, but neither Tver nor Kaluga (addressed by this project).

of these projects targeted investments to primary care and basic referral facilities where health services were more cost-effective than specialized hospital-based care.

DONOR SUPPORT

1.17 The only other major donor active on health in Russia at the time of project preparation and appraisal was the United States Agency for International Development (USAID), which supported a program called ZdravReform through the private contractor Abt Associates.⁴ ZdravReform's assistance in health financing focused on diversifying health care revenue to include contributions by employers, government, and individuals, and increasing efficiency through market restructuring, introducing incentive-based payment systems, and improving productivity through business skills (USAID, 1996). It emphasized primary care over more expensive and less efficient curative care by shifting service delivery from specialists to generalists and inpatient to outpatient settings and by integrating delivery systems, and improvement in the quality of care through licensing and accreditation standards, quality assurance and quality improvement programs, and consumer satisfaction surveys.

1.18 USAID, through the ZdravReform program, played an important partnership role in the HRPP by developing the provider payment systems to be implemented in both pilot oblasts. WHO and U.S. Centers for Disease Control and Prevention (CDC) consultants seconded to the Bank provided key technical support to the maternal and child health and family medicine components, particularly in an environment where the client was reluctant to borrow for international technical assistance. A Japan Grant Facility financed project preparation.⁵

2. Objectives and Design

PROJECT OBJECTIVES

2.1 The objectives of the HRPP, according to the loan agreement, were "to improve the quality and efficiency of health care and reproductive and cardiovascular health outcomes in two oblasts on a pilot basis to enable the Borrower to make decisions about national adoption of specific reform measures".

4. The initial USAID ZdravReform contract to Abt Associates ran from January 1, 1992 through December 31, 1996, in the amount of US\$1.2 million. The ZdravReform program was designed to provide comprehensive technical support to the health services sector at all levels of government in Russia and other former Soviet countries. Follow-on contracts for a ZdravPlus program focused primarily on countries in Central Asia.

⁵ The \$2.5 million Policy and Human Resources (PHRD) grant funded several elements of project preparation, including: field trials with Russian experts on introducing revised protocols for MCH/FP services; a health behavior survey in Tver oblast used in designing the health promotion strategy for preventing cardiovascular disease; and technical assistance with implementation plans for the reform of provider payment mechanisms in Kaluga oblast and with design documents for the Rzhev Perinatal Center in Tver oblast. The grant was not used to develop strategies for monitoring and evaluation.

2.2 The project focused on three high-priority reform measures:

- changing incentive systems through the introduction of output-driven, cost-conscious provider payment mechanisms, accompanied by information-based quality assurance schemes;
- strengthening primary care services, centered on a network of family physicians, and correspondingly reducing inpatient care services; and
- improving practices in maternal and child health and cardiovascular health, with an emphasis on promoting healthy lifestyles and offering better-quality, cost-effective, and affordable prevention, diagnosis, and treatment.

2.3 The objectives did not change throughout the life of the project. Specific targets were set for improvements in efficiency of health system performance through the restructuring of provider incentives, for strengthening of primary care services through the introduction and development of family medicine, and for health outcomes in MCH and cardiovascular health. Monitoring, evaluation, and dissemination of results were identified as an essential element of the pilot approach, critical not just for purposes of the present project but as a vehicle to channel lessons from the pilot to the rest of the country.

COMPONENTS

2.4 The project consisted of four components: two independent sub-projects for Kaluga and Tver oblasts, each consisting of a package of reforms; one component to strengthen national and regional training programs in family medicine; and one to monitor, evaluate, disseminate, and replicate project results (Box 2). Although the underlying principles of reform were the same, each oblast sub-project was unique, having been shaped by local oblast priorities, institutional capacities, and other local conditions. In most cases, project activities were either designed to be phased in gradually, beginning with initial pilot rayons and then spreading throughout the oblast in later years of the project; or they were intended only to affect specific target facilities or rayons, with facilities or geographic areas selected based on the quality of their pre-existing physical infrastructure, volume of care, and other factors.

IMPLEMENTATION ARRANGEMENTS

2.5 The government was represented by the MOF and MOH. They delegated management and implementation responsibilities to the administrations of Kaluga and Tver for the oblast components, the Moscow Sechenov Medical Academy (MMA) for the family medicine component, and the Public Health Institute MedSocEconomInform (MSEI) of the federal MOH for the monitoring, evaluation, and dissemination component. A Project Advisory Committee, later renamed the Health Reform Steering Committee, acted as an advisory body. A Central Support Unit (CSU), housed in the Russian Health Care Foundation, coordinated day-to-day project activities.

2.6 Oblast management teams consisted of a Project Coordination Committee of high-ranking oblast health officials, and a Project Management Unit (PMU). The PCC carried out general supervision of sub-project implementation, while PMUs coordinated day-to-day implementation of sub-project components. The PMU was staffed by component coordinators, civil engineers responsible for civil works, an accountant, and support staff.

Box 2. HRPP Components

Kaluga Oblast Health Reform (US\$ 44.2 million, 50% of base costs). This component had three subcomponents: *Delivery System Restructuring* -- to increase the range, volume, quality, and accessibility of services at outpatient facilities and reduce the share of inpatient services, by expanding the role of family care providers and shifting most diagnostic and some treatment services to outpatient facilities – Consultation, Diagnostics, and Treatment Centers (CDTCs) – replacing polyclinics; *Restructuring Provider Incentives* – to replace the systems of payment to hospitals and polyclinics with systems that encourage service provision at the least costly, medically appropriate level, through the promotion of primary care, elimination of unnecessary referrals to specialists, and reduction in hospital admissions and lengths of stay; *Maternal and Child Health and Family Planning* – to increase efficiency and effectiveness of organization and service delivery, and to emphasize health promotion by implementing selected reforms in antenatal care, perinatal care, family planning and reproductive health, and health promotion and professional education.

Tver Oblast Health Reform (US\$ 38.0 million, 43% of base costs). This component had four subcomponents: *Restructuring Cardiovascular Health Services* – to develop a cost-effective package of interventions to reduce cardiovascular disease, focusing on prevention and improved basic emergency care; *Family Medicine* – to facilitate the introduction of family physicians as principal primary caregivers, by strengthening teaching at Tver Medical Academy, establishing family medicine clinics, and developing a network of CDTCs to provide outpatient referral support; *Maternal and Child Health and Family Planning* – to introduce changes in clinical practice standards and creating the physical environment, with a focus on improving antenatal care, creating baby-friendly hospitals, building a new inter-regional perinatal center, and creating a new center to coordinate health promotion and professional education activities; and *Restructuring Provider Incentives* – to improve provider payment, quality assurance, and management information systems.

National Training Program in Family Medicine (US\$ 2.8 million, 2% of base costs). This component supported development of training programs in family-centered care at the federal and oblast levels by: updating models of practice; curriculum and faculty development; quality improvement and certification; and creating a supportive environment for the expansion of family-centered health care.

Monitoring, Evaluation, and Dissemination (US\$ 1.4 million, 2% of base costs). This component was to monitor and evaluate the pilot experience and disseminate results. Planned activities included routine data collection and review, periodic assessments of activities and their outcomes, and population-based surveys to evaluate outcomes. It was to disseminate the results to other territories in the Russian Federation, on the basis of which to decide whether project interventions can and should be replicated in other parts of the country, and if so, guide in the design of appropriate mechanisms.

MONITORING AND EVALUATION DESIGN

2.7 The monitoring and evaluation (M&E) component planned to evaluate the project in terms of its impact on quality and cost-effectiveness of services, consumer and provider satisfaction with the reforms, and health outcomes. Activities included *routine monitoring* of indicators; *annual monitoring* of a short list of key indicators of the most important targets; a *Year 1 Evaluation* of implementation capacity and project

management; a *Mid-Term Evaluation* to assess the extent to which the project was meeting its objectives, whether the project design continued to be appropriate, and whether implementation measures needed to be addressed; and a *Final Evaluation* to review and assess overall achievements and shortcomings. The sources of data for the main M&E indicators were almost exclusively external to the project – annual health statistics from the federal government and the regional health insurance Funds. The project did not plan to conduct surveys of households, providers, or beneficiaries.⁶

2.8 The primary responsibility for data collection on routine and key project indicators rested with the PMUs in each oblast. The MOH designated MSEI to carry out the mid-term and final reviews on its behalf; the latter was to develop a data base for project evaluation and organize a training workshop on M&E methodologies for project staff and annual workshops to review the status of key indicators and to upgrade evaluation skills. To strengthen its institutional capacity and help it carry out its responsibilities, MSEI was to develop a partnership with an international institution with expertise in monitoring, evaluation, and dissemination of similar health reform projects.

2.9 Although one of its main objectives was to extrapolate lessons for the rest of the country from the project's experience in health reform, the project lacked an evaluation design that would have allowed attribution of changes in outcome (system performance or health status) to the project's package of reforms. This was a critical omission, as a number of oblasts (St. Petersburg, Kemerovo, and Samara, for example) continued innovations in health system restructuring and health finance reforms throughout the 1990s. Other oblasts had already begun to introduce principles of family medicine, and Tver had made progress in this area prior to engagement with the Bank. Further, many other economic and social factors were changing across the country that could be expected to have an impact on health systems and conditions.

RISK ASSESSMENT

2.10 The Staff Appraisal Report (SAR) characterized the project as high risk, citing five specific factors: (a) the experimental nature of the project, involving substantial changes in multiple dimensions of health care delivery; (b) the highly uncertain social, political, and economic context; (c) the risk of shortfalls in resources in the participating oblasts to meet project obligations; (d) project complexity; and (e) the beneficiary institutions' lack of experience with project procurement, accounting, and management procedures (World Bank, 1997b). A "Quality at Entry" assessment in September-October 1996 cited additional risks: (f) the potential for conflict between the federal-level CSU and the oblast-level PMUs; (g) the low commitment to and ownership of the project at the national level; (h) concerns about project readiness (implementation planning and staffing); and (i) limited involvement of senior management during project preparation.

2.11 The risks associated with "the experimental and reform-oriented nature of the project" were considered to be mitigated by strong ownership by the two participating oblasts (enhanced by the participatory preparation process). With respect to the other

6. The one exception was a planned survey of smoking rates among men in Tver, conducted by the project in 1997-1998.

cited risks, the SAR pointed to planned first-year and mid-term reviews that could recommend project restructuring if necessary. The only action taken to reduce the risk due to complexity was to reduce the number of oblasts from three to two.

2.12 One risk that could have been considered at appraisal, but was not, was the political dimension of the introduction of family medicine. Internationally understood to mean practice in which a single physician is trained to provide first-contact and comprehensive care to adults, women (obstetrical and gynecological services), and children, family practice met resistance in Russia mainly from specialists (especially pediatricians) whose interests were threatened. In some areas of the country, the latter formed significant, powerful, well-organized interest groups, especially in urban areas.⁷

3. Implementation and Costs

PLANNED VERSUS ACTUAL COSTS AND FINANCING

3.1 The HRPP was approved on June 5, 1997 and became effective on April 17, 1998. Disbursement was slow, with 43.9 percent of planned funds disbursed at mid-term (April 1, 2001). In 2003, the federal Government cancelled the remaining portion of the loan (\$33.3 million). When the project closed on April 30, 2004, only \$32.7 million of the loan had been disbursed (49.6 percent, see Annex A). There were no formal reporting requirements for counterpart financing in the legal agreement, making it difficult to get a full picture of disbursements as against base costs at the project level.⁸

3.2 The two oblasts each disbursed roughly 40 percent of planned loan expenditures (38 percent in Kaluga, 42 percent in Tver), while disbursement for the federal components on family medicine and monitoring, evaluation, and dissemination, were less than a quarter of that planned (Annex C, Table C.1). Among the loan agreement categories, resources for “hardware”, like equipment, pharmaceuticals, training materials, supplies and vehicles and for civil works were much more likely to be disbursed than those for “software”, like consulting and contractual services, training, provider payments, and health promotion (Annex C, Table C.2). For example, roughly 70 percent of planned expenditures on medical equipment, pharmaceuticals, training materials, supplies, and vehicles were disbursed in both oblasts as was 81 percent of planned civil works expenditure in Kaluga. However, only 12 percent of planned expenditures on MCH/FP health promotion were spent in Kaluga and only 18 percent in Tver. None of the planned civil works expenditures in Tver for MCH/FP were expended. Only 3

7. In the more sparsely populated rural areas, feldshers already provided a wide spectrum of medical care, so the concept of a single practitioner responsible for a family’s primary care was not alien. The United States and many other countries have had similar experience in terms of the relative ease with which family medicine is introduced in rural as opposed to urban areas. It has taken some countries decades to accept the principles of family medicine.

8. The planned counterpart contribution, according to the SAR, was to have been \$32.3 million (Kaluga - \$19.2 million; Tver - \$11.8 million; federal government - \$1.3 million). According to the Implementation Completion Report (ICR, p. 37), total counterpart contributions amounted to \$3.78 million, or only 12 percent of planned. This included \$1.7 million for Kaluga (9 percent of planned), \$1.8 million for Tver (16 percent of planned) and \$266,455 for the federal government (21 percent of planned).

percent of planned health promotion expenditure for preventing cardio-vascular disease (CVD) was actually spent in Tver. The project spent a very small percentage of its planned funding on contractual services and training, at both the oblast and federal level, and only 22 percent of planned expenditure on federal-level equipment and training materials was disbursed.

IMPLEMENTATION EXPERIENCE

3.3 *Impact of the financial crisis.* The August 1998 financial crisis was devastating to the project, approved only a year earlier. The project did not get fully under way until early 2000. Tver Oblast rebounded slightly more quickly than did Kaluga, but both had difficulty making counterpart payments on time. The Bank considered canceling, downsizing, or significantly restructuring the project in 1999, but respected the requests of both oblast administrations to postpone this decision until they had more time to regain fiscal health.

3.4 *Changes in the political environment.* Both oblasts experienced gubernatorial elections or significant changes in administration staffing during the life of the project. Political commitment to the project was initially lower in Kaluga than in Tver, but the new Kaluga governor elected in November 2000 increased and maintained support.⁹ In Tver, difficult relations with a new vice-governor responsible for social issues appointed in the fall of 2001 led to a unilateral decision by the governor to suspend the project in December. The Tver administration requested that all loan funds be reallocated for equipment purchases, which was not approved by the Bank. By the fall of 2002, following intensive discussions with Bank staff, the governor renewed his personal interest in achieving the objectives, transferring oversight and authority directly to his office. Project activities resumed, but the suspension resulted in discontinuity in implementation, disruption of services to beneficiaries, and project staff turnover.

3.5 *Government freezing of the project.* The federal government's decision to prohibit new contracts for the project as of September 1, 2003 came with no warning to Bank staff. The impetus came from the MOF rather than the MOH and, according to respondents, had more to do with national politics than with specific objections to this project. Russia's economic and fiscal situation had improved dramatically and the government was keen to demonstrate that it no longer needed or wanted foreign assistance; it was positioning itself as a net donor of international aid, canceling numerous partnership projects and making early payments on billions of dollars' worth of foreign debt.¹⁰ The government officially cited slow disbursement and non-use of consultants (with specific complaints about inaction on the planned perinatal center in Tver) as a reason for stopping HRPP disbursements. However, the oblasts continued financing many project activities from their own resources.

3.6 *The impact of new federal health reform laws and regulations.* The counterparts in Tver and Kaluga lost interest in the provider payment reform components about

9. He had previously been the vice-governor in charge of the project.

10. Five other Bank-financed projects were also prematurely frozen or closed by the government.

halfway through the project, when a series of new federal laws and regulations signaled that further changes in national policy might be forthcoming (Box 3). According to respondents, there was a view that local experimentation was fruitless in light of policy changes in Moscow that would nullify the results.

Box 3. Federal Legislation that affected the Efficacy of Health Reforms

Budget code changes: In 2000, amendments to the Russian Federal Budget Code significantly restricted health care providers' flexibility in spending budget resources. They introduced a system of control over spending for polyclinics and hospitals, earmarking funds for very specific line items (salaries, pharmaceuticals and medical equipment, capital construction, etc.); providers are not permitted to redistribute resources across line items. Although this regulation applies only to money flowing through the state budget, and not to that in the system of compulsory medical insurance, many health care providers choose to follow the rigid line item designations in budgeting for their entire facilities.

Pension reform: In the mid-1990s, Russia began discussions and experiments leading to a gradual shift from a distributive, pay-as-you-go pension system to a privately-funded, accumulated scheme. The federal Pension Fund began several years later to pay part of the compulsory medical insurance contributions for pensioners. Rather than channeling the money through the Territorial Health Insurance Fund (THIF), however, the Pension Fund has paid these contributions directly to health care providers through the budget, bypassing the insurance scheme's incentives for health system restructuring and improved efficiency. Health care providers have responded by abandoning or curtailing many reform experiments.

3.7 *Missed opportunity to restructure the project.* By the April 2001 mid-term review (MTR), the overarching goals of the project had already been overshadowed by the problems that had arisen, and key Bank staff wanted to restructure the project in light of the fact that health care financing reform and primary care restructuring were not moving forward. However, the counterparts successfully argued that momentum was building and that the project would be able to "catch up" after a slow start.

3.8 *Weak implementation of monitoring and evaluation (M&E).* Implementation of M&E was superficial and key activities were never carried out. There was never a sense of urgency: The MTR barely mentioned M&E and the April 2003 supervision mission, five years after project launch and just prior to the government freeze on spending, commented that work on this component was starting slowly. Responsibility for managing M&E activities at the federal level changed three times (Box 4). The linkage between the federal and oblast level M&E activities was weak, so that the oblast coordinators worked independently. Outcomes were not effectively monitored at the oblast level; oblast data were not aggregated and analyzed at the federal level; and the results of the pilot activities were not analyzed with respect to other rayons or oblasts. The quality of M&E was also adversely affected by cancellation of the international technical assistance contract.

3.9 The project's key performance indicators were the subject of sustained controversy. The health financing components represented such a new type of project that it was unclear what kind of indicators to construct. For the incentive-based contracts for general practitioners, for example, different rayons in the same oblast used different indicators. In addition, the indicators were not sufficiently tightly connected to the objectives; it was argued that more proximate process indicators should have been added. Systemic change can be slow, outcome indicators such as infant mortality and

cardiovascular disease may be affected with a lag, and these indicators are also affected by factors having nothing to do with health reform.¹¹

Box 4. Shifting Responsibilities for the Federal M&E Component

Initially, responsibility for monitoring, evaluation, and dissemination for the HRPP was assigned to MedSocEconomInform (MSEI), an MOH-affiliated research and policy analysis organization. A critical element of project design was the international partnering of MSEI with the TNO Institute of Preventive Health (IPH) in the Netherlands. That partnership resulted, by mid-1999, in the development of a matrix of detailed indicators for the project's M&E. At that point, MSEI was abolished, responsibility for the M&E component was transferred to the Central Public Health Research Institute (CPHRI) of the MOH, and the affiliation with the IPH was terminated.

In the summer of 2000, CPHRI was dissolved and its functions were transferred to a unit in the Moscow Medical Academy. This created a potential conflict of interest: since the MMA was a beneficiary of the project, it could not monitor and evaluate its own performance. Months of delay ensued, during which the Bank and the project counterparts exchanged opinions and options on a new structure for the M&E component. Finally, in April 2001, the Bank and the MOH agreed that the Department of Health Economics and System Development would take lead responsibility for M&E. This not only benefited the HRPP, but also strengthened MOH capacity outside the project.

4. Outputs and Outcomes by Objective

4.1 The project's objective has two distinct parts – first, to improve outcomes (the quality and efficiency of health care and reproductive and cardiovascular outcomes) and, second, to evaluate the pilot activities on the basis of which to make decisions about national adoption of specific reform measures. Throughout the implementation period (1997-2004) and despite the country's economic resurgence, health system reform across the country was markedly uneven temporally and geographically. Measures such as the introduction of the compulsory medical insurance system proceeded in fits and starts and were implemented fully in some oblasts and not at all in others (Box 5). Population decline continued and adult mortality rose. Some indicators of reform that were important to this project, however, enjoyed sustained progress across many oblasts, including declines in average length of hospital stay, infant mortality, and the abortion rate. Other contextual factors – income levels, for example, which declined significantly at the August 1998 financial crash but then rebounded rapidly beginning in 1999 – may have contributed to these national trends. These factors make it a challenge to evaluate the specific impact of the HRPP in Tver and Kaluga oblasts. The project's poor M&E design and implementation compounds the dilemma of attribution. Evidence on project outputs is in Annex C and on health system and health status outcomes in Annex D. In the discussion of achievement of objectives, we consider to the extent possible evidence from non-project sources with respect to outcomes and, in light of the evidence of what was actually implemented, assess plausible attribution of these outcomes to the project.

11. At the MTR, Bank staff recommended that the indicators be revisited. For example, the knowledge and attitudes of the population could have been tracked, or the pooling of money into the regional insurance Funds and set-up of incentive-based provider payment systems could have been measured. The counterparts, however, had limited experience with tracking indicators and were reluctant to change them.

IMPROVE THE QUALITY AND EFFICIENCY OF HEALTH CARE, AND REPRODUCTIVE AND CARDIOVASCULAR OUTCOMES

Quality of health care

4.2 The project outputs or activities most likely to improve the quality of health care included: purchase of equipment and supplies for outpatient care in new family medicine practices in both oblasts and for maternity homes in Kaluga; purchase of key equipment in the oblast central hospital; purchase and refurbishing of ambulances for emergency care in Tver; construction or repair of a few selected health facilities both oblasts; training of obstetricians, gynecologists, and midwives in updated methods of antenatal care in Kaluga; and training of emergency personnel in Tver (Table C.3).

4.3 It is likely that the availability of equipment and quality of facilities substantially improved. Despite the cancellation of more than half of the loan funds, a high percentage of planned expenditure on equipment and drugs (about 70 percent), and for civil works in Kaluga (81 percent, Table C.2), was disbursed. The planned inter-rayon perinatal center in Rzhev City was not built, however, so the improvement in quality was less than planned. Many people were in fact trained, although only a very small share of the consulting, contractual and training funds were used in Kaluga (12 percent) or Tver (8 percent).

4.4 An important caveat to this conclusion, however, is that there were no targets set for quality improvement and no real indicators of trends in quality of health care – for example, the percent of facilities with a specific piece of equipment or with trained staff. There is no evidence on whether the new equipment was properly used, improving the quality of service, or whether any quality improvement affected health outcomes. No indicators were available with respect to changes in knowledge or practices among trainees, the extent to which they used the new knowledge in their work, or the extent to which it contributed to better MCH outcomes.

Efficiency of health care

4.5 The interventions designed to improve the efficiency of health care were primarily the restructuring of provider incentives, the health sector restructuring (including creation of family medicine doctors promoting outpatient care), and health promotion (preventive services to reduce the demand on curative and in-patient care).

Box 5. Russian Experience with Health Insurance in the 1990s

Until 1992, the main sources of health financing were the federal budget and enterprises. In 1993, concurrent with decentralization of financing to the oblast level, a system of compulsory health insurance was introduced. A 3.6 percent payroll tax was collected by a Territorial Health Insurance Fund (THIF) at the oblast level, of which 3.4 percent was retained and 0.2 percent was remitted to a Federal Health Insurance Fund (FHIF) responsible for oversight and providing equalization payments to economically disadvantaged oblasts. Health insurance payments for people who did not work – pensioners, students, etc. – were to be made by municipal authorities. The THIFs were to make payments to one of a number of competing private insurance companies licensed to work in the system, based on claims submitted on behalf of patients treated in similarly licensed polyclinics or hospitals. The intent was for insurance companies to compete with one another for business from patients or employers enrolling large numbers of workers, based on the companies' success in affiliating with the highest-quality clinics and hospitals and maintaining high standards of quality control and defense of patients' rights. Health care providers were to compete for recognition of these quality standards by the insurance companies and by individual patients.

There were great hopes on the part of its proponents that “insurance medicine,” as it was called, would produce major improvements in Russian health care. The results across the remainder of the 1990s, however, were mixed. On the one hand, the financial situation in the health sector was significantly better with the compulsory health insurance system than it would have been in its absence. For example, budget funding for educational and cultural programs fell by 27 and 31 percent, respectively, from 1992-95. The impact of similar cuts in health care was muted by the off-budget insurance contributions; health care spending declined by only ten percent.

On the other hand, the system was adopted without sufficient preparation; there had been no experience in the management of the regional funds, implementing regulations were insufficient, and appropriate regulatory bodies did not exist. The private health insurance companies that were expected to be the principal insurers were initially few in number. The responsibilities of the oblast health authorities and the THIFs were not clearly delineated.

Furthermore, because the insurance law was vague about the per capita contribution required of the municipalities on behalf of the non-employed, those localities skimmed on their payments. As of early 1999, the total debts of local governments to the insurance system amounted to 11.5 billion rubles (US\$ 770 million). Employers could not pay enough into the new system to compensate, particularly since about 60 percent of the population does not work (children, the elderly), and these groups are the most likely to consume health services. In many cases, regional and local governments ignored or bypassed the insurance system, continuing to pay for health care directly through the budget, so that any new incentives intended to govern providers were diluted almost to the point of irrelevance.

4.6 The implementation of output-driven, cost-conscious provider payments systems was limited, especially at the inpatient level, and the implementation period was not long enough to generate incentives for change. The new payment schemes were introduced sporadically and vulnerable to changes in national policy. Because of the weak commitment of many personnel to market-oriented reforms in both oblasts, some of the mechanisms introduced were gradually transformed back into Soviet-era line-item budgets; other reform measures co-existed with Soviet-era procedures, often in a single facility. Insufficient data were collected in either oblast to support comprehensive introduction of new reimbursement systems. Capitation formulas on which to base reimbursements were never constructed. Signals from Moscow and the oblast governments were inconsistent; even when policy was aggressively in favor of change, implementation of new procedures was uneven. As a result, initial progress in a small number of pilot rayons and facilities remained localized.¹² Given this implementation

12. Only 15 percent of the loan funds for health provider payments in Kaluga were disbursed.

record, the contribution of restructured provider incentives to improved efficiency or quality of the health system was likely negligible.

4.7 In contrast, activities aimed at improving efficiency through restructuring of primary health care were fully implemented, in some cases exceeding targets. This includes the training of family physicians and equipping of their practices and the establishment of Consultation, Diagnosis and Treatment Centers (CDTCs). However, the reimbursement scheme for family physicians created a system of performance incentives and bonus calculations that involved forty separate indicators. In effect, because of the complexity of this system of incentives, family physicians ended up receiving a uniform level of bonuses, just as in the old Soviet system.

4.8 At the federal level, the MMA assisted with the development of a legal and regulatory framework for family medicine, curricula and standards for physician and nurse re-training and residency, and train-the-trainers curricula and standards. A family medicine training center was created, and the MMA provided technical assistance for the creation of the Family Medicine Chair in Tver and a family medicine training center in Kaluga. However, the MMA refused to accept the international technical assistance envisaged by the project and the curriculum did not conform fully to international standards: pediatrics and, to a lesser extent, obstetrical/gynecological care were not integrated into the Russian concept of family medicine, which was frequently referred to as general practice (GP). The share of the health budget on outpatient care rose in both oblasts during the life of the project, though not reaching the target of 50 percent (Table D.2).¹³ There are no data, however, indicating whether the newly trained family doctors/GPs have in fact changed their behavior – that is, whether they are treating outpatients instead of referring patients to specialists or in-patient care. Thus, the extent to which these activities have contributed to improved efficiency is unknown.

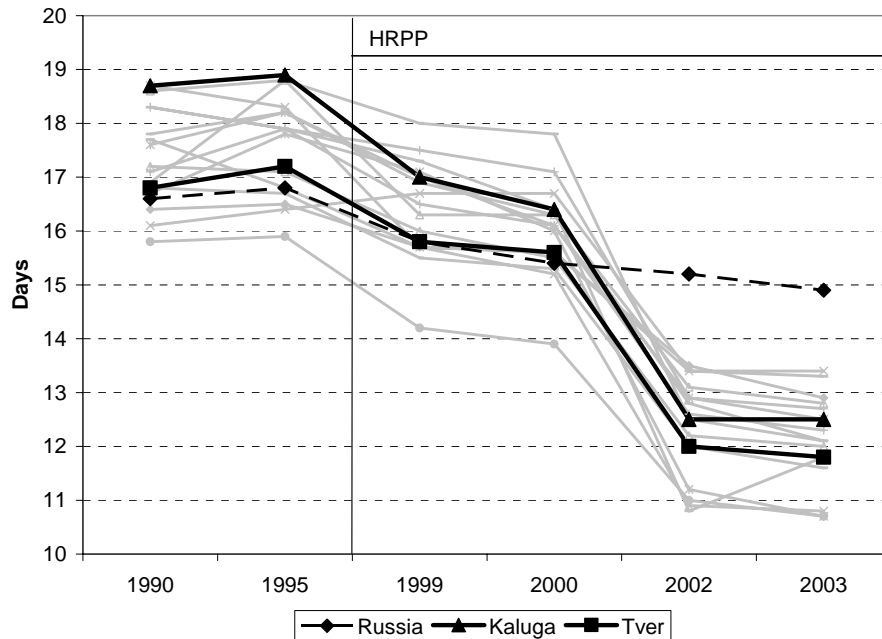
4.9 Finally, the contribution of health promotion activities to improved efficiency is also unclear. On the one hand, there were significant efforts in public education on CVD through the mass media and schools in Tver. On the other hand, only 3 percent of the loan funds for CVD health promotion were spent, and the share for MCH/FP promotion was also very low (18 percent in Tver, 12 percent in Kaluga). While there one-time survey of smoking was conducted in Tver, trends in knowledge or behavior were not tracked. Based on the low level of implementation of these activities, their contribution to improved efficiency was likely negligible.

4.10 Despite the tenuous link between project activities as implemented and the efficiency of the overall health system, some indicators of efficiency at the oblast level nevertheless improved in Kaluga and Tver – as they did in virtually all oblasts at a similar economic level and/or within geographic proximity. For example, the incentive-based provider payment system was intended to produce a decline in hospital admission rates and in average length of hospital stay (ALOS). Figure 3 plots the ALOS for Russia as a whole, for all of the oblasts in the Central Federal District (including Tver and Kaluga), and for Novgorod and Pskov, which fall in the “average” range on indicators like per

13. Based on project data; IEG was unable to independently confirm these statistics. Data from other oblasts are not available for comparison, and therefore attribution of these increases to project activities as opposed to other contextual or background factors is not possible.

capita income (like Tver and Kaluga).¹⁴ These comparable non-project oblasts achieved similar reductions in ALOS, which could be due to national reforms, such as the compulsory medical insurance system, or other national trends.¹⁵

Figure 3. Average length of hospital stay, Kaluga, Tver and selected oblasts

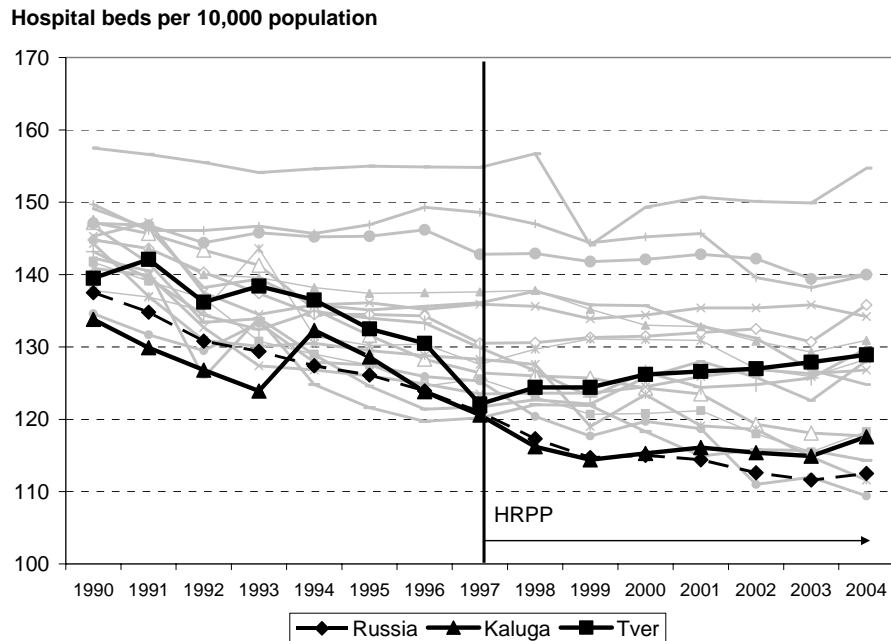


Source: “Srednyaya zanyatost’,” 2002; “Srednyaya dlitel’nost’,” 2005.

4.11 In contrast, another indicator of efficiency – the hospital admission rate – was unchanged in Tver and *increased* in Kaluga, despite the project’s efforts to reduce admissions and encourage more outpatient care through the family medicine program (Table D.1). A reduction in the number of hospital beds was also a project indicator of improved efficiency. There was a downward trend in hospital beds per 10,000 population in both oblasts as well as in the comparison group and Russia as a whole prior to the HRPP (Figure 4). Following the HRPP launch, they declined slightly and leveled off in Kaluga, but *increased* in Tver (contrary to the trend in the comparison group).

14. To improve the readability of the figures, the labels for the other oblasts have been dropped. They include: Belgorod; Bryansk; Ivanovo; Kostroma; Kursk; Lipetsk; Novgorod; Orel; Pskov; Ryazan; Smolensk; Tambov; Tula; Vladimir; Voronezh; and Yaroslavl.

15. There were improvements in some measures of efficiency in a small number of pilots in Kaluga and Tver from 1995-2000 – a period that dates from before the HRPP through the first few years of spotty and erratic implementation due to the financial crisis. In three pilots in Tver, hospital admissions declined by 19-30 percent and ALOS declined by 11-22 percent. In three pilots in Kaluga, hospital admission rates declined by 7-22 percent. While this may be indicative of local success, they have not been compared systematically with non-pilot facilities and rayons.

Figure 4. Hospital beds per 10,000 population, Kaluga, Tver and selected oblasts

Source: Goskomstat 2005b, 2005d

Reproductive health

4.12 The project activities most likely to affect reproductive/maternal and child health outcomes were those in the MCH/FP components –selected reforms in antenatal and perinatal care, family planning, and reproductive health; MCH health promotion; professional education; improvements in physical facilities; and creating ‘baby-friendly’ hospitals.

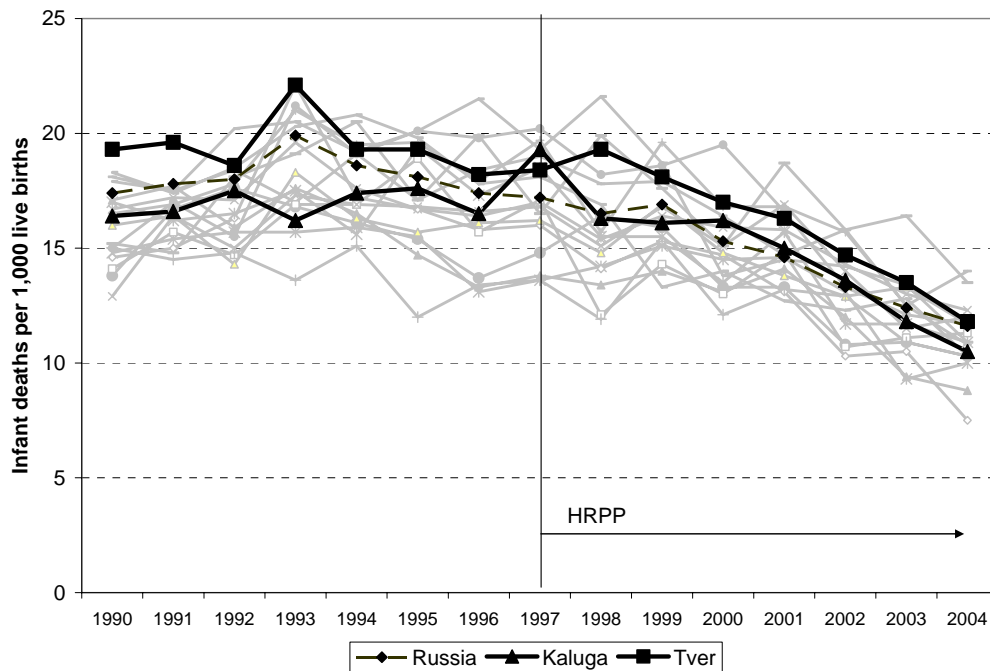
4.13 Kaluga had stronger implementation in this regard – all obstetricians, gynecologists and midwives in the oblast were trained, diagnostic capacity for 12 women’s consultations was improved, and minor civil works, equipment, drugs, supplies, and training were allocated to 10 maternity homes. Although the inter-rayon perinatal center in Tver was never built, centers for coordinating health promotion and professional training in antenatal care, FP and reproductive health were set up. However, as noted earlier, very little of the resources for promotional, preventive activities were used and the fact that these topics were not included in the family medicine curriculum also reduced the scope for impact. While many respondents found the training revolutionary to the way that they do their jobs,¹⁶ there are no data available that indicate the extent to which providers changed their behaviors as a result of the training or equipment financed by the project – for example, in the case management of pregnant women, or in the provision of antenatal care.

16. Respondents remarked that new protocols for attending deliveries, training midwives and neonatologists, and other areas “changed practitioner mentality” in both regions, making them more receptive to new ideas like long-term breastfeeding and rooming-in of newborns. According to one respondent from Tver, the project “helped us to look at maternal and child health from the point of view of the patient, rather than structuring things in a way that was convenient for the system.”

4.14 The percent of pregnant women with anemia at delivery declined considerably in both oblasts – from 33 to 24 percent in Tver and from 24 to 21 percent in Kaluga – though still not reaching project targets (20 and 18 percent, respectively).¹⁷ It is curious that Kaluga, with the strongest performance in delivering MCH/FP interventions, witnessed the smallest improvement. On the other hand, pregnancy-induced hypertension *increased* in Kaluga and was basically unchanged in Tver (Table D.2). These unexpected results could indicate better detection, poor case management, or increased access to services of women from higher-risk background. Without data from non-project areas for comparison, indicators linked more closely to the project’s outputs, or a carefully constructed evaluation design, it is impossible to know the extent to which project activities contributed to these positive outcomes or mitigated the negative ones.

4.15 Indicators of child health outcomes show substantial improvements in Tver, Kaluga, and other non-project comparison areas. As shown in Figure 5, progress in reducing infant mortality was the norm throughout Russia over the project period. Perinatal mortality dropped significantly in both oblasts, and in Kaluga neonatal mortality also dropped – in all cases below any targets that were set (Table D.2). Similar reductions were achieved in regions across the country, complicating the task of attributing outcomes to the Bank-financed project.

Figure 5. Infant mortality in Kaluga, Tver and selected oblasts



Source: Goskomstat 2005a, 2005c

4.16 Finally, the abortion rate in both oblasts declined – from 60 to 45 per 1,000 women 15-45 in Tver and from 56 to 46 per 1,000 in Kaluga. However, once again, the same trends were experienced in comparison oblasts and nationally over that period (Figure 6), making it difficult to attribute the declines in the pilot regions directly to the

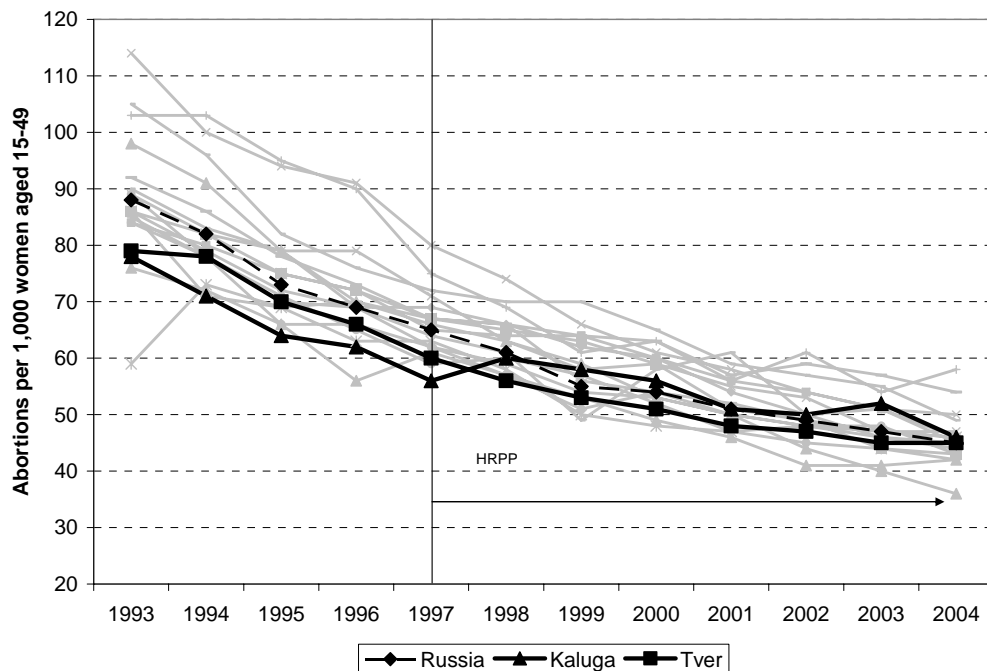
17. The statistics on anemia and hypertension among pregnant women were taken from project documents; IEG was unable to independently confirm them.

project. In addition, it is commonly assumed that at least part of this decline is due to increased resort to private sector abortions that are not captured in government statistics. It does not appear that the decline in abortion is due to increased contraceptive prevalence: prevalence of IUDs and oral contraceptives barely changed or declined in the two oblasts over the period 1996-2001 (Table D.2).¹⁸

Cardiovascular health

4.17 The project aimed to improve cardiovascular health in both oblasts, but particularly in Tver, where the emphasis was on improved emergency care, including training, purchase of new ambulances, and refurbishing of others. Data collected as part of that intervention reportedly documented a reduction in average time from emergency call to ambulance arrival, and a reduction in deaths from heart attacks during ambulance transport.¹⁹ The head of the oblast Emergency Medicine department received training in Israel under the project; this physician energetically returned to Tver and set up an emergency medicine training center using methodologies completely new for Russia (interactive training, role-playing, etc.)²⁰ Health promotion activities were also planned on CVD; while some of these were implemented, only 3 percent of the loan resources for prevention of CVD were accessed.

Figure 6. Abortion rate, Kaluga, Tver and selected oblasts



Source: Goskomstat 2005b

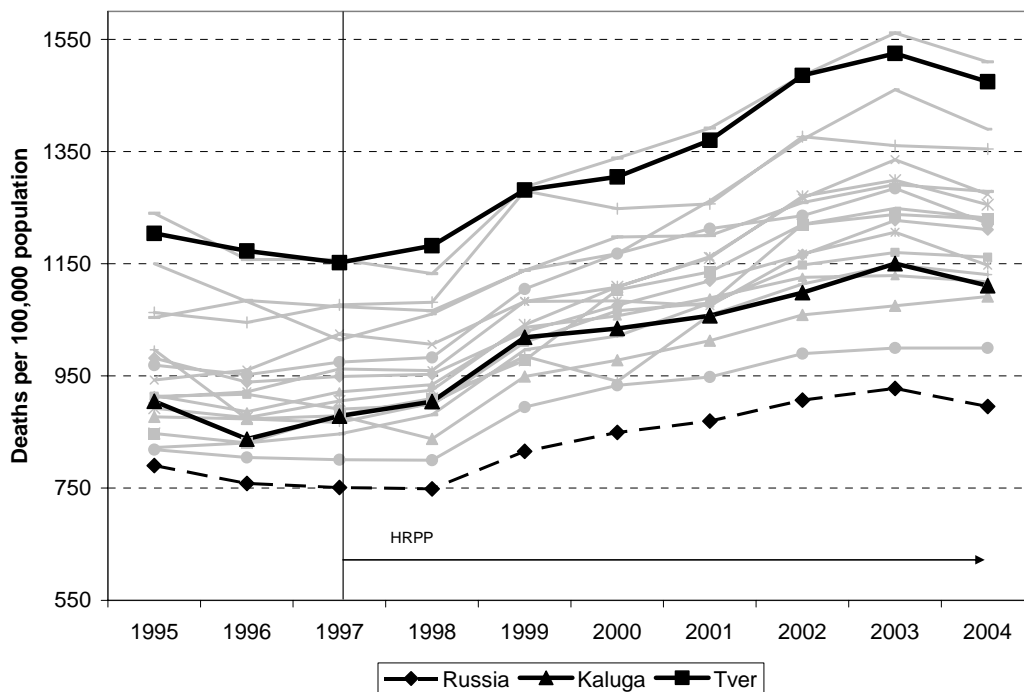
18. Note, however, that these contraceptive prevalence statistics may be subject to the same bias as the abortion statistics, namely they may not be capturing increased use of contraceptives from the private sector.

19. This information is as reported in a Project Status Report and the ICR; IEG was unable to access the original data, nor were the authors of the ICR (p. 15).

20. Unfortunately, this training center is no longer in operation, as the physician who traveled to Israel has retired, and political figures in the region have reclaimed the physical facilities for other purposes.

4.18 Several targets for cardiovascular service delivery were met in Tver. According to the ICR, the number of registered and monitored essential hypertension cases increased by 59 percent, exceeding the target increase of only 10 percent. The number of newly detected acute myocardial infarctions (per year) was reduced from 2,729 to 2,411, exceeding the 3 percent target reduction.²¹ However, the mortality rate from cardiovascular disease in both oblasts and in comparison areas worsened a great deal throughout the life of the project, beginning in 1999 and leveling off only in 2003-2004. Indeed, Tver's absolute rate of death from circulatory system disease remains one of the highest, despite project activities. The project did not collect data or conduct analysis to determine why this might be the case.

Figure 7. Mortality from cardiovascular disease, Kaluga, Tver and selected oblasts



Source: Goskomstat 2005b.

EVALUATE THE PILOT PROJECT AND DISSEMINATE THE LESSONS

4.19 This objective was not achieved. There was no evaluation design to isolate the effects of the pilot interventions. Thus, as is evident from the results discussed above, it is impossible to know whether the trends observed reflect an influence of the project or of other background factors. Key informants vociferously claimed that the failure to design and implement meaningful M&E – including systematic collection of data at all levels, analysis of project impact against non-project regions and facilities and against a counterfactual, and effective communication of the results of this analysis to key recipients -- were the single most critical factor preventing the project's results from having a country-wide impact. Most planned M&E activities were never implemented.

21. As both this indicator on heart attacks and the previous one on hypertension are measured in terms of the absolute number of individuals, neither conveys the change in service coverage or population-based morbidity rates.

4.20 Some elements of the project's approach were nevertheless disseminated and sometimes adopted elsewhere, even in the absence of evidence that they were effective. Dissemination conferences and seminars were held, a project web site was designed, and a project information newsletter was published. The list of equipment for a family physician office developed under the project has been adopted as the recommended standard by the MOH. Tver's progress in emergency medicine became sufficiently well-known that staff from Rostov, Novosibirsk, and other oblasts traveled to Tver to receive training and study Tver's standard ambulance equipment list.

5. Ratings

OUTCOME

5.1 The **outcome** of the project as a whole, based on the relevance of its objectives and design and its efficacy and efficiency in meeting those objectives is rated *unsatisfactory*.

5.2 This overall outcome rating represents an average of the outcomes for the main objectives, in terms of improving the health system and health outcomes, and learning from the pilot (Table 1, discussed below). A paramount objective of this project, as a pilot, was to learn about the efficacy of the proposed health reforms for wider replication. However, there was no evaluation design that would permit isolating the impact of the project from that of other background developments in Russia; this and the lack of M&E in the project overall makes it extremely difficult to assess the extent to which any change in desired outcome at the oblast level can be attributed to the project's activities.

Table 1. Outcome ratings, by objective

Objective	Relevance	Efficacy	Efficiency	Outcome
1. Improve the ..				
quality of health care	Substantial ^a	Substantial	Negligible	Moderately Unsatisfactory
efficiency of health care		Negligible		
reproductive health		Negligible/Modest ^b		
cardiovascular health		Negligible		
2. Evaluate the pilot to inform wider adoption of reforms	Modest ^c	Negligible	Negligible	Highly Unsatisfactory
Overall outcome rating	Unsatisfactory			

a. Relevance of the objective is high, but relevance of project design with respect to the objective is modest.

b. Negligible in Tver and modest in Kaluga.

c. Relevance of the objective is high, but relevance of project design with respect to the objective is negligible.

5.3 The assessment of **relevance** is based on the relevance of the objectives themselves and the relevance of the project design in meeting those objectives. The relevance of the objectives is uniformly *high*. The most recent CAS recognizes that Russia still faces formidable health challenges, particularly its soaring working-age mortality rate, primarily due to cardiovascular disease (World Bank, 2005). It also recognizes the importance of: reversing the deterioration of Russia's human capital; delivering key public services and infrastructure; and developing stronger institutions of

social assistance. The CAS specifically cites low efficiency in health care delivery; increasing inequity in access to quality services; and low service quality. It calls for strengthening coordination and monitoring at the national level, and restructuring efforts and capacity building at regional and local levels, all of which were embodied in the HRPP. The two main objectives of support to government health reform are to: (i) help establish a health care system that is accessible, affordable, and efficient; and (ii) strengthen the response to premature mortality and the risks of HIV/AIDS. The HRPP addresses the first of these objectives, and its CVD components address the second.

5.4 The relevance of the project design to the objective of improving the quality and efficiency of health care and improving reproductive and cardiovascular health is modest. Although there was substantial and important preparation work with the regions on the component to reform provider payment mechanisms, including the development of a comprehensive framework, pilot sites, and plans for organizational changes and initial implementation, there was insufficient attention to the obstacles likely to be encountered during implementation. The project conveyed new concepts to the Borrower, but failed to implement those concepts as planned. The politically important maintenance of universal access to free-of-charge health care was not explicitly considered in the efforts to improve efficiency of care. Many elements of the components on reproductive and cardiovascular health were well designed, although there was insufficient attention to the difficulties likely to develop in the construction of a new perinatal care center in Tver. Also, while the project in Tver focused on smoking behaviors as a contributor to cardiovascular disease, it did not address what is widely considered to be the primary contributor to premature mortality from cardiovascular illness, excessive alcohol consumption. The relevance of the project design for the M&E component was negligible. The project design included no systematic framework to assess the impact of project interventions against control groups and/or against the counterfactual.

5.5 The **efficacy** of meeting each of the project objectives was discussed in Section 4. While for most of these objectives, efficacy (averaged over both oblasts) is at best modest or negligible, it is important to highlight that in the areas of health systems reform, family medicine, CVD prevention and care, and MCH/FP, the HRPP brought new ideas to the table and provided a forum for their open discussion, particularly at the oblast level. The HRPP conveyed the notion that there are objective factors governing policy and resource allocation in the health sector that transcend politics. Respondents from both oblasts were vigorous and unanimous on this point. One respondent explained that “the project changed the minds of many, many people, and now the new approaches are disseminated in geometric fashion.” Another claimed that “the project was effective in proving that international models can be introduced in Russia’s regions.”²² The project was particularly successful in overcoming some of the political and legal obstacles hindering the introduction of family medicine.

22. One respondent commented that the project had achieved a “mentality breakthrough,” in family medicine and another called it a “real revolution where we were pioneers in the field,” helping key players in both regions not only to understand the benefits of family medicine, but also to overcome the resistance to it. Several respondents maintained that family medicine eventually would have developed in Russia, but that it would have happened much later without the HRPP, and that politicians/administrators and the general public would not have understood its importance.

5.6 The **efficiency** of the project in meeting the objectives is negligible. The project as a whole suffered from significant delays and interruptions in implementation (the 1998 financial crisis, suspension of disbursements in Tver and then by the federal government). In its design, the project efficiently paired improvements in curative and emergency care with health promotion activities for MCH/FP and CVD. However, in implementation the complementary promotion activities were under-implemented. To the extent that provider payment incentives were implemented, the increased payments were in effect offered to all participating providers (irrespective of performance) and in many cases co-existed with the previous payment system. Less than planned collaboration between the MMA and its international partner and the failure to implement planned international technical assistance contributed to reduced efficiency in meeting all of the objectives. There was one significant exception to this pattern: international technical assistance was used very efficiently in the training and restructuring for maternal and child health services in Kaluga. The repeated transfer of responsibility for monitoring, evaluation, and dissemination from one institution substantially reduced the efficiency with which even the modest M&E activities could be pursued.

RISK TO DEVELOPMENT OUTCOME

5.7 Risk to development outcome overall is *modest*. The project contributed to a sea change in the conceptual thinking about the delivery of many aspects of health care, from practitioners to legislators to administrators, in both regions and to some extent at the national level, that is unlikely to be reversed.²³ The most significant source of risk, the abandonment of project activities and goals in the absence of Bank funding and leadership, is unlikely to materialize with respect to the training of family physicians; the oblast administrations were already financing the training of family physicians and the equipping of GP offices after the suspension of loan disbursements,²⁴ and both regions' training centers are still actively operating. In both oblasts, the system of bonus payments for family physicians remains in place and the diagnostic centers are still effectively functioning as inter-rayon centers, easing the patient burden on central rayon hospitals. All 47 medical schools in Russia now train GPs, using a curriculum strongly influenced by the HRPP. However, the training center for emergency staff in Tver was shut down shortly after the project closed due to a political dispute.

5.8 The risk of changes detrimental to the project's achieved outcomes is demonstrated by Kaluga's and Tver's approaches to the National Project for health care (Box 6). Respondents at all levels from both oblasts reported that the HRPP had prepared them well for implementing the National Project, and that they were better prepared than colleagues from other oblasts. To the extent that the National Project incorporates reform elements designed to increase the efficiency and efficacy of health services delivery, HRPP participants from Kaluga and Tver are already familiar with those concepts and are ready for rapid implementation using the new federal resources. Even where the National Project provides money for salaries and equipment without adequate attention to cost-

23. As one physician put it, "We are now aware of the financial implications of our decisions. Even small-scale physicians now know about economic mechanisms because of work begun under the World Bank project."

24. In addition, Tver financed 25 new offices in 2005, with an additional fifty planned for 2006.

effectiveness and demand, the two oblasts are able to retain an orientation toward reform. As National Project financing frees local resources, Those savings may be applied to continuation of important elements of the HRPP. However, the lack of evidence of the efficacy of specific controversial reforms in Russia (which was supposed to be generated by the HRPP) increases their vulnerability to political forces and raises the longer run risk to development outcomes.

Box 6. Russia's National Projects

In September 2005, President Vladimir Putin announced four major initiatives to upgrade living standards in Russia, on: modern health care; quality education; effective agriculture; and accessible housing. These sectors are to receive priority in the 2006-2008 national budgets, with the ultimate goal being the development of human capital as an impetus to sustained economic growth.

Health care is designated to receive over half of total National Project funding. From 2006-2008, federal financing of health care will increase by 64 percent. The bulk of new resources will go toward strengthening primary care, with district doctor and general practitioner salaries increasing by up to US\$350 per month, and nurses' salaries rising by up to US\$175 per month. A total of US\$509 million is earmarked to provide new equipment for district polyclinics, with 10,000 such clinics slated to receive new equipment over the next two years. More than 11,000 new cars will be purchased for the ambulance service. Investment in the construction of new health care facilities, particularly in Siberia and the Far East (which have experienced disproportionate population decline), will amount to US\$807 million in 2006, exceeding the 2005 budget by 290 percent.

The Birth Certificate program, initiated at the beginning of 2006, allocates certificates worth 5,000 rubles (about US\$ 170) to pregnant women that follow them to their choice of outpatient prenatal care provider, and 10,000 rubles to their choice of maternity home. The idea is that gynecological and obstetric care will respond to the demands of the market, as providers increase quality of services in order to attract additional patients and therefore additional resources. More than half of the funding from the certificates can be allotted to salary increases for clinic and hospital personnel.

Many observers are concerned that the National Projects, while positive in terms of increasing resources to the social and health sectors, will miss the opportunity to promote much needed structural reform. For example, in the interest of launching the program without delay, salary increases for primary care providers are currently being distributed across the board without regard for merit or quality incentives. The Government is currently discussing the launching of some regional pilots on structural reform, which would be a welcome addition to the National Projects agenda (World Bank Moscow Office, 2006).

BANK PERFORMANCE

5.9 Overall Bank performance is rated *moderately unsatisfactory*, based on moderately unsatisfactory preparation and supervision.

5.10 The Bank's performance in ensuring quality at entry was *moderately unsatisfactory*. On the one hand, the competitive process by which the regions were selected ensured some level of ownership at the oblast level and responsiveness of the project to local needs. The timing of the project was good. The Russian government was preoccupied with macroeconomic policy throughout the 1990s, to the neglect of health and social welfare. In this environment, the Bank was able to support the small constituency within the government (at all levels) that was committed to reform and trying to take steps toward systemic change. The family medicine component, for example, dovetailed well with efforts that were already underway in the development of a

GP curriculum and training program at the federal level and in Tver. Bank staff were patient and creative in presenting new concepts, in an environment where those concepts were at best unfamiliar and at worst met with open hostility, in such a way that the borrower could digest them over time and adapt them to local conditions. The concept of a pilot project on health reform that would yield lessons for the rest of Russia and possibly engender greater political support was highly appropriate, as were the explicit objective and planned activities for disseminating the lessons.

5.11 However, the Bank was highly remiss in failing to ensure a rigorous evaluation design with a control group or other method of statistical control at the time of appraisal that would have allowed an understanding of the extent to which these experimental reforms were impacting the quality and efficiency of health care delivery and key health outcomes. The Bank appears not to have realized how new the concept of evaluation, and specific evaluation methodologies, was to the borrower, and did not aggressively move to build capacity and allocate resources up front. This lapse undermined the ability to measure the effectiveness of reforms and to realize the learning benefits for the oblasts and the rest of Russia. The choice of monitoring indicators also failed to measure intermediate outcomes that could be more directly attributed to project outputs. Beyond these issues of M&E, significant known risks were not properly mitigated during design; the prevailing attitude seemed to be that preparation had taken long enough (four years) and it was simply time to move forward.

5.12 Bank supervision was *moderately unsatisfactory*. Commendably, Bank staff managed to help keep health reform on Russia's agenda despite overwhelmingly difficult and complicated circumstances. The Bank effectively co-opted many Russian practitioners who initially opposed the project, including them in activities and thereby convincing them of its benefits. Deliberate, multifaceted, and targeted publicity about the benefits of the HRPP managed to win over many physicians, legislators, politicians, journalists, and the general public. The importance of the Bank's success in bringing new ideas to the table, creating constituencies for reform, and sustaining commitment to reform cannot be overstated.

5.13 However, while the Bank recognized the problems of the project at the outset and as it moved forward, it did not always take proactive steps to redress them. The MTR in particular was a lost opportunity. Management above the level of the task-team leader (TTL) seems to have been disengaged and was not proactive in acknowledging and addressing the obstacles encountered.²⁵ Furthermore, turnover of staff on the project was excessive, both among TTLs and consultants,²⁶ and there was sometimes a mismatch between the operational experience and technical skills of the TTL and the requirements of the job. Credibility and capacity for policy dialogue with the borrower hinged critically on the right skill mix. This was first and foremost a pilot project intended to demonstrate specific impacts, yet M&E activities were never a priority for supervision: baseline data were never collected and futile catch-up attempts were

25. The Project Status Reports (PSR) show no comment from management until after the MTR, for example.

26. There were three TTLs over the 6 years of implementation. Respondents commented that it took too much time to acquaint each new person with the scope and details of the project, wasting valuable time and energy that could have been expended toward the project's objectives.

discussed but never accomplished. Finally, the quality and consistency of the technical assistance on health reform components was questioned by respondents.²⁷

BORROWER PERFORMANCE

5.14 Government performance was *moderately unsatisfactory*.²⁸ The level of commitment to genuine reform as embodied in the project was variable. In Kaluga, there was initially more interest in leveraging the project for the purchase of new equipment and perhaps some useful training, than in implementing activities involving systemic change or restructuring. Most of the components in Kaluga got started in earnest only after elections that elevated a strong champion of the project to the governor's office. Tver was from the beginning more committed to genuine reform (having had more experience with reform-oriented ideas), but personnel turnover resulted in a nine-month mid-project suspension of all activities.

5.15 At the federal level, the MOH was a very weak player not particularly interested in reform. In part because the Bank did not more intently pursue MOH involvement during project preparation, and to a greater extent due to the shallow understanding of and commitment to reform among officials, the MOH was never involved in the project on a day-to-day basis. It always maintained a somewhat distant relationship with project activities. The abrupt suspension by the MOF of all new contracts, amounting in essence to a one-year-early cancellation of the project, was a signal of weak commitment to working with Bank partners. Although the decision may have been a reasonable one, given project performance and the political economy at the time, the manner in which it was done was not productive.

5.16 The implementing agencies' performance was also *moderately unsatisfactory*. The CSU, PCCs, and PMUs performed as effectively as could be expected under the circumstances, although there were significant difficulties defining the proper role of the CSU in relation to the PMUs during the first half of the project. Other responsible agencies, including the MOH, the MMA, and the MSEI and its designated successors on M&E, neglected to perform many of their contractual obligations, rejected international technical assistance, and most importantly, failed to deliver on the crucial monitoring and analysis tasks essential for eventual scale-up.

MONITORING AND EVALUATION

5.17 Overall, monitoring and evaluation was *negligible*. Both the design and the implementation of M&E were *negligible* (see relevant discussions in Sections 2 and 3). As discussed in Section 4, utilization of M&E – in the case of this project, an explicit objective – was also *negligible*.

27. The hiring of a Russian health financing consultant in late 1999 to monitor and supervise these components helped, but came too late to ensure scale-up of activities from an initial handful of pilot facilities and rayons.

28. The environmental factors outside government control, such as the 1998 financial crisis, are not a factor in this rating. Indeed, the Kaluga and Tver regional governments remained determined to continue the project despite the tremendous fiscal difficulties caused by the devaluation of the ruble.

6. Lessons and Perspectives

LESSONS

6.1 **Monitoring, evaluation, and dissemination are critical elements of a pilot project.** Even if other objectives are not met, an effective M&E process can contribute important lessons about why that may have been the case. A pilot effort is wasted without an evaluation design capable of isolating impacts. Planning of data collection and analysis of a pilot project cannot be left to finalize after it is launched; the design and resources to implement it must be in place at the project's inception.

6.2 **Political commitment is important at all levels, throughout the life of the reform process.** Government priorities and regional political leadership will change; new personnel will occupy important positions at key ministries. Continuous policy dialogue is crucial to assessing and maintaining that commitment. The probability of changes in political environment over the course of the project should be taken into account during project design. Counterpart project staffing should, to the extent possible, be not only good but deep in order to accommodate probable changes, and the Bank's overall relationship with a country and the country context must constantly be reassessed in terms of its impact on specific projects.

6.3 **Even under conditions of extremely decentralized governance, the national level is a key player in the health sector.** In Russia, despite the seemingly anarchic nature of the situation after President Boris Yeltsin told the regions to "take as much sovereignty as [they] can swallow" in the early 1990s, federal regulatory and legal requirements still governed much local activity. A pilot project in Russia is therefore either extremely complicated because of the time-consuming legal and regulatory issues that have to be addressed, or, if legal issues connected to the center are not involved, the project risks becoming a separate exercise unrelated to events in the rest of the country so that scale-up is impossible.

6.4 **Health reform projects that are complex face increased risk of failure.** The HRPP involved multiple layers of government and a large number of separate health and health policy challenges. A project with narrower scope might have encouraged tighter focus and more demonstrable results.

6.5 **Local ownership is important, but there's still a need to prioritize.** The complexity and "patchy" nature of the HRPP was due to the deliberate strategy of building ownership by encouraging the oblasts to prepare reform proposals. But throughout Russian and Soviet history, the regions have had a tendency to submit extensive requests on the expectation that they would be granted only a fraction of what they requested. The potential contribution of the Bank in helping the oblasts to prioritize activities linked to a coherent reform framework was not realized.

6.6 **Health reform operations – even when not successful in meeting their objectives – can nevertheless have a major influence on the policy debate by planting ideas on new ways to do things.** While the HRPP provided financing for

urgently needed inputs for the health system, the real value added of the project was to introduce new ideas into the national dialogue on health reform.

PERSPECTIVES ON ONGOING AND FUTURE SUPPORT

6.7 Lessons from the HRPP are reflected in the objectives of the ongoing Health Reform Implementation Project (HRIP, US\$41.2 million, effective June 2003), to: (a) establish a system of federal regulation for effective governance and management of the health system; (b) develop and implement strategic approaches to health sector reform in selected regions (Voronezh Oblast and Chuvash Republic); (c) strengthen the institutional capacity of the MOH as a federal executive agency; (d) draw lessons from the implementation of regional programs and disseminate them; and (e) develop and implement an efficient scheme of restructuring of the health system, with emphasis on increased access, quality and efficiency of health services.

6.8 The HRIP draws on lessons from the HRPP's experience with monitoring and evaluation. The HRIP Project Appraisal Document (PAD) stresses that the project's M&E system will collect and compare baseline data with that collected during, and after project implementation. Comparisons will be made between geographic areas that were affected by project interventions and those that were not, with appropriate adjustments for confounding factors, and the monitoring system will collect both process and outcome/impact indicators. A regional health accounts system is to be established to develop valid baseline values for regional expenditures and for measuring and estimating impacts, in terms of both savings and costs.

6.9 The PAD explicitly recognizes that, during the HRPP, reform efforts in the regions were constrained by outdated national-level norms and standards, and that the federal MOH lacked the financial and institutional resources to lead reform efforts. The experience of the HRPP confirmed the important role that the "center" must play even in a decentralized health system, and the need for mutually supportive relations between the center and the regions. The HRPP therefore "provided the main motivating force in the design of this Bank-funded health reform project which has a strong focus at the federal level" (World Bank 2003).

6.10 Other HRPP lessons explicitly applied to the HRIP include: (a) the need for continued discussions to build support within Russia during project implementation; (b) the need for an appropriate design of provider payment mechanisms and the pay-off in cost savings that could result from an output-based global budgeting system for hospitals; (c) the need for a unified approach to health services restructuring involving facilities at all levels of care in a given region and not just in individual facilities; (d) the need to assess the cost-effectiveness of diagnostic services also on a system-wide basis involving primary care, in- and out-patient specialist facilities, and free-standing diagnostic centers; (e) the importance of changing clinical practice patterns in Russia; and (f) the potentially quick returns that can be gained from relatively simple changes, such as the introduction of new protocols for responding to ambulance calls. Key participants in the HRIP claim that they still review documents from the HRPP in order to extract relevant lessons; officials from the HRIP oblasts have visited Tver to become familiar with aspects of their organization of care and training.

References

- Administration of Tver Oblast. 2005. "Ob organizatsii pervichnoy meditsinskoy pomoshchi po printsipu vracha obshchey praktiki (semeynogo vracha) v Tverskoy Oblasti" ["On the organization of primary medical care according to the principles of general practice (family physician) in Tver Oblast"], Resolution 230, July 7.
- Bennett, Sara, and Mary Paterson. 2003. "Piloting Health System Reforms: A Review of Experience," *Technical Report* no. 019, Partners for Health Reform Plus, Bethesda, MD, January.
- DaVanzo, Julie, and Clifford Grammich. 2001. *Dire Demographics: Population Trends in the Russian Federation*. Santa Monica, California: The RAND Corporation.
- Feshbach, Murray. 2003. *Russia's Health and Demographic Crises: Policy Implications and Consequences*. Washington, D.C.: Chemical and Biological Arms Control Institute.
- Goskomstat Rossii. 2005a. *Demograficheskiy Yezhegodnik Rossii [Demographic Yearbook of Russia]*. Moscow: Goskomstat.
- Goskomstat Rossii. 2005b. *Regiony Rossii [Regions of Russia]*. Moscow: Goskomstat.
- Goskomstat Rossii. 2005c. *Sotsial'noye Polozheniye i Uroven' Zhizni Naseleniya Rossii [Social Situation and Standard of Living of the Population of Russia]*. Moscow: Goskomstat.
- Goskomstat Rossii. 2005d. *Zdravookhraneniye v Rossii [Health Care in Russia]*. Moscow: Goskomstat.
- Government of the Russian Federation. 1997. "Kontseptsiya razvitiya zdravookhraneniya i meditsinskoy nauki v Rossiyskoy Federatsii" ["Concept paper for development of health care and medical science in the Russian Federation"]. *Meditsinskaya Gazeta* 90, November 19, pp. 4-6.
- International Bank for Reconstruction and Development and the International Finance Corporation. 2005. "Country Assistance Strategy Progress Report for the Russian Federation, FY 2003-2006". Russian Federation Country Management Unit, Europe and Central Asia Region, Report no. 31579-RU, February 15.
- McKee, M., V. Shkolnikov, and D. Leon. 2001. "Alcohol is Implicated in the Fluctuations in Cardiovascular Disease in Russia since the 1980s", *Annals of Epidemiology* 11(1):1-6.

Scheiber, George. 1993. "Health Care Financing Reform in Russia and Ukraine", *Health Affairs (Millwood)* 12(suppl): 294-299.

Sheiman, Igor. 1993. "New Methods of Finance and Management of Health Care in the Russian Federation". Paper presented to the conference on "Health Sector Reform in Developing Countries", Durham, New Hampshire, September.

Shishkin, S. 1999. "Problems of Transition from Tax-Based System of Health Care Finance to Mandatory Insurance Model in Russia," *Croatian Medical Journal* 40(2): 202-209.

"Srednyaya zanyatost' koyki i srednyaya dlitel'nost' prebyvaniya bol'nogo v stationare" ["Average bed occupancy rates and average length of hospital stay"] 2002. *Zdravookhraneniye Rossiyskoy Federatsii* 5: 44-46.

"Srednyaya dlitel'nost' prebyvaniya bol'nogo v stationare i chislo poseshcheniy v ambulatorno-poliklinicheskikh uchrezhdeniyakh v sub'yektakh Rossiyskoy Federatsii" ["Average length of hospital stay and number of visits to ambulatory-polyclinic institutions in subjects of the Russian Federation"]. 2005. *Zdravookhraneniye Rossiyskoy Federatsii* 2: 48-50.

Telyukov, Alexander. 1997. *Health Financing Reforms in Kemerovo Oblast, Russia: Background, Current Status, and Prospective Directions: A Case Study*. Bethesda, MD: Abt Associates. March.

Tragakes, Ellie and Suszy Lessof. 2003. *Health Care Systems in Transition: Russian Federation*. Copenhagen: European Observatory on Health Systems and Policies.

Twigg, J. 2001. "Russian Health Care Reform at the Regional Level: Status and Impact," *Post-Soviet Geography and Economics* 42(3):202-219.

Twigg, J. 2002. "What Has Happened To Russian Society?" in Andrew C. Kuchins, ed. *Russia after the Fall*. Washington, D.C.: Carnegie Endowment for International Peace, pp. 147-162.

USAID. 1996. "USAID Agency Performance Report 1996: Population Health, and Nutrition Highlights," Washington, D.C.

World Bank. 1997a. "Updated Project Information Document, Health Reform Pilot Project," January 28.

World Bank. 1997b. "Staff Appraisal Report: Russian Federation, Health Reform Pilot Project." Human Resources Division, Country Department III, Europe and Central Asia Region, Report no. 15585-RU, April 24.

World Bank. 2001. "Health Reform Pilot Project, Midterm Review: Report on Mid-Term Results of Project Implementation, April 1998 – April 2001," Moscow, April.

World Bank. 2003. "Project Appraisal Document on a Proposed Loan in the Amount of US\$ 30 Million to the Russian Federation for a Health Reform Implementation Project." Human Development Sector Unit (ECSHD), Russia Country Unit, Europe and Central Asia Region, Report no. 23260-RU, February 20.

World Bank. 2004. "Implementation Completion Report on a Loan in the Amount of US\$ 66.0 Million to the Russian Federation for a Health Reform Pilot Project," Report no. 29807-RU, October 19.

World Bank Moscow Office. 2006. "Russian Economic Report – April 2006," Economics Unit, Moscow, April.

Annex A. Basic Data Sheet

HEALTH REFORM PILOT PROJECT (LOAN 4182)

Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project cost	98.40	35.93	36.4
Loan amount	66.0	32.7	49.5
Cancellation		33.3	

Project Dates

	<i>Original</i>	<i>Actual</i>
Board approval	06/05/1997	06/05/1997
Signing	10/09/1997	10/09/1997
Effectiveness	01/07/1998	04/17/1998
Closing date	04/30/2004	04/30/2004

Staff Inputs (staff weeks)

	<i>Actual/Latest Estimate</i>	
	<i>N° Staff weeks</i>	<i>US\$('000)</i>
Identification/Preparation	238	572
Supervision	391	909
ICR	4	12
Total	633	1493

Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Performance Rating</i>	
				<i>Implementation Progress</i>	<i>Development Objective</i>
Identification/ Preparation	02/22/1993	5	Team Leader (1); Health Economist (1); Health Specialist (2); Operations Officer (1);		
	10/19/1993	6	Team Leader (1); Health Economist (2); PHN Specialist (1); MCH Specialist (1); Medical Advisor (1)		
	11/28/1993	6	Health Economist (2); Pharmaceutical Specialist (1); Public Health Specialist (2); Health Care Management Specialist (1)		
	02/01/1994	5	Health Economist (1); Pharmaceutical Specialist (1); OBGYN Specialist (1); PHN Specialist (1); Health Care Management Specialist (1)		
	03/20/1994	2	OBGYN Specialist (1); PHN Specialist (1)		
	05/22/1994	5	Pharmaceutical Specialist (1); OBGYN Specialist (1); Medical Educator (1); Health Care Management Specialist (1); PHN Specialist (1)		
	07/10/1994	8	Operations Advisor (1); Health Care Administrator (1); Pharmaceutical Specialist (2); OBGYN Specialist (1); Emergency Care Specialist (1); Health Finance Specialist (1); PHN Specialist (1)		
	Appraisal/Negotiation	02/03/1996	11	Team Leader (1); Health Economist (1); Medical Specialists (7); Operations Analyst (1); Procurement (1)	
Supervision	06/01/1998	10	Program Team Leader (1); Implementation Spec. (1); Health Financing Spec. (1); Project Officer (RM) (1); Procurement Spec. (RM) (1); CVD Specialist (1); Health Management Spec. (1); Health MIS Specialist (1); Family Medicine, GP (1); Health Promotion Spec. (1)	S	S
	01/16/1999	3	Task Leader (1), Project Coordinator (RM) (1); Financial Analyst (1)	U	S
	06/12/1999	7	Sector Leader (1) Program Team Leader (1); TTL, Implement., Procu. (1); Project Coordinator-RM (1);	U	S

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Performance Rating</i>	
				<i>Implementation Progress</i>	<i>Development Objective</i>
			Health Financing (1); Procurement-RM (1); Financial Management- RM (1).		
	10/01/1999	6	Task & Mission Leader (1); PTL (1); Health Financing Spec. (1); General Practitioner (1); Moscow Office/Proj.Coo (1); Moscow Off/Procurement (1)	U	S
	04/14/2000	8	TTL, Project Management (1); Operations Officer/Mos (1); Family Medicine Consult (1); Health Financing Consul (1); MCH Specialist, WHO (1); Financial Management Spec. (1); Procurement Specialist (1); PTL (1)	S	S
	11/30/2000	4	Task/Mission Leader (1); Health Financing (1); Procurement (1); Operations Officer (RM) (1)	S	S
	12/14/2001	2	Moscow Office (1); Provider Payment (1)	S	S
	03/04/2002	8	Team Leader (1); Public Health Sp. (1); Health Financing Sp. (1); Health Economist (1); Project Coordinator, RM (1); Med. Equipment SP. (1); Procurement SP., RM (1) Program Team Leader (1);	S	S
	10/11/2002	4	TTL, Health Economist (1); Public Health Spec. (1); Project Coordinator (1); Consultant, Economist (1)	S	S
	04/26/2003	5	TTL. Health Economist (1); Public Health Specialist (1); Operations Officer (1); Fin. Management Officer (1); Procurement Specialist (1)	S	S
Supervision/ICR	4/2004	6	TTL Health Economist (1); Operations Officer (1); Health Specialist (1); Public Health Specialist (1); Health Consultant (1); MCH Consultant (1)	U	S

Annex B. Persons Interviewed

USA

World Bank

Olusoji Adeyi, former Team Leader for Health Programs in Russia
 Michael Carter, former Country Director for Russia
 Sarbani Chakraborty, author of the Implementation Completion Report
 Teresa J. Ho, Task Team Leader (1997-99)
 Jack Langenbrunner, Task Team Leader (2002-2004)
 Robert Liebenthal, former Division Chief
 Jean-Jacques de St. Antoine, Lead Operations Officer, Human Development, Eastern Europe and Central Asia region
 George Schieber, Health Policy Advisor, Health, Population, and Nutrition
 Julian Schweitzer, former Russia Country Director
 Maria Vannari, Task Team Leader (1999-2002)

Other

Michael Borowitz, Department for International Development (UK)
 Daniel Miller, Centers for Disease Control and Prevention

Moscow

Government

Vladimir Starodubov, Deputy Minister of Health and Social Development
 Vladimir Shinkarenko, Deputy Director, Russian Federation Scientific Research Center for Restorative and Resort Medicine; Director of HRPP (1996-2000)

World Bank

Alexander Balakov, Procurement Specialist
 Andrey Darusenkov, Senior Operations Officer
 Tatyana Loginova, Operations Officer, Health Projects

NGOs and Academia

Igor Denisov, Vice Rector, Moscow Medical Academy
 Nadezhda Lebedeva, Russian Health Care Foundation, HRIP
 Igor Sheiman, Professor, Higher School of Economics
 Sergey Vidmanov, Russian Health Care Foundation, Director of HRPP (2000-2004)

Kaluga Oblast

Vladimir Isayev, Director of Health Care
 Yury Kondratyev, Minister of Health Care and Social Development
 Gennady Sememenev, Director of Family Medicine component, HRPP
 Tatyana Sidorova, responsible for reconstruction of maternity houses and general practice physician offices, HRPP

Elena Soboleva, Director of Monitoring and Evaluation, HRPP
Valentina Volkova, Director of Mother and Child Health component, HRPP
Sergey Voronin, Lead Specialist, Ministry of Health and Social Development, Kaluga Oblast; Head of Project Implementation Unit, HRPP
Tatyana Vovkodav, Chair of Committee for Economic Planning, Deputy Minister of Health Care and Social Development

Tver Oblast

Vladimir Chernyshov, Director of HRPP
Sergey Kolbasnikov, Main Specialist-Expert (Therapist), Department of Health Care
Alexander Molokayev, First Deputy Head of Department of Health Care
Olga Pischulina, Deputy Governor
Lidiya Samoshkina, Head of Department for Treatment and Preventive Care of Mothers and Children, Department of Health Care
Vladimir Vinogradov, Professor, Head of Department of Internal Medicine, Tver State Medical Academy

Annex C: Inputs and outputs

Table C.1: Planned versus actual financing by component

Component	Planned (\$US million)	Actual (\$US million)	Actual as a percent of planned
Kaluga Oblast Health Reform	44.2	16.9	38
Tver Oblast Health Reform	38.0	16.0	42
Family Medicine	2.8	0.46	16
Monitoring, evaluation, dissemination	1.4	0.33	23
Management	2.8	2.24	80
Total	98.4 ^a	35.93	36

Source: Implementation Completion Report, Annex 2, pp. 36-37

a. Includes \$9.4 million in physical and price contingencies.

Table C.2: Planned versus actual financing by loan agreement categories

(Expenses for World Bank loan only.)

Level of administration and loan agreement category	Planned (\$US)	Actual (\$US)	Actual as a percent of planned
<i>Kaluga Oblast</i>			
Civil works (health restructuring and MCH/FP)	1,400,000	1,140,478	81
Equipment, pharmaceuticals, training materials, supplies, vehicles	17,900,000	12,714,619	71
Consulting and contractual services and training	8,300,000	1,023,177	12
Health provider payments	1,400,000	205,179	15
Health promotion (MCH/FP)	1,000,000	123,100	12
<i>Tver Oblast</i>			
Civil works (MCH/FP)	2,400,000	0	0
Equipment, pharmaceuticals, training materials, supplies and vehicles	18,400,000	12,797,392	70
Consulting and contractual services and training	1,000,000	82,946	8
Health promotion (CVD)	1,300,000	38,708	3
Health promotion (MCH/FP)	6,900,000	1,253,248	18
<i>Federal</i>			
Equipment and training materials	771,000	172,959	22
Consulting services and training	2,000,000	570,138	29
RHCF operating costs	2,500,000	1,216,871	85
Refund of project preparation advance	729,000	453,405	62

Table C.3: Output targets and achievements

Indicator	<i>Pre-project^a</i> <i>(1994)</i>	<i>Baseline</i> <i>(1997)</i>	<i>Target^a</i> <i>(2002)</i>	<i>End of project</i> <i>(2004)</i>
Kaluga (five target rayons, plus Kaluga City)				
No. of feldsher stations	125		97	103 ^e
No. of general practices operating under reformed functions (including new models of practice and provider reimbursement)	0		30	30 ^{b,c}
No. of group practices operating under reformed functions*	0		23	17 ^{b,d}
No. of CDTCs operating under reformed functions*	0		9	9 ^b
No. of hospital beds in project facilities*	1,600		1,248	1,205 ^e
Train ob/gyns in updated methods of antenatal counseling and care			all ob/gyns and midwives in the oblast (~100)	287 MCH staff trained (ob/gyn, GP, midwives, feldshers, nurses). Not clear if all ob/gyns & midwives included.
Training on new payment system			All primary care physicians & facility managers + 2 staff/facility	0
Improved diagnostic capacity to women's consultations			12	12
Minor civil works and furniture to support rooming-in in maternity homes			10 homes	10 homes
Basic equipment, drugs, supplies and training at maternity homes			10 homes	10 homes
Tver				
No. of family doctor residency graduates*	30 ^f		50	153 ^b graduates of the TMA
No. of family medicine offices opened and equipped	0		50	50 ^b
No. of CDTCs upgraded from existing polyclinics	0		6	8 ^b
Emergency personnel trained			2,000	2,000 (approximately)
No. of faculty at TMA trained as teachers and trainers in family medicine			No exact number provided	No exact number provided
Ambulances purchased			44	44
Ambulances re-equipped			40	40
Ultrasound unit for central oblast			1	1

Indicator	<i>Pre-project^a</i> <i>(1994)</i>	<i>Baseline</i> <i>(1997)</i>	<i>Target^a</i> <i>(2002)</i>	<i>End of project</i> <i>(2004)</i>
hospital				
CT scanner for central oblast hospital			1	1
Create and equip diabetes control center			1	1
Establish center to coordinate health promotion and professional training in antenatal care			1	1
Establish center to coordinate health promotion and professional education in family planning and reproductive health			1	1
Establish inter-rayon perinatal center in Rzhev City			1	0
Test and adopt information system with financial, utilization, practice and demographic data			36 rayons (“oblast wide”)	17 rayons
Inventory of individual health status in 5 demonstration districts			3,000 people	3,000 people (approximately)
Federal				
Model of family practice*	0		1	1 ^b
New curricula development*	0		3	3 ^b
No. of faculty trained in family medicine*	0		35	Not available.
No. of training centers established*	0		4	Ditto.

* Indicator from the SAR. All other indicators are planned outputs from the project implementation plan.

a. Source: SAR, Annex 5.2, p. 117.

b. Source: ICR, Annex 1, p. 34.

c. An additional 34 (mostly in rural areas) were financed by the oblast administration.

d. Eleven were within the project and 6 practices were established outside the project.

e. Source: ICR, p. 9.

f. Source: ICR, p. 10

Annex D. Outcomes

Table D.1: Quality and efficiency of health services

Indicator	Tver				Kaluga			
	<i>Pre-project (1994)</i>	<i>Base-line (1997)</i>	<i>Target^a (2002)</i>	<i>End of project^l (2004)</i>	<i>Pre-project (1994)</i>	<i>Base-line (1997)</i>	<i>Target^a (2002)</i>	<i>End of project (2004)</i>
Hospital admission rate (percent of population)	21.4 ^b (1995)	19.2 ^b (1998)	18.1	21.8 ^b (2003)	18.7 ^b (1995)	17.8 ^b (1998)	16.4	21.1 ^b (2003)
Average length of hospital stay (days)	17.2 ^a	15.8 ^b (1999)	15.5	15.4 ^{c,e} 11.8 ^b (2003)	18.5 ^a	17.0 ^b (1999)	16.6	15 ^{c,e} 12.5 ^b (2003)
Share of health spending on outpatient services (percent)	43 ^d		50	46 ^c	30		50	42 ^c
Hospital beds per 10,000 population	136.5 ^b	122.1 ^b	n.a.	128.9 ^b	125.5	120.6 ^b	106.7	110 ^c 117.6 ^b

a. Source: Staff Appraisal Report (World Bank, 1997b), Annex 5.2, p. 117.

b. Source: Government of Russia Annual Health Statistics, published in Goskomstat 2005a, 2005b, 2005c, and 2005d.

c. Source: ICR, p. 34 (most recent estimate); origin of data unknown.

d. Source: ICR, p. 9; origin of data unknown.

e. According to the ICR, the ALOS dropped from 13.9 to 8.5 at the pilot sites in Kaluga (p. 27) and from 14.5 to 12.6 days at the pilot sites in Tver (p. 30).

Table D.2: Maternal, child, and cardiovascular health outcomes

Indicator	Tver				Kaluga			
	Pre-project (1994)	Base-line (1997)	Target ^a (2002)	End of project (2004)	Pre-project (1994)	Base-line (1997)	Target ^a (2002)	End of project (2004)
Maternal health								
Percent of pregnant women with anemia* (at delivery)	33 ^a		20	24 ^h	24.2 ^a		18	21 ^h
Percent of pregnant women with hypertensive disorders of pregnancy*	11 ^a		7.0	11.8 ^h	14 ^a		10.5	17.0 ^h
Contraceptive prevalence, women 15-49* (percent)	23 ^a		35	e	19.3 ^a		30	e
IUD prevalence (percent)	13.75 ^g	14.91 ^g		14.3 ^g (2001)	10.34 ^g	8.88 ^g		7.34 ^g (2001)
Oral contraceptive prevalence (percent)	4.51 ^g	8.29 ^g		5.27 ^g (2001)	2.59 ^g	4.06 ^g		3.16 ^g (2001)
Abortion rate per 1000 women ages 15-49 ^f	78 ^g	60 ^g	To be reduced	45 ^g	71 ^g	56 ^g	To be reduced	46 ^g
Child health								
Infant mortality rate (per 1000 live births)	19.3 ^g	18.4 ^g		11.8 ^g	17.4 ^g	19.3 ^g		10.5 ^g
Neonatal mortality* (per 1000 live births)	c		c	7.4 ^h	10.8 ^a		9.0	7.5 ^h
Perinatal mortality* (per 1000 live births)	18.7 ^a	18.2 ^g (1996)	17.7	13.2 ^g	d	15.7 ^g (1996)	d	12.8 ^g
Cardiovascular health								
Deaths from CVD per 100,000 population		1157.2 ^g		1474.5 ^g		878.5 ^g		1110.8 ^g
Percent of men who smoke*	60 ^a	53.8 ⁱ	50		d	d	d	d

n.a.: not available

* Key performance indicator identified in the staff appraisal report.

a. Source: SAR, Annex 5.2, p. 117. No source of the data is provided for the statistics cited in the SAR; thus, they may not be strictly comparable with statistics for subsequent periods.

b. Source: Government of Russia Annual Health Statistics, published in Goskomstat 2005a, 2005b, 2005c, and 2005d.

c. Not an indicator for Tver Oblast.

d. Not an indicator for Kaluga Oblast.

e. Indicator was replaced by the abortion rate following the mid-term review (2001)

f. Indicator was introduced following the mid-term review; no explicit target was set other than to lower the abortion rate.

g. Source: Goskomstat 2005a, 2005b, 2005c, 2005d.

h. Source: ICR, Annex 1, p. 34.

i. Source: A population-based survey conducted as a baseline in Tver, 1997-98. There is no evidence that a comparable, repeat survey was conducted at the end of the project.

Annex E. Timeline on Russian health reform and the HRPP

Year	Russian Federation	Tver Oblast	Kaluga Oblast	World Bank
1988	Soviet government begins three-region experiment known as New Economic Mechanism for health reform.			
1991	Collapse of the Soviet Union. Boris Yeltsin assumes Presidency of an independent Russian Federation in January 1992.			
1992	Federal Order 237 establishes Family Medicine as a legal clinical specialty.			WB dialogue with government of the Russian Federation launched USAID launches multi-year \$1.2 million ZdravReform project on health financing. ^a
1993	Russian President Boris Yeltsin signs the Law of Self-Governance devolving a substantial amount of responsibility and authority for most policy areas, including health, to the regional level. Law on Compulsory National Medical Insurance takes effect.	Work on General Practice models begins in Tver.		Formal preparation begins for Health Reform Pilot Project (HRPP)
1994				Six oblasts invited to present health reform proposals at a workshop in Moscow, three selected (October)
1995				
1996				Russia CAS presented to Board includes the objective of promoting health reform to improve the quality and efficiency of health care.
1997	MOH issues concept paper for national health reform. (November)			The Bank's Board approves the Medical Equipment Project (\$305 million) and

Year	Russian Federation	Tver Oblast	Kaluga Oblast	World Bank
				Community Social Infrastructure Project (\$288 million) to address investment needs in medical equipment and facilities (January). Board approves the HRPP (June)
1998	<p>First HRPP study tour to Netherlands for M&E component. Plans in place to hold training workshop on M&E methodology (April)</p> <p>Financial crisis results in devaluation of ruble and significant social/economic upheaval countrywide (August)</p> <p>Ministry of Finance (MOF) suspends disbursements on HRPP to Tver sub-project (October)</p>	<p>Tver unable to make semi-annual interest payment to MOF for the HRPP (August)</p> <p>Tver Health Department issues Executive Order 192 creating a Prenatal Care Center at Maternity Hospital #5 (December)</p>		<p>HRPP becomes effective (April)</p> <p>First HRPP supervision mission (May-June)</p>
1999	<p>MSEI, responsible for federal M&E for project, is abolished. M&E transferred to Central Public Health Research Institute (CPHRI). MOH issues Order 463, approving the sectoral program "General Practice/Family Medicine." It includes the development of a training system for general practitioners and family physicians (December)</p>	<p>Tver makes two outstanding payments on HRPP loan (from August 1998 and February 1999) (March)</p> <p>Diabetes Center opened (December)</p>	<p>Kaluga fails to pay service charges on HRPP loan (February)</p>	<p>First-year HRPP review delayed to FY00 (Spring)</p> <p>Change of Task Team Leader for HRPP (Fall)</p> <p>First-year review of HRPP (September)</p>
2000	<p>President Vladimir Putin takes office. He introduces legislative and executive measures to recentralize policy making, including in the health sector</p>	<p>Training begins for ambulance personnel (February)</p> <p>Executive Order on establishment of Consultation, Diagnostic, and</p>	<p>Health Department issues Executive Order on reformed provider payment arrangements (March)</p>	

Year	Russian Federation	Tver Oblast	Kaluga Oblast	World Bank
	<p>Adoption of new federal budget code (January)</p> <p>CPHRI abolished; M&E responsibility for HRPP transferred to Moscow Medical Academy (summer)</p> <p>Federal government issues Resolution 627, recognizing the excellence of the national family medicine training component of the HRPP (August)</p>	<p>Treatment Centers (March)</p> <p>Anti-smoking media campaign (May-June)</p> <p>Representatives sent to first All-Russian Congress of General Practitioners (December)</p>	<p>Borovsk Central Regional Hospital maternity department awarded designation as Baby Friendly Hospital (September)</p> <p>Gubernatorial elections (November)</p>	
2001	<p>MOH Department of Health Economics and System Development assumes responsibility for M&E (April)</p> <p>President Putin signs into law national pension reform (December)</p>	<p>HRPP coordinator appointed to the newly-created position of Deputy Head for Health Reforms in the Oblast Health Department (February)</p> <p>Gubernatorial elections (November)</p> <p>Governor sends letter to World Bank suspending the HRPP in Tver by unilateral decision of the oblast administration (December)</p>	<p>“Concept and Strategic Plan for the Development of the Health Care System in Kaluga Oblast, 2002-2005,” developed, defining health promotion, risk prevention, and cost-effective use of existing resources as priorities (Fall)</p>	<p>HRPP Mid-Term Review Mission (April)</p> <p>Medical Equipment Project closes (April)</p>
2002		<p>Oblast government requests redirection of all loan funds for equipment purchases (January 2002)</p>		<p>World Bank supervision mission to Tver to explore reasons for suspension of the project (April)</p> <p>Change of Task Team Leader for HRPP (spring)</p> <p>HRPP mission resolves issues related to suspension of project in Tver (December)</p> <p>Community Social Infrastructure Project closes (December)</p>

Year	Russian Federation	Tver Oblast	Kaluga Oblast	World Bank
2003	MOF freezes all contracts and disbursements for HRPP (September)			Health Reform Implementation Project (HRIP) effective (June)
2004				HRPP Implementation Completion Report review mission (March-April) HRPP closed (April)
2005	President Putin announces National Project for Health Care (September)			

a. Source: ZdravInform Library of Health Reform Projects, on a web site run by the MOH:
http://zdravinform.ru/dev/html/eng/projects/pr_passport.php?ppprojectid=304