EVALUATION OF THE ORGANIZATIONAL MODEL OF PRIMARY CARE IN THE RUSSIAN FEDERATION

- A survey-based pilot project in two rayons of Moscow oblast -

Primary care in the WHO European Region

EVALUATION OF THE ORGANIZATIONAL MODEL OF PRIMARY CARE IN THE

RUSSIAN FEDERATION

- A survey-based pilot project in two rayons of Moscow oblast -

ABSTRACT

In many countries in transition, health reforms are part of profound and comprehensive changes in essential societal functions and values. Reforms of (primary) care are not always based on evidence, and progress is often driven by political arguments or the interests of specific professional groups, rather than by the results of sound evaluations. However, policy-makers and managers nowadays increasingly demand evidence of the progress of reforms and the responsiveness of services. The implementation of the WHO Primary Care Evaluation Tool (PCET) aims to provide a structured approach towards this by drawing on the health systems functions such as governance, financing and resource generation, as well as the characteristics of a good primary care service delivery system: accessibility, comprehensiveness, coordination and continuity. This report gives an overview on the findings for Moscow oblast in the Russian Federation.

The project was implemented on a pilot basis in the Russian Federation in 2007 in the framework of the 2006–2007 Biennial Collaborative Agreement between the WHO Regional Office for Europe and the Ministry of Health and Social Development of the Russian Federation, an agreement that lays out the main areas of work for collaboration between the parties. Further partners were the Netherlands Institute for Health Services Research (NIVEL) – a WHO Collaborating Centre for Primary Care – and the Russian Federal Research Institute for Information and Organization in Health Care, as well as other stakeholders in the Moscow oblast health system, such as national policy experts, managers, family doctors and their patients.

Keywords

Address requests about publications of the WHO Regional Office for Europe to:

> Publications
> WHO Regional Office for Europe
> Scherfigsvej 8
> DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (http://www.euro.who.int/pubrequest).

TABLE OF CONTENTS

ABBREVIATIONS

GP   general practitioner
NIVEL   Netherlands Institute for Health Services Research
PC   primary care
PCET   primary care evaluation tool
STI   sexually transmitted infection
WHO   World Health Organization

ACKNOWLEDGEMENTS

FOREWORD

Primary health care embodies the values and principles that WHO pursues in its world-wide effort to helping countries strengthen their health systems efficiently and equitably. WHO renewed its commitment to global improvements in health, especially for the most disadvantaged populations, in the recent *World health report 2008*, which urges countries to act on evidence that access to primary care services forms the core of an efficient and appropriate health care system. The title of the report underscores the urgency of its message: *Primary health care – Now more than ever.*

Over the past 30 years, health in the 53 WHO Member States in the European Region has improved considerably overall, despite significant changes in the patterns and trends in disease occurrence, demographic profiles and exposure to major risks and hazards in a rapidly evolving socioeconomic environment. In addition, the Region has seen trends towards more integrated models of care and greater pluralism in the financing and organization of health systems. Governments are continuing to rethink their roles and responsibilities in population health and the organization and delivery of health care, thereby changing the context for framing and implementing health policy.

This report evaluates developments in primary care in Moscow oblast (administrative area), Russian Federation, using a methodology that characterizes a good primary care system as one that is comprehensive, accessible, coordinated and integrated; that ensures continuity; and that recognizes that all health system functions outlined in the WHO framework are considered equally in work to improve the overall health system. This means that the financing arrangements, service delivery, human and other resources (such as appropriate facilities, equipment and drugs) and finally all necessary legal frameworks and regulations are in place, and the system is steered by the right leader. The report thus offers a structured overview of the strengths and weaknesses of a country's organizational model for primary care services – including the voices of the professionals and patients concerned – to interested policy-makers and stakeholders. The report focuses on structural performance, and provides for a list of proxy indicators. It does not, however, examine the process or outcome of care itself, and thus its quality. The aim of pilot-testing the tool in Moscow oblast, Russian Federation was to learn more about the structure and the organizational model of primary care in a given country. This is a first and very important step, a baseline, towards discovering how primary care processes and outcomes can be improved. While the validation of the tool was the main objective of the evaluation, we at the WHO Regional Office for Europe hope that this report will contribute to the primary care reform in the Russian Federation.

We thank the many collaborators who generously contributed their ideas and insights to this novel project, and we gratefully acknowledge the financial assistance provided by the Netherlands Ministry of Health, Welfare and Sport in the framework of the partnership programme between the Regional Office and the Netherlands.

Enis Barış, MD, PhD
Director, Country Health Systems (DCS)
WHO Regional Office for Europe

EXECUTIVE SUMMARY

This report summarizes the main results of the WHO Primary Care Evaluation Tool, which was implemented on a pilot basis in Moscow oblast (administrative are), Russian Federation in 2007 in the framework of the 2006–2007 Biennial Collaborative Agreement between the WHO Regional Office for Europe and the Ministry of Health and Social Development of the Russian Federation, an agreement that lays out the main areas of work for collaboration between the parties. Further partners were the Netherlands Institute for Health Services Research (NIVEL) – a WHO Collaborating Centre for Primary Care – and the Russian Federal Research Institute for Information and Organization in Health Care, as well as other stakeholders in the Moscow oblast health system, such as policy experts, managers, family doctors and their patients.

Introduction

The Primary Care Evaluation Tool (PCET) addresses both supply and demand-side aspects of primary care. It is intended to support ministries of health and other stakeholders in the health system in monitoring the progress of their primary care-related policies and reforms and in setting new priorities on the basis of evidence-based information with the aim of further strengthening the primary care level.

Methods

The underlying methodology for the design of the PCET was derived from the WHO 2000 Health Systems Framework *(1)*, which indicates that the performance of a health system is determined by the way in which its functions are organized. The health system functions are: stewardship, resource generation, financing and service provision. The framework of the Primary Care Evaluation Tool encompasses these four functions, together with the key characteristics of primary care services, including: accessibility to services, continuity of care, coordination of care and comprehensiveness. Furthermore, for each of the primary care functions and characteristics, a number of key dimensions and subthemes are identified, and, in a second step, translated into one or more indicators or appropriate proxies. In order to evaluate the complexity of any primary care system, information is gathered on different levels, and from both the demand side and the supply side. The Tool therefore consisted of three questionnaires: a questionnaire concerning the status of primary care at national level, a questionnaire for primary care providers and a questionnaire for patients. Together, the three questionnaires covered all the primary care functions identified and the dimensions and items derived from the Framework. Each questionnaire was prestructured, with precoded answers.

The Tool was pilot tested in 2007 in two rayons (local administrative divisions) of Moscow oblast: Shatura and Stupino. Questionnaires were completed by national policy experts and health system researchers, primary care providers (general practitioners (GPs), and generalist doctors for the adult population (terapevty), and for the child population (paediatricians)) and their patients. The results rely on self-reported behaviour or experiences rather than on direct observations or the systematic analysis of routine data.

Results

- *At national level, based on interviews with national policy experts*
  Stewardship: Primary care, despite the strong commitment of leading government officials and the corresponding appraisals in various basic documents of the federal ministry such as strategic concepts and prikases, does not seem to be placed yet among the highest political priorities as far as the implementation of health care reform is concerned. Stakeholder, such as provider and patient organizations, are not involved in the primary care policy process and patient rights have not yet been regulated. As a result, considerable regional variations exist in primary care provision and education.

  Financing: primary care is funded and provided by the state, although there are also private providers. All public primary care services are free of charge, except for medicines, for which there are co-payments. Even though the level of the primary care providers' salaries has improved since 2005, financial incentives for quality improvement are still lacking.

  Resources: Overall, there has been a scattered introduction of newly trained GPs, since with an average rate of yearly 500 newly trained GPs, the GP workforce is not yet sufficient in numbers to notably change the ratio vis-à-vis *terapevty* and paediatricians, who remain so far the major workforce to provide primary care. However, it is important to note that based on intense consultations and debates between the policy level and the executing and implementing levels within the federal logic of the Russian Federation, an intermediate consensus has been reached to allow the municipal administrations to choose their human resources approach for primary care according to the respective regional needs and possibilities. This means that this can either be based on a GP solo or group practice model or by retaining the former organizational structures of "policlinics" and "women consultations" (predominantly in urban areas) preserving separate mother and child services but with possible functional changes to better meet new challenges. With regard to quality control and improvement mechanisms applied in primary care, the evaluation has shown that they are mostly carried out with a traditional top-down approach. The resource situation with regard to available medical equipment seem to be more favorable for GP practices in Stupino compared to the traditional primary care facilities with *terapevty* and paediatricians in Shatura.

- *At family doctor and patient level, based on the experiences and opinions of the respondents, and routine data*
  Accessibility of care: patients can easily reach the primary care facilities in the two rayons examined. However, the quality of the premises could be improved, as shown by the poor wheelchair access and average assessment of the waiting rooms. Providers spend a relatively large proportion of their time travelling, indicting the inadequate availability of transportation. Overall, patients are satisfied with the availability of primary care staff and the treatment and services they receive.

  Coordination of care: even though primary care (PC) providers do not officially have the role of gatekeeper, patients prefer to see their PC providers first for new health problems. However, newly trained GPs (in Stupino) are not the doctor of first contact for women or children. Interdisciplinary coordination in primary care has not been

well developed. GPs do not generally have working relations with medical specialists. Nurses are extensively involved in administrative tasks.

Continuity of care: patients report that they are assigned to a primary care provider. They are positive about their relationship with their provider, in terms of treatment provided, consultation duration and social skills. Clinical records are mostly kept on paper. Computers are rarely used in primary care for this purpose.

Comprehensiveness of care: newly trained GPs (in Stupino) provide treatment for a wide range of diseases. They also frequently perform medical procedures, except for those involving eyes and ears, and in the cases of women and children. They do not have strong links with the community in which they work.

Table 1:   Overview of selected indicators by primary care function for the pilot rayons in Moscow oblast of the Russian Federation

Functions	Selected dimensions/proxy indicators	Findings Physicians (N=50) Patients (N=1229)
Stewardship/ Governance	Department in Ministry of Health specifically dealing with primary care (PC) *	No; PC is part of the department for medical care
	% of regions, territories, republics * – without any (retrained) GPs so far – with more than 20% GPs	10.2% 6.8%
	% of primary care centres with patient complaint procedure in place	57%
Financing	Employment status of primary care physicians	100% state employed
	% patients reporting co-payments for drugs prescribed in PC	52%
Resource generation	% of all active physicians working in PC *	12%
	% of all primary care physicians working as GPs*	8.5%
	Average age of primary care physicians	48 years
	Hours that PC physicians spend on professional reading (per month)	8.1 hours
	% of medical universities with department of family medicine/ general practice*	90%
	Average number of items of medical equipment available to PC physicians (from a list of 30 items)	20
	% of physicians reporting no or insufficient access to a laboratory	32.5%
	% of physicians reporting no or insufficient access to X-ray equipment	58.5%
	% of PC physicians with a computer in the centre/practice	86%
Service delivery		
Access to services	% of patients living within 20 minutes' travel of PC facility	77%

Functions	Selected dimensions/proxy indicators	Findings Physicians (N=50) Patients (N=1229)
	Average number of registered patients per PC physician: – GPs – *Terapevty* – Paediatricians	1697 2140 708
	Average number of patient consultations per day: – GPs – *Terapevty* – Paediatricians	23 23 24
	Average number of home visits per day: – GPs – *Terapevty* – Paediatricians	5 5 8
	Average working hours per week: – GPs – *Terapevty* – Paediatricians	36 31 36
	Average length of patient consultations (minutes)	18 minutes
	Reported average utilization rate (number of visits) by patient per year	6.5
	% of PC physicians using an appointment system – GPs – *Terapevty* – Paediatricians	45% 30% 30%
Coordination	% of PC physicians sharing premises with other PC physician(s)	60%
	% of PC physicians also have regular meetings with – practice nurse – social worker	85% 51%
Continuity	% of PC physicians keeping medical records routinely	92%
	% of patients assigned to their PC physician (no choice)	90%
	% of patients with their PC physician for at least 3 years	64%
Comprehensiveness	% of PC physicians who frequently use clinical guidelines	87%
	Score for PC physicians' role in first contact care for a selection of 17 health problems (range of score 1 (never) – 4 (always)): – GPs – *Terapevty* – Paediatricians	2.68 2.54 2.08
	Score for PC physicians' involvement in the treatment of a selection of 18 diseases (range of score 1 (never) – 4 (always)): – GPs – *Terapevty* – Paediatricians	3.32 3.55 2.34
	Score for PC physicians' or team members involvement in the provision of a selection of 16 preventive and medical-technical procedures (range of score 1 (never) – 4 (always)): – GPs – *Terapevty* – Paediatricians	2.69 2.14 2.16
	% of PC physicians who have regular meetings with local authorities	47%

Evaluation of the organizational model of primary care in the Russian Federation

Recommended policy action

- Promote primary care as a federal strategic priority, either strengthening the leadership at federal level or strengthening the coordinating role of the federal ministry.

  » The evaluation has shown that there seems to be considerable regional diversity in primary care policy and service provision throughout the Federation, between oblasts as well as between rayons within oblasts. These differences are related both to decentralization of power and to weak central coordination; there is also a lack of resources and managerial capacity at the oblast and rayon levels. Health management courses could be organized for senior and middle-level managers and administrators working in the different institutions that steer primary care at rayon and oblast level and in health facilities might be considered.

- Involve associations of health professionals and nongovernmental organizations more formally in the process of health policy development and aspects of its implementation.

  » The evaluation has shown that organizations of professionals and patients are already involved in the policy-making process but this tends to be on an ad hoc basis. The inclusion of stakeholders on a more formal basis, for example through a standing committee or by officially delegating health policy and implementation responsibilities to them, might be considered.

- Further develop and formalize the role of patients in primary care, for instance by improving complaint procedures in health centres, ensuring better communication of referral rules, and promoting patients' responsibilities in prevention or monitoring their needs on a regular basis.

  » The evaluation has shown that the important role and position of patients is formally acknowledged, but patients are not always aware of their rights; nor are they or PC physicians fully aware of the potential of informed and active patients achieving better health outcomes, for example, in the area of noncommunicable diseases. A public information campaign targeting both the general population and physicians with differentiated messages, using mass media such as radio or television might be beneficial.

- Take measures to reduce the shortages of primary care physicians and nurses. This may also reduce the current high workload of, for example, *terapevty* in some rayons. Consider expanding the job profile for GPs and practice nurses.

  » The evaluation of workforce data has shown that the introduction of GPs in primary care in the whole of the Russian Federation is still in its infancy. In most places primary care is still provided by *terapevty* and paediatricians. To some extent, this may be a result of the severe shortage of GPs. This may point to a lack of educational capacity in general practice or to a lack of interest among physicians (or not enough incentives) embarking on a career as a GP. Full use of existing educational capacities should be considered – and even the possibility of expanding them. Incentives such as free Internet connections and e-learning programmes for GPs and nurses in rural areas could prove attractive. The repu-

tation of GPs as a profession could be improved by subsidizing and supporting research by them or expanding the general practice task profile, in particular, the GPs' role as the health care entry point, the provision of family planning, some paediatric services and some gynaecological services such as cervical cancer screening. The introduction of new disciplines in primary care could also be considered: the nurse practitioners would free GPs for other tasks and would enhance the role of the nurse towards being more of a full team member, with more clinical tasks and less paper work and secretarial tasks.

- Improve the coordinating role of GPs by removing obstacles to collaboration and working relations between GPs and secondary level medical specialists (strengthening the GPs' role as the first contact point); and support cooperation with the community and social services.

    » The evaluation has shown that there is almost no formalized multidisciplinary team work within primary care or between levels of care to the benefit of, for example, patients with chronic diseases or multiple morbidities. Team working schemes for the core primary care team should be introduced and training provided. Disease management programmes that include pathways for patients through primary and secondary care levels should be formalized. Stronger links between primary health care facilities and the community should be stimulated to enhance coordination between the health and social services.

1 EVALUATING PRIMARY CARE: AN INTRODUCTION

Why evaluate primary care?

Although the strengthening of primary care services is a priority of health reforms in many countries, in both central/eastern and western Europe, the backgrounds to and reasons for the reforms are not similar. In western Europe, emphasis on primary care is expected to provide an answer to questions of rising costs and changing demand resulting from demographic and epidemiological trends. Central and eastern European countries, as well as countries of the former Soviet Union, are struggling to fundamentally improve the performance of their entire health systems. Primary care, which used to be poorly developed or nonexistent in these countries, is now being developed to bring adequate and responsive health services closer to the population.

In many countries in transition, health reforms are part of profound and comprehensive changes in essential societal functions and values *(2)*. Reforms of (primary) care are not always based on evidence, and progress is often driven by political arguments or the interests of specific professional groups, rather than by the results of sound evaluations.

However, policy-makers and managers nowadays increasingly demand evidence of the progress of reforms and the responsiveness of services. Health systems continue to cope with old problems, like tuberculosis, but also need to adapt to changing needs and demands that require the development of new services and new models of delivery. A relatively new feature is evaluation of the responsiveness of health services from the patients' perspective. Such evaluations generate information about responsiveness, access and convenience of services, aspects of treatment by staff and the quality of information and coordination. This shows that the evaluation of primary care needs a framework, as there are so many aspects that are important to monitor.

Evaluating primary care and the health systems framework

A health system can be defined as a structured set of resources, actors and institutions related to the financing, regulation and provision of health actions that provide health care to a given population. Health action is conceived as any set of activities whose primary intent is to improve or maintain health. The overall objective of a health system is to optimize the health status of an entire population throughout the life cycle, while taking account of both premature mortality and disability *(3)*.

Health systems aim to achieve three fundamental objectives *(1,3)* as shown below.

- *Improved health* (for instance, better health status and reduced health inequalities).

- *Enhanced responsiveness to the expectations of the population*, encompassing:

  » respect for the individual (including dignity, confidentiality and autonomy);

» client orientation (including prompt attention, access to services, quality of basic amenities and choice of provider).

- *Guaranteed financial fairness* (including households paying a fair share of the national health bill; and protection from financial risks resulting from health care).

The level of attainment of these goals reflects the performance of the system as a whole. However, as there are variations in health conditions and health systems across countries, the country context needs to be taken into account when comparing the performance of health systems. Thus, the measurement of performance connects goal attainment to available resources.

The WHO health system performance framework (see Fig. 1) indicates that performance is determined by the way in which the following four key functions are organized *(3)*:

- *stewardship*

- *generating resources*

- *financing*

- *service provision.*

Other approaches to performance measurement can be found in the international literature *(4,5,6,7)*. However, they all use similar insights or related concepts. The four functions can be applied to the whole health system of a country – or, for example, to the primary care level only – with specific subcharacteristics for the service provision function.

Figure 1: WHO health system functions and objectives
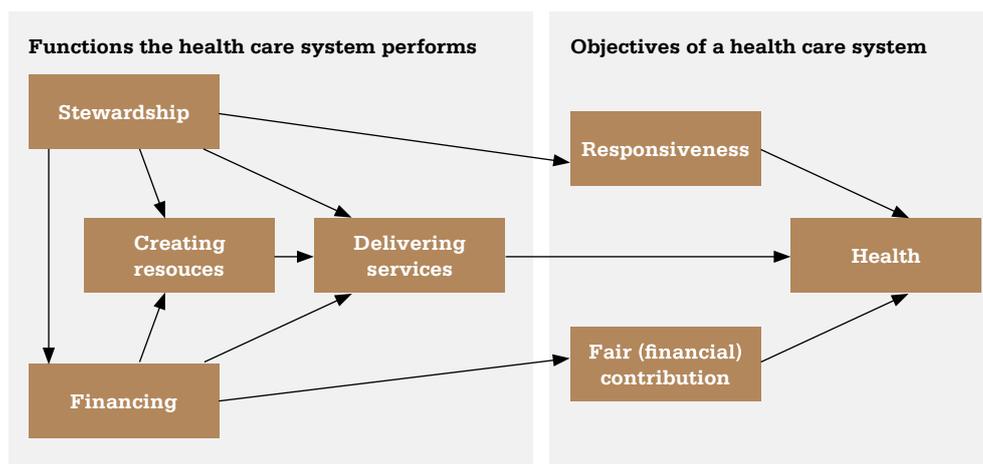
What is the meaning of the four system functions?

Stewardship

Stewardship is an overriding function (but broader than regulation), in that it oversees all basic health system functions. It has direct and indirect effects on the outcomes of a health system *(1)*. Stewardship encompasses the tasks of defining the vision and direction of health policy, exerting influence through regulation and advocacy, and collecting and using information. It covers three main aspects: a) setting, implementing and monitoring the rules for the health system; b) assuring a level playing field for purchasers, providers and patients; and c) defining strategic directions for the health system as a whole. Stewardship can be subdivided into six subfunctions: overall system design, performance assessment, priority setting, regulation, intersectoral advocacy and consumer protection *(3)*. In short, stewardship deals with: governance, information dissemination, coordination, and regulation of the health system at various levels.

Resource generation

Any level of a health system needs a balanced variety of resources to function properly, but these have to be further developed (and expanded) in order to sustain health services over time and across levels and geographical areas. The resources needed encompass physical assets (equipment, facilities), consumable supplies, human resources and knowledge/information. It is crucial that the quantity and quality of human resources is adequately matched to the demand for services across the various levels of health care and equitably distributed across the country. Naturally, to ensure quality of care, the skills and knowledge of health providers need to be up-to-date and compatible with developments in technology and evidence-based medicine. Policy development concerning human/physical resource planning, and a regulatory framework for assuring high quality service provision and consumer protection falls under the stewardship function – however, the actual state of affairs relating to workforce volume and distribution and professional development (training, continuous medical education, research, knowledge production) is usually measured under the resource generation function.

Financing

In general, financing deals with the mobilization, accumulation and allocation of funds to cover the health needs of the people, individually and collectively, in the health system *(8)*. The financing function in health systems is defined by Murray and Frenk *(3)* as "the process by which revenues are collected from primary and secondary sources, accumulated in fund pools and allocated to provider activities". Three subfunctions can be distinguished: revenue collection, fund pooling, and purchasing. Revenue collection means the mobilization of funds from primary sources (households, firms) and secondary sources (governments, donor agencies). There are a number of mechanisms through which funds can be mobilized, varying by health systems context, e.g. out-of-pocket payments, voluntary insurance rated by income, voluntary insurance rated by risk, compulsory insurance, general taxes, earmarked taxes, donations from nongovernmental organizations (NGOs) and transfers from donor agencies. In order to share and reduce health risks, funds can be pooled through various forms of health insurance. The allocation of funds to cover the costs (staff, durables and running costs) of specific health service interventions by health providers (institutional or individual) is purchasing *(3)*. The way these subfunctions are organized and executed has an impact on the access to health services.

Service delivery

Service provision involves the mix of inputs needed for the production process within a specific organizational setting leading to the delivery of health interventions *(3)*. It relates to preventive, curative and rehabilitative services delivered to individual patients and to services aimed at larger populations (e.g. health education, promotion) through public and private institutions. Providing services is something that the health system does (and there are four key characteristics that define "good provision"; see below) – it is not what the health system is.

The Primary Care Evaluation Framework

The characteristics of primary care vary from country to country, and there are different (normative) definitions of what constitutes primary care (see also Annex 1). However, a comprehensive "good" primary care system has the following characteristics:

> Primary care is that level of a health system that provides entry into the system for all new needs and problems, provides person-focused (not disease-oriented) care over time, provides care for all but very uncommon or unusual conditions, and coordinates or integrates care provided elsewhere or by others *(9)*.

The Primary Care Evaluation Framework (see Fig. 2) from which the Primary Care Evaluation Tool (PCET) is developed, encompasses the four functions of a health care system (as mentioned above), combined with the four key characteristics of primary care services that are part of service delivery, as derived from the above definition.

Figure 2:   Primary Care Evaluation Framework
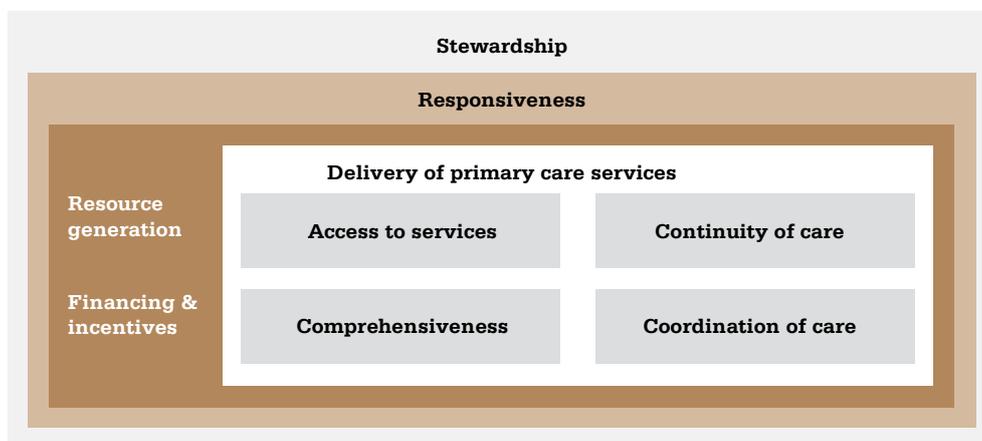
What do the four key characteristics of a "good" primary care system mean?

Access to services

In general, access to health services can be defined as the ease with which health care is obtained *(5)*. Alternatively, it can be defined as "the patients' ability to receive care where and when it is needed" *(10)*. There are various barriers of a physical, psychological, sociocultural or financial nature that can restrict accessibility. Included in the PCET scheme are, for instance, geographical limitations (distance to and distribution

of general practices = geographical access), and factors related to the organization of primary care practice (office opening hours, distant consultations, timeliness = organizational access), as well as the costs incurred by patients (cost-sharing, co-payments = financial access).

Continuity of services

An important feature of primary care is that health care interventions should be geared to patients' health care needs over a longer period and cover successive episodes of care/treatment. A general definition of continuity is the "follow-up from one visit to the next" *(11)*. WHO provides a more comprehensive definition, which takes into account the (possible) involvement of various health care providers. It is described as "the ability of relevant services to offer interventions that are either coherent over the short term both within and among teams (cross-sectional continuity), or are an uninterrupted series of contacts over the long term (longitudinal continuity)" *(10)*.

Several levels of continuity can be distinguished *(12)*: first, informational continuity that relates to an organized body of medical and social history about each patient, accessible to any health care professional caring for the patient. Second, there is longitudinal continuity, which points to a specific locus where a patient customarily receives health care from an organized team of providers in an accessible and familiar environment. Third, interpersonal continuity, which is defined as an ongoing personal relationship between the patient and the care provider, is characterized by personal trust and respect *(12)*. Furthermore, Reid et al. *(13)* add another level, namely, management continuity: the provision of timely and complementary services within a shared management plan. The PCET scheme includes informational, longitudinal and interpersonal continuity of care.

Coordination of delivery

Particularly because primary care is the entry point to health care and often serves a gatekeeping function to other levels of care, the coordination of services at primary care level is an important determining element in the responsiveness of health services provision and the health system as a whole. The potential for problems in coordination is particularly evident at the interface between primary and secondary care, or between curative care and other (public health) services in the field of health promotion *(14)*. A general definition of coordination is "a technique of social interaction where various processes are considered simultaneously and their evolution arranged for the optimum benefit of the whole" *(8)*. More specifically, it can be defined as "a service characteristic resulting in coherent treatment plans for individual patients. Each plan should have clear goals and necessary and effective interventions, no more and no less. Cross-sectional coordination means the coordination of information and services within an episode of care. Longitudinal coordination means the interlinkages among staff members and agencies over a longer period of treatment *(10)*. In the PCET scheme, the various dimensions of coordination encompass collaboration within the same primary care practice, within the same level between primary care providers (e.g. family doctors, district nurses, physiotherapists, etc.) and between primary care and other levels of care through referral systems.

Comprehensiveness

Comprehensiveness can be defined as the extent to which a full range of services is either directly provided by a primary care physician or specifically arranged elsewhere *(15)*. In the primary care setting, comprehensiveness refers to the fact that services comprise curative, rehabilitative and supportive care, as well as health promotion and disease prevention *(14,16)*. The comprehensiveness of services is not only manifested in the specific range of services provided but also, and related to that, the practice conditions, facilities and equipment, as well as the professional skills level of the primary health service provider. In addition, the community orientation of primary care workers plays a role. All these dimensions have been taken into consideration for the PCET scheme.

The Primary Care Evaluation Scheme

Taking the Primary Care Evaluation Framework (1) as its basis, the Primary Care Evaluation Scheme focuses on specific issues, policies and health care priorities relevant to countries, and consists of measurable topics and items related to current national priorities for change in primary care and the facilitating conditions. The primary care evaluation scheme forms the basis of the Primary Care Evaluation Tool (PCET).

The scheme is structured as follows:

- stewardship

- financing and incentives

- resource generation

- delivery of primary care, subdivided into:

  » accessibility
  » continuity care
  » coordination of care
  » comprehensiveness of services.

Table 2 shows that, for every primary care system function, a number of key dimensions have been identified, reflecting subthemes. Each dimension has, in its turn, been translated into one or more information items or proxy indicators for the dimension.

Table 2: Overview of selected functions, dimensions and information items

Function	Subfunction	Dimension	Selected items/proxies
Stewardship		Policy development	PC policy priorities
		Professional development	(RE-) Accreditation system for PC
			Quality assurance mechanisms for PC
		Conditions for the care process	Laws and regulations
			Human resources planning
		Conditions for responsiveness	Involvement of professionals and patients in the policy process
			Patient rights; complaint procedures
Resource generation		Workforce volume	Numbers and density
		Professional development	Role and organization of professionals
			Education in PC
			Scientific development and quality of care
		Professional morale	Job satisfaction
		Facilities and equipment	Medical equipment
			Other equipment
Financing and incentives		Health care/PC financing	PC funding
		Health care expenditures	Expenditures on PC
		Incentives for professionals	Entrepreneurship
			Mode of remuneration
		Financial access for patients	Cost sharing/co-payment for PC
Delivery of care	Access to services	Geographical access	Distance to PC practice
			Distribution of PC physicians
		Organizational access	List size
			PC provider workload
			PC outside office hours
			Home visits in PC
			Electronic access
			Planning of non-acute consultations

Function	Subfunction	Dimension	Selected items/proxies
		Responsiveness	Timeliness of care
			Service aspects
			Clinics for specific patient groups
	Continuity	Informational continuity	Computerization of the practice
			Medical records
		Longitudinal continuity	Patient lists
			Patient habits with first contact visits/ referrals
			Endurance of patient-provider relationship
		Interpersonal continuity	Patient-provider relationship
	Coordination	Cohesion within PC	PC practice management
			Collaboration among general practitioners/family doctors
			Collaboration of PC physician with other primary care workers
		Coordination with other care levels	Referral system/gatekeeping
			Shared care arrangements
	Comprehensiveness	Practice conditions	Premises, equipment
		Service delivery	Medical procedures
			Preventive, rehabilitative, educational activities
			Disease management
		Community orientation	Practice policy
			Monitoring and evaluation
			Community links
		Professional skills	Technical skills

In order to evaluate the complexity of any primary care system, information is gathered on different (administrative) levels, and from the supply and demand sides, i.e. from health providers and patients (including both objective and subjective measures). Therefore, the Primary Care Evaluation Tool consists of three separate questionnaires: a questionnaire concerning the situation of primary care policies at national level, a questionnaire for primary care doctors (as considered in the given country), and a questionnaire for patients. Together, the three questionnaires cover all identified primary care functions, their dimensions and information items, as derived from the scheme. Each questionnaire has been prestructured with precoded answers.

2 EVALUATING PRIMARY CARE IN MOSCOS OBLAST, THE RUSSIAN FEDERATION: SOME RESULTS FROM A PILOT PROJECT

2.1. Overview of the implementation process of the project in Moscow oblast

The activities of the pilot project began in February 2007 and were completed in March 2008. The project partners of the WHO Regional Office for Europe – besides the Ministry of Health and Social Development of the Russian Federation – were the federal agency, the Russian Federal Research Institute for Information and Organization in Health Care, and the Netherlands Institute for Health Services Research (NIVEL), in its capacity as WHO Collaborating Centre for Primary Health Care.

The results and conclusions were discussed at a review meeting with international experts at the WHO Regional Office for Europe in Copenhagen on 14 and 15 April 2008. Experiences in using the Tool during the pilot studies, and comments and recommendations made at the review meeting resulted in a revision of the three questionnaires. A second pilot study was conducted in Turkey – the results are described in a separate country report. The following gives a short overview of the implementation process.

2.1.1. Preparatory phase

Literature review
Using the WHO performance framework as a conceptual basis for the Primary Care Evaluation Scheme, a directed literature review was conducted by the researchers at NIVEL. The literature review aimed to gather information on possible ways to operationalize the identified and selected key primary care system functions. Particular attention was paid to useful primary care indicators and existing (primary care) performance measurement and evaluation tools and questionnaires.

For this purpose, PubMed, Google Scholar and the NIVEL library were consulted. The search was conducted by using free text terms such as "primary health care" in combination with "performance tool", "performance assessment", "performance indicators", "task performance and analysis", "quality indicators", "patient satisfaction", "stewardship", "reform", "policy", "evaluation", "financing", "resources", "coordination of care", "continuity of care", "comprehensiveness of care", "access", "preventive care", "accreditation", "integration", "medical records", "professionalism", "gatekeeping", and "list system". The search resulted in 350 hits, of which the most relevant were selected.

Preparatory meeting
After the first draft version of the Primary Care Evaluation Scheme was developed, an international preparatory meeting was held in March 2007 with the participation of,

inter alia, representatives from the Russian Federation. The objectives of the meeting were as follows:

- to strengthen commitment among stakeholders to the development, implementation and application of the Primary Care Evaluation Tool;

- to learn about international experiences and existing instruments;

- to discuss and reach consensus on key concepts and definitions used;

- to discuss and validate the provisional set of dimensions, proxy indicators and information items and to improve the first version of the scheme in order to develop the questions for the questionnaires;

- to prepare first steps for the pilot implementation of the questionnaires.

The general requirements, possible approaches and preliminary timing of activities were discussed and two countries were selected for the pilots to take place: Turkey and the Russian Federation.

Drafting, validation and translation of questionnaires

On the basis of the information and feedback from the preparatory meeting, the draft versions of the questionnaires were developed. These were then forwarded to the meeting participants for comment and possible suggestions for change (clarity, omissions, terminology). This revision round also offered the experts the possibility of involving and consulting with other experts in their country and thus broadening the basis for validation. When all comments and inputs for revision were processed, the final versions in English of the three questionnaires were established. As the questionnaires were tailored to the national situations, the versions developed for Turkey and the Russian Federation were slightly different: for example, the final version of the national level questionnaire contained 60 questions for the Russian Federation and 54 for Turkey covering: primary care policy, legislation and rules; workforce volume, training and education; health financing; and coordination. An annex was also included, with questions on statistical data to be filled in by experts from the Ministry of Health and Social Development. This annex contained 18 questions for the Russian Federation and 14 for Turkey, mainly on baseline health care and workforce data, funding sources, budgets and payments. Similarly, the final version of the primary care provider questionnaire had 55 questions for the Russian Federation and 54 for Turkey, with the following sections: basic provider information, including education and professional association membership; location of and number of patients covered by the practice; workload and practice staff; accessibility; quality improvement and research; patient information; employment and income of the provider; coordination and teamwork; and equipment and clinical tasks. The final version of the patient questionnaire had 26 questions for the Russian Federation and 25 for Turkey, with the following main content areas: basic patient information; visiting behaviour and continuity of care; payment for services; patient opinion on access, responsiveness and quality of primary care services and patient opinion on the cooperation between health care providers.

Subsequently, these final versions were translated into the respective country languages in a check and double-check procedure. The translations were first made into the local language with inputs from an expert in primary care. Subsequently, a back-translation was made and compared with the original version.

2.1.2. Implementation phase and field work

Meetings in the Russian Federation

The international project team met twice in the Russian Federation (in April and October 2007) with the local partner institute and other stakeholders to prepare the implementation of the Tool and to organize the collection of data. The following activities were carried out during these visits:

- discussion of final details of the questionnaires, resulting in (minor) changes;

- information to and exchange with national working groups that had been established for the guidance of the project and dissemination of results;

- information to the selected rayon health authorities of Moscow oblast about the pilot study and the planned activities;

- site visits to the selected rayons;

- instruction/training of field workers (for instance, in respect of the confidential nature of the surveys);

- discussion of details of the sampling and recruitment procedure with the national coordinator and others;

- discussion of details of the data collection strategy and logistics;

- preparation for data entry and related instruction;

- facilitating the meeting with the national experts who filled in the national level questionnaire, in order to achieve consensus on "factual" questions (the "consensus meeting").

Choice of pilot areas, sampling, data collection and processing

The health system in the Russian Federation is still under reform in many oblasts. A system of primary care with general practitioners is being introduced in some oblasts, but most still have the former Semashko system, with specialists. Given this transitional situation, it was decided to compare two rayons within one oblast (Moscow oblast was chosen because it was logistically the easiest to access): one rayon with a reformed primary health care system where family doctors or general practitioners have been introduced; and one rayon still based on the old Soviet Semashko system, where specialists are dominant in primary health care. Consequently, Stupino rayon in the Moscow oblast was selected as a pilot area representative of the reformed system, and Shatura district was chosen as representing a region in an early stage of reform.

Stupino rayon has a population of about 150 000 (2006) and the main city, Stupino, has about 68 000 inhabitants. Stupino is a modern town with major health and educational institutions, and many modern industries located in the surrounding area. The basic structure of health services in Stupino district in 2005 was as follows:

- rural: a) out-patient units with GPs; b) family practice centres with day-stay beds and out-patient care;

- urban: polyclinics/family centres: three with preventive health departments, day-stay beds (10) and secondary care (e.g. for hypertension etc.);

- peri-urban (5000 population): hospital polyclinic: dispensaries; and group practices (GPs; paediatricians; *terapevty*; nurses).

Stupino has a central hospital, two rayon hospitals, two polyclinics and 17 feldsher posts (staffed by medical assistants, or feldshers). In Stupino town, a modern state-of-the-art emergency station has recently been established. At present the primary care system is under further reform, with all primary care physicians being retrained in general practice and a roll-out of the newly trained GPs to rural areas planned to take place. Day care and home care is promoted and collaboration between primary care and social services encouraged. The policy aim is to reduce the number of hospital beds and secondary/tertiary care utilization rates in order to make health care more (cost)efficient. At the time of the survey, there were 47 general practitioners in Stupino, some of whom worked in group practices. A threefold increase in consultations was observed recently, as a result of the extension of practice opening hours. The income of general practitioners is not capitation-based, but a combination of basic salary, with supplement payments (based on additional specialties) and a bonus system (related to number of visits; vaccination rates; and number of special cases treated).

Shatura rayon is a relatively young (< 70 years) rayon within Moscow oblast with a pre-dominantly agricultural economy. The major local industry is furniture manufacturing. The population was approximately 71 000 people in 2002, but is growing because of significant levels of immigration. There are seven municipalities. Shatura town is the administrative centre, with a population of about 30 000 (2002).

The health system in Shatura is still based on the old Soviet system but is currently being reformed; the medical infrastructure is being upgraded with priority on the rural areas. The number of physicians in the population is around the national average (53/100 000). Between 2002 to 2006, the number of hospital beds declined by one third, while the number of visits to feldshers doubled (average of 70 000 per year). Shatura has 1 central and 6 smaller ones, with a total of 665 beds and 18 specializations. There are 4 polyclinics, 12 rural outpatient units and 21 feldsher posts. Shatura has 2 general practitioners as of yet, but there are 29 *terapevty*, 14 paediatricians and 22 feldshers. In Shatura town, there are 12 *terapevty* and 8 paediatricians. Furthermore, there are two emergency stations and 12 radio-equipped ambulances (2006). The main health problems in Shatura are respiratory infections, cardiovascular diseases (CVDs), cancers and muscoskeletal disorders. Life expectancy is lower for men (58 years) than women (73 years).

Since the selected pilot areas of Stupino and Shatura still have different "systems" in terms of the type of primary care physicians working there, the sampling approach was adjusted accordingly: Stupino had a total of 47 registered general practitioners and it was decided to include them all in the sample. In Shatura, with 2 general practitioners at the time of the survey, it was decided to sample all those considered to be primary care physicians; this did exclude feldshers, but resulted in a similar sample size to that of Stupino: all 29 active *terapevty* (26 in hospitals and 3 in polyclinics) and 14 paediatricians (12 in hospitals and 2 in polyclinics), as well as the 2 GPs were selected for inclusion in the survey, making a total of 45. The samples covered both urban and rural areas.

For the patient questionnaire, it was decided to interview the first 20 patients of the selected primary care physician on the given data collection day. For logistic reasons, interviews would take place in the polyclinics/family practice centres. This resulted in a total of 1800 targeted patients (940 in Stupino; 900 in Shatura), the actual response rate however was lower (see Table 3).

Given the large distances between the pilot areas and the time available, it was decided to work with locally recruited field workers, in this case students from a nursing school. The training of field workers was designed by NIVEL and carried out by the local partner, the Russian Federal Research Institute for Information and Organization in Health Care, which was also responsible for the distribution and collection of the questionnaires. The training consisted of clarification and instructions concerning:

- the objectives of the survey, including the importance of monitoring primary care and the usefulness of the survey outcomes for policy-making;

- the basic principles and structure of the Tool, the type of questions used and how answers should be given;

- the specific contents of the tool, i.e. topics of the system checklist, and provider and patient questionnaires;

- selection of the research locations, primary care providers and patients;

- how to conduct the field work, including how to approach and assist respondents; how to establish a good rapport by clearly explaining the purpose of the survey and stressing confidentiality; how to deal with nonresponse; and how to minimize bias caused by the field worker (neutrality, patience, aloofness);

- selecting a suitable environment for patients to fill in the questionnaire, guaranteeing minimum interference by third parties and unbiased answers;

- how to check the quality and completeness of responses;

- how to record any questions/problems encountered during field work.

To safeguard confidentiality, the completed questionnaires were collected by the field-workers, checked and then dispatched in a sealed envelope directly to the Russian Federal Research Institute for Information and Organization in Health Care.

The consensus meeting with national experts from various stakeholders in the health system, such as the Ministry, regional health authorities, representatives of health professional organizations and researchers from the local partner, the Federal Research Institute for Information and Organization in Health Care, took place in October 2007, facilitated by NIVEL staff and based on the national level questionnaire/checklist. The meeting resulted in the collection of relevant background data on primary care reforms; however, it also resulted in substantive discussions on primary care developments in the Russian Federation, especially when the experts' answers varied on specific topics.

To facilitate the data processing, a tailor-made data-entry programme was designed, using SPSS Data Entry Station version 3.0.3. For the Russian questionnaires, the data entry was done by the local partner, the Russian Federal Research Institute for Information and Organization in Health Care. The cleaning of the data files and the analysis was done by NIVEL in the Netherlands. Details on the implementation process in Moscow oblast, the Russian Federation are summarized in Table 3 below.

Table 3:   Overview of the implementation process in Moscow oblast, Russian Federation

Features of data collection	Explanation
Target groups	• GPs • Paediatricians • *Terapevty* • Patients • National primary care policy experts
Locations	• Shatura rayon • Stupino rayon
Type of data collection	• GPs/Paediatricians/*Terapevty*: survey using pre-structured questionnaires disseminated by fieldworkers • Patients: survey using pre-structured questionnaires disseminated by fieldworkers • National experts: pre-structured questionnaires and discussion / consensus meeting
Period of data collection	15 October – 5 November 2007
Sampling method	• GPs: population (all) in Stupino and Shatura • Paediatricians: population (all) in Shatura • *Terapevty*: population (all) in Shatura • Patients: the first 20 patients visiting the selected physician • National experts: selected by local partner
Sample size (required by researchers)	• GPs: Stupino: 47; Shatura: 2 • Paediatricians: Shatura: 14 • *Terapevty*: Shatura: 29 • Patients: Stupino: 940; Shatura: 900 • National experts: 5–10
Response	• GPs: Stupino: 23 (49%); Shatura: 2 (100%) • Paediatricians: Shatura: 14 (100%) • Terapevty: Shatura: 13 (45%) • Patients: Stupino: 701 (75%); Shatura: 528 (61%) • National experts: 9

Evaluation of the organizational model of primary care in the Russian Federation

Features of data collection	Explanation
Instructions	• Local partner instructed on details of sampling procedure and recruitment • Fieldworkers instructed and trained on how to approach and assist respondents • Questionnaires contained instructions on completion
Coordination and support of fieldwork	• Local partner coordinated the fieldwork • Fieldworkers shared experiences with local partner during fieldwork phase
Data entry	By local partner in Russia, in line with agreed guidelines and using the data entry programme provided by NIVEL
Data analysis and reporting	At NIVEL

2.2　Policy experts on developments in primary care in the Russian Federation: some results of the survey

This chapter gives a (nonexhaustive) sketch of the current context of primary care in the Russian Federation, showing relevant trends and pointing to the large regional variation in the regulation and provision of health services. The following aspects will be considered: legislation and regulation, financial arrangements, workforce, education of providers, and aspects of coordination and teamwork. Most data for this chapter have been collected by means of a questionnaire (system checklist) and a consensus meeting with a panel of experts from various departments of the Ministry of Health and the Federal Research Institute for Information and Organization in Health Care.

Thus, this chapter is based on the experiences and in opinions of a selection of experts. After the experts had filled in the questionnaire individually, a consensus meeting was organized to discuss the answers, to try to reach consensus and to provide clarification of and background to the responses. Statistical background information was provided separately by the Ministry of Health and Social Development. Where indicated, information about health reforms and health legislation and regulation has been derived from the publication *Health Care Systems in Transition; Russian Federation (17)*.

Further, this chapter provides the context for the results of the surveys of primary care physicians and patients in the rayons of Stupino and Shatura. In describing the results, reference has been made to the health systems functions and selected dimensions of the Primary Care Evaluation Scheme outlined in Table 2.

2.2.1.　Stewardship aspects of primary care developments

• **Dimension: policy development**

Primary care-related policies and regulations
The start of primary care reforms goes back to the times of the former Soviet Union in 1987, when a policy paper on the concept of primary care was issued. Since then, a number of decrees (prikaz) have given further detail on how this vision should be implemented. A decree issued in 1997, entitled "Concept of health care and medical science development in the Russian Federation", specified the following goals: improvement of

health care organization; financing and modernization of management; maintenance of sanitary-epidemiological well-being; development of medical science; improvements in medical education. It also extended the period of implementation of the concept to 2010 *(17)*.

There are no laws in the Russian Federation that deal specifically with primary care, and primary care has never been given its own department in the Ministry of Health. Since 1998, after the above-mentioned decree was issued, primary care has been the responsibility of the department of organization of medical care.

Poorly articulated policy and a lack of drive seem to be a problem in the health sector as a whole. A 'Health for All' policy has never been officially adopted. Implementation of the 1997 health care strategic concept, which was officially adopted, stagnated because of the lack of any mechanism. According to Health Care Systems in Transition: the Russian Federation (HiT), there are a number of key obstacles to developing a coherent health care policy in the country:

- health and health care are not government priorities;

- the Ministry of Health hesitates to take a leading role in strategic planning;

- there is a lack of technical expertise, political will and information for health policy;

- there is a shortage of financial and institutional resources to back up health policies;

- the Ministry of Health lacks the necessary authority over the regions to enforce such a policy on a national level *(17)*.

Regional diversity

The Russian Federation is an enormous territory in which much power has been decentralized to republics and oblasts. This is also true for the delivery of primary care since – with decentralization – there is a certain degree of freedom to develop regional policy. There is scope for regional and local authorities to guide policy-making and customize provision to local needs. The role of federal legislation and regulation is to give overall directions and set minimum norms or targets. Within this framework, details can be filled in according to regional needs and possibilities. For instance, there are federal norms for the number of primary care physicians per given population and their tasks and responsibilities are the same all over the Federation. Financial access for patients (for instance, co-payments) is also uniform. However, the type of physicians who provide primary care (GPs for the whole population, or terapevty for adults and paediatricians for children) and how they are paid (salary or, for example, performance-based remuneration) may differ from region to region. Regional laws usually elaborate on federal laws or modify them, but some have no link whatever to or even go beyond federal legislation. In the Republic of Karelia, for instance, there are laws on 'patients rights' and on 'primary medical care', which do not have equivalents at the federal level. It may be concluded that health policy and decision-making across administrative levels is not well coordinated.

Where insurance companies operate, the situation may be more complicated as a result of the additional shift of power to these nongovernmental third-party payers. The HiT concluded that there is considerable evidence that not all oblasts and rayons are able to meet the responsibilities devolved to them. There is a lack of financial and managerial capacity that has led to a decision-making vacuum in some areas *(17)*.

- **Dimension: conditions for the care process**

Relevant laws and regulation since 1992

Despite little direct attention being paid to primary care, there have been laws and regulations adopted in the Russian Federation with clear implications for primary care. The following list of laws, decrees, orders and governmental decisions provides for a background to the current situation of primary care *(17)*.

- Law of the Russian Federation On "Krai and oblast councils and krai and oblast administrative bodies" (1992), establishing that krais and oblasts have the same rights as republics, for instance concerning their own health services. This was a step towards decentralization and local powers to determine levels of health care funding and provision in line with federally established minimum standards.

- Order of the Ministry of Health on "The phased transition to primary health care based on the work of the general practitioner or family physician" (1992), recognizing the term "primary health care" for the first time and setting out plans to extend primary care units, increase the number of primary care nurses and give them greater responsibility, and provide special training for GPs.

- Law on "Certification of production and services" (1993), establishing rules for obligatory certification in accordance with requirements on the quality of various medical goods and services.

- Law on "Fundamentals of the Russian Federation legislation on citizens' health protection" (1993), concerning protection of health of the citizens, the competences of executive bodies, principles for a system of health protection, improvements in public health services and in the quality of health care services, and protection of the rights and interests of patients and medical and pharmaceutical workers. For the first time, problems of health were considered to be a public priority.

- Constitution of the Russian Federation (1993) establishing conditions for the fulfilment of basic rights of citizens in the Russian Federation. Item 41 specifies the right of the citizen to protection of health and medical care.

- Order of the Ministry of Health (1994), adopting a list of essential drugs, covering 96 drugs in 31 categories, and exempting certain population groups from payment.

- Order of the Ministry of Health "Regulation on obtaining permission to carry out professional (medical and pharmaceutical) activities" (1994), outlining the rules that must be followed to receive permission for conducting professional work.

- Decision of the Government on "Confirmation of a regulation on licensing medical activity" (1996), ratifying the regulation concerning the rules for medical personnel to obtain a license.

- Order of the Ministry of Health on "Certification of doctors in general practice" (1996).

- Order of the Federal Mandatory Health Insurance Fund on "Organization of work regarding letters, complaints and suggestions of the citizens of the Russian Federation" (1997), demanding that all constituent areas of the Russian Federation follow the rules outlined in the order in responding to all citizen's complaints concerning the provision of health care.

- Decision of the Government on "Concept of health care and medical science development in the Russian Federation" (1997), stating the basic goals of health care system development, as outlined by the Ministry of Health: improvements in the organization of health care; consideration of the issues of financing and modernization of management; maintenance of sanitary-epidemiological well-being; development of medical science; improvements in the system of medical education and personnel selection etc. The Government ratified the plan on the implementation of this concept in 1997–1998 in order to guarantee the rights of citizens to health and medical care, to achieve economic stability and improve the efficiency of health services and medical science, and it has been extended up to 2010.

- Order of the Federal Mandatory Health Insurance Fund on "Observance of confidentiality with respect to items of information which constitute medical secrets" (1998).

- Order of the Ministry of Health on "Introduction of the classifier of simple medical services" (1998), listing professional medical standards to be followed in order to ensure high-quality medical care.

- Order of the Ministry of Health "Ministerial programme on general (family) practice" (1999), developing the concept of the general practitioner as equivalent to a family doctor and specifying the legal, organizational, informational and financial mechanisms necessary for the development of family practice.

- Recommendations on "The territorial guaranteed package programme providing free medical services to citizens of the Russian Federation" (2000). These define the purposes, principles, structure and order of the territorial programmes, and establish norms for volume and cost of care. This methodology is to be used by authorities of the constituent areas of the Russian Federation to develop their own programmes.

- Order of the Ministry of Health on "The representatives of the Ministry of Health in federal regions" (2000). Since the administrative reorganization of the country into seven divisions in 2000, permanent representatives of the President have been placed in each of the divisions. There are also posts of representatives of different ministries, including representatives of the Ministry of Health (often professors of medical universities).

- Decision of the Government on "Confirmation of a regulation on licensing medical activities" (2001), governing the licensing of medical activities carried out by legal entities and individual businesses.

Specific subjects in laws and regulation

The 1997 concept policy paper, *Concept of health care and medical science development in the Russian Federation* laid down the main principles of and formed the basis for a comprehensive reform: from a list of 17 major items for regulation, there was only one item that the national policy experts (at our consultation meeting) considered had not been dealt with. The items that are regulated can be summarized as follows:

- identification of the disciplines responsible for the provision of primary care;

- specification of responsibilities and tasks of GPs, *terapevty*, paediatricians and nurses;

- specification of educational requirements for GPs, *terapevty* and paediatricians;

- specification of requirements for (re-)accreditation of GPs, *terapevty* and paediatricians;

- minimum norms for availability of GPs, *terapevty* and paediatricians in a population;

- minimum norms for availability of primary care facilities in rural areas;

- requirement on keeping medical records in primary care;

- requirement on monitoring the performance of primary care;

- specification of primary care policy targets (including date of achievement);

- mention of interprofessional cooperation in primary care as a priority.

The item not mentioned in the policy paper – according to the expert panel – was the specification of possible co-payments for patients.

Policy papers dealing with primary care do not specify the role of medical professional organizations or organizations representing patients or consumers. According to the expert panel, there is no reason to mention a role for professionals in the policy process. As far as consumers are concerned, the experts judged that their rights are protected separately, in the law on consumer protection.

- **Dimension: Conditions for responsiveness**

Specific legislation or regulations on the position of patients in health care is relatively rare. As mentioned above, the protection of patients is supposed to be covered by the general law on consumer protection. There is no separate law on patients' rights as yet. This is probably why health facilities and primary care doctors are not formally obliged

to have a complaint procedure for patients to express their dissatisfaction with a service or treatment. Although no national organizations defending patients' rights and interests were known to the expert panel, such organizations do exist at regional and local levels. They offer support to patients who want to make a complaint, or assistance when claims have been submitted in cases of medical error.

Patients are largely free to choose their provider and to visit any doctor. Patients can register with the health centre or GP of their choice and, formally, they are not obliged to see a GP or *terapevt* before being treated by a medical specialist. However, the expert panel did say that, in practice, most patients do consult their primary care doctor before seeing a specialist.

2.2.2. Resource generation aspects of primary care developments

- **Dimension: professional development**

Quality improvement mechanisms
The federal Ministry of Health and Social Development is the only body in charge of licensing and (re)certification. Permission to work in primary care is subject to the following conditions: having completed a postgraduate education (for physicians) or specific education (for nurses); and being able to meet criteria concerning the design of practice premises, equipment, hygiene and the keeping of medical records. Independent physicians need formal permission from the health authority.

For recertification of primary care physicians, two major criteria apply. One is to have completed a minimum amount of continuing medical education (CME) activities (now equalling 144 hours of study in 5 years). It seems that physicians spend most time on CME in intensive courses towards the end of their five-year recertification term. Another criterion is to have practised for at least 39 hours per week during the period prior to recertification. Participation in peer review or medical audit activities does not give credits towards recertification. Recertification should be distinguished from attestation, which forms part of the medical career scheme, with different levels related to knowledge and experience.

Federal norms exist for the (maximum) number of patients per physician. These are: 1700 patients per GP; 1800 per *terapevt*; and 800 children per paediatrician. If these norms are exceeded, a new physician should be appointed. However, there are shortages of physicians, and where these occur – mostly in rural areas – the size of the practices can be (much) higher than the norms.

The performance of primary care and care providers is frequently assessed by means of the following formal instruments: internal practice checks; practice inspections by supervising physicians; obligatory periodic knowledge and skills tests; and external clinical audits (using medical records). Informal practice assessment visits by colleagues are unknown.

Data on the performance of primary care are not routinely available. For instance, data on expenditure and utilization of services at the primary care level only are not available. Data on the type of health problems that patients present in primary care (in terms

of reasons for contact or diagnosis) are only available to a limited extent. The expert panel reported that no national data are available for referral rates of GPs, paediatricians and *terapevty* to secondary care and hospitals.

The implementation of clinical guidelines in primary care was reported to be a major topic of debate. However, such guidelines are not freely available; they are not routinely distributed to primary care facilities, but have to be purchased by GPs, *terapevty* and paediatricians. Guidelines are also implemented by being integrated into postgraduate programmes and CME courses. Most clinical guidelines for primary care are developed by specialists, although there are inputs from primary care physicians. This also applies to guidelines made for GPs, although there is a joint working group for these under the auspices of the Ministry of Health.

Workforce and human resources planning

Only 12% of all physicians in the Russian Federation are working in primary care as generalists. GPs represent about 1%, paediatricians 4.5% and terapevty 6.4% of all physicians. Annex 2 provides an overview of the numbers of GPs, paediatricians and terapevty per oblast, territory or republic of the Russian Federation.

For human resources planning, the availability of registers of professionals is indispensable. Registers of GPs, *terapevty* and paediatricians are complete and up-to-date, but none exist for primary care nurses. The expert panel could not agree whether registers for pharmacists, physiotherapists and midwives are inexistent or may exist in some republics or oblasts. Over the past five years, a forecasting study has been undertaken to calculate the future need for physicians. The results have been used to set norms and estimate the need for physicians of different specialties and for various oblasts, territories or republics.

Table 4:   **Number of active primary care providers and number of vacant positions in primary care**

Primary care provider	Active providers (abs.)	Vacant positions (%)
• GPs	6 358	≈ 50%
• Paediatricians	28 606	≈ 10%
• *Terapevty*	39 608	≈ 10%
• Nurses	≈ 80 000	(no data)
• Physiotherapists	≈ 30 000	(no data)
• Midwives	≈ 35 000	(no data)

Table 4 provides an overview of active providers in a number of primary care disciplines in the Russian Federation, together with estimates of shortages. Among the generalist physicians in primary care (that the total of GPs, paediatricians and *terapevty*), more than half (53.0%) are *terapevty* and 38.4% are paediatricians. GPs are only a small fraction of the primary medical workforce (8.5%). It is estimated that about half of all GP positions are vacant. Even if these vacancies are taken into account, the small proportion

of GPs points to the fact that the implementation of a primary care model based on GPs is only beginning to be implemented in the Russian Federation. We had no information about the causes of the large number of vacancies. It may be a result of a lack of educational capacity in general practice/family medicine. The number of nurses in primary care appears to be only slightly higher than the total number of physicians; this means that it is considerably below the required number of nurses, according to the official norm. Although no data were available on the vacancies for nurses in primary care, the absolute number confirms the severe shortages of nurses, both in primary care and in the hospital sector, as mentioned by the expert panel. According to the experts, there are no shortages in other disciplines, including *terapevty*, dentists and pharmacists.

The number of GPs and their share in the primary care workforce vary between regions of the Federation. Annex 2, gives an overview of the situation in all 88 oblasts, territories or republics. Table 5 below provides a summary.

Table 5: **Retrained GPs as a percentage of the total number of active primary care physicians[1] in the oblasts, territories or republics in the Russian Federation**

Percentage GPs	Number of regions (either oblasts, territories or republics)
0–2.9	24
3–5.9	23
6–10.9	20
11–20.9	16
21–30.9	1
31–40.9	3
41 and more	1
Total (average 8.5%)	**88**

[1] Total of active primary care physicians = GPs, paediatricians and terapevty

In a quarter of the regions, the percentage of GPs is below 3% (in 8 regions, there are no GPs at all). In almost three quarters of the regions, the share of GPs does not exceed 10% of the total of generalist physicians in primary care. There are no regions where general practice/family medicine has an established position, in that it represents the majority (let alone is the only provider of primary medical care).

Nowadays, family medicine or general practice is an academic discipline in the Russian Federation, with departments and professors of its own. The national policy expert panel estimated that about 90% of the 54 medical universities now have a department of family medicine or general practice. All of these departments were reported to be involved in scientific research.

The postgraduate programme in family medicine/ general practice takes a total of two years – out of which six months are spent in primary care practice. No data were

available on the percentage of medical graduates choosing to enrol in postgraduate programmes of family medicine/general practice. Having completed the postgraduate programme or the retraining course is no guarantee of finding a position as a GP. Sometimes the practice situation has not been adapted yet or the post description does not make it possible to practice as a full GP. Although no data or estimates were available of the number of qualified GPs who are currently not working as GPs, the expert panel thought this to be a temporary problem only.

- **Dimension: professional organizations**

There are national organizations with regional branches for GPs, *terapevty* and paediatricians. In terms of membership, the association of paediatricians is the largest, with around 51 000 members. The association of *terapevty* has about 11 000 members and the 'All-Russia Association of General Practitioners' has 6300 members. The associations are involved in educational and scientific activities as well as professional development (for instance, by organizing meetings and publishing a journal). The national journal for GPs is called 'Russian Family Practice'. It brings out four issues per year; the number of subscriptions is unknown. One of the tasks of the associations of *terapevty* and paediatricians is to defend the material interests of their members. It was reported that GPs' material interests were defended bit by the association but by trade unions.

2.2.3   Financing aspects of primary care developments

- **Dimension: incentives**

Like almost all Russian physicians, GPs, terapevty and paediatricians are paid a salary, the amount of which is usually related to the number of registered practice population (or: target population). In some regions there is also a performance component. Dentists (or stomatologists) are an exception to this rule; they are paid a fee-for-service.

No details are available about how the salary levels of GPs, *terapevty* and paediatricians relate to the salary levels of medical specialists, such as gynaecologists, specialists in internal medicine, cardiologists and general surgeons. However, as a result of the trend towards primary care promotion, the remuneration of GPs and other staff in primary care has improved since 2005. Salary levels and salary increases differ between the regions, but it may be concluded that primary care doctors are currently better paid than specialists working in polyclinics.

- **Dimension: financial access**

Generally speaking, consultations with GPs, *terapevty* and paediatricians are free of charge, but patients have to pay for prescribed medicines. Only patients with certain diagnoses, such as HIV/AIDS, diabetes, cancer and tuberculosis (TB) are exempt from out-of-pocket payments.

2.2.4.   Service delivery aspects of primary care developments

Primary care providers can be in a good position to coordinate services across levels of care. The discussion with the expert group was structured around a list of specific

coordination methods considered for inclusion in the national level questionnaire – and they were asked if these are relevant for the Russian Federation. Firstly, experts thought that – although there is no legal obligation – primary care doctors are (financially) encouraged to act as gatekeepers, and therefore assume a coordinating role. They did not, however, agree about the desirability of a gatekeeper role. Secondly, they mentioned that several regional health authorities are encouraging the formation of group primary care practices. This is not a national policy, however. And thirdly, most experts mentioned that it is common to refer the patient back to his or her GP, *terapevt* or paediatrician after hospitalization. Also, long-term care, such as care for chronically ill, is increasingly frequently provided by multidisciplinary teams that include both doctors and nurses. With some rare exceptions, however, primary care physicians cannot play an active role in the treatment of hospitalized patients.

2.2.5.   Perceived actual topics in primary care developments

Ten possible topics with relevance for primary care were listed in the national level questionnaire and the expert group was asked to indicate to what extent they were currently a subject of discussion in the country. The most important subject was the shortages of physicians and nurses in primary care, and how to address the problem. The second most important issues was how to improve efficiency in primary care. Quality improvement in primary care came third, with particular emphasis on the implementation of clinical guidelines: it was widely agreed that guidelines help to improve services, but the debate was more about how they should be implemented. The expert group also mentioned that improving the quality of services should also include improving the buildings and equipment in primary care. Another important issue was to encourage self-care among patients. Improving the coordination of care by establishing a gatekeeping role for GPs was not considered an issue for debate.

2.3.   GPs, *terapevty* and paediatricians on primary care services in Stupino and Shatura: some results of the survey

The results presented in this section come from the survey of GPs, *terapevty* and paediatricians in the Stupino and Shatura rayons in Moscow oblast, Russian Federation. The descriptions are based on their experiences and opinions. The survey looked at the following topics: workload and use of time, access and availability of services to patients, aspects of quality of care, use of clinical information, coordination and cooperation, available medical equipment, and several dimensions of clinical task profiles. In describing the results, reference is made to the health systems functions and selected dimensions of the Primary Care Evaluation Scheme, as outlined in Table 2.

2.3.1   Background information on respondents

The study was conducted in Moscow oblast in Stupino rayon, about 130 kilometres south-east of Moscow city and Shatura rayon, about 130 kilometres east of the city.

Stupino rayon has a population of approximately 150 000. Stupino city, with a population of about 70 000, is heavily industrialized (including western companies). Shatura rayon had a population of about 71 000 in 2002, but this number is rising as a result

of immigration. The main business is agriculture; there is one local furniture factory. Shatura town is the administrative centre of the rayon, with a population of about 30 000 (in 2002).

Stupino and Shatura were selected as pilot rayons for the Primary Care Evaluation Tool because they are at different stages of reform and, in particular, the Russian partner organization was interested in comparing the organizational models: Stupino rayon was selected as a pilot area representative of the reformed system, with GPs in place, and Shatura rayon was chosen as representing a region in the early stages of reform, with many elements of the Shemasko model still in force and *terapevty* and paediatricians as the main primary care providers.

Figure 3: Moscow oblast with the Stupino and Shatura rayons
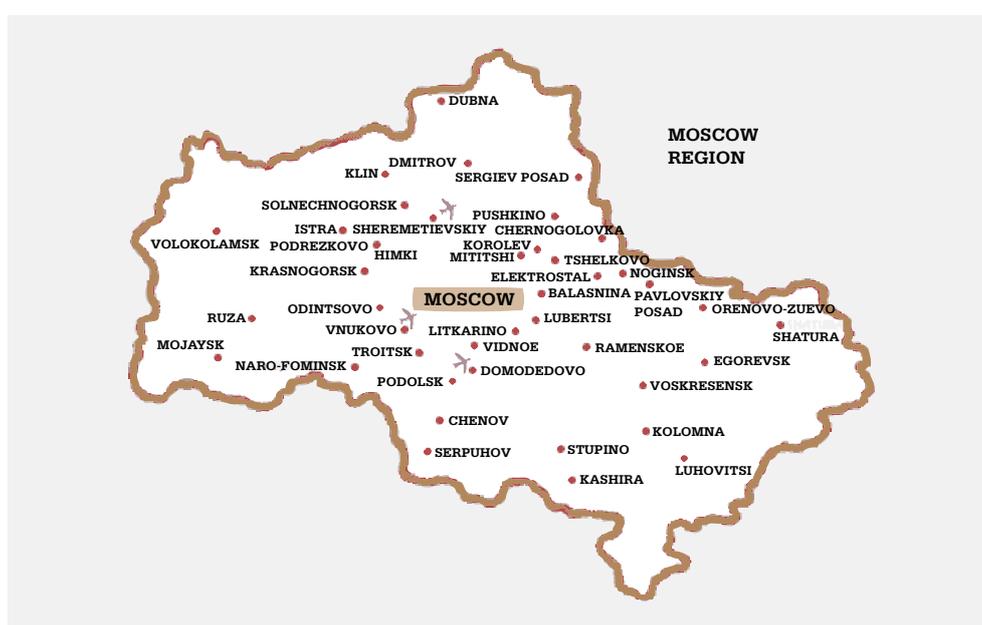
The survey produced a total of 52 responding primary care physicians in the two rayons; 29 in Shatura and 23 in Stupino (see Table 6). Half of the respondents were newly trained GPs. However, the medical background and the type of practice of the respondents varied according to rayon. In Shatura, most (88%) worked in rural areas and all but two were *terapevty* or paediatricians, the traditional type of primary care physicians. Only two physicians in Shatura described themselves as GPs. In contrast, in Stupino, all respondents were GPs, and a majority (61%) worked in urban practices.

The respondents represented a substantial proportion of the total primary medical workforce. In Shatura, all the paediatricians and 52% of *terapevty*/GPs responded. In Stupino, 49% of the total GP population in the rayon responded.

Table 6: **Numbers of responding urban and rural GPs, paediatricians and *terapevty***

Physicians	Shatura (N=29)		Stupino(N=23)		Total	
	urban	rural	urban	rural	Abs.	%
GPs	-	2	14	9	25	48.1
Paediatricians	1	13	-	-	14	26.9
Terapevty	2	11	-	-	13	25.0
TOTAL	**3**	**26**	**14**	**9**	**52**	**100**

Table 7 gives a number of key characteristics of the responding physicians and their practices in the two rayons. Primary medical care is usually provided by women: three quarters of the responding physicians were female. This was particularly true in Stupino, with 83% compared to 68% in Shatura.

In Stupino, almost all the GPs have completed an official postgraduate training programme, while only 41% in Shatura have done so.

Table 7: **Key characteristics of physicians in Shatura and Stupino**

Features	Shatura (N=29)			Stupino(N=23)		
	Abs.	%	Valid N	Abs.	%	Valid N
Gender GPs • Female • Male Paediatricians • Female • Male *Terapevty* • Female • Male	1 1 13 1 6 7		29	19 4 - - - -		23
Physicians who have completed Postgraduate training	11	41	27	21	91	23
Physicians not member of an association	22	82	27	9	41	22
Physicians serving adults and children	7	59	17	13	83	14
Physicians under age of 50 years	10	35	29	15	65	23
State-employed with salary	28	100	28	23	100	23
Physicians' average age (yrs) • GPs • Paediatricians • *Terapevty*	45 51 50		2 14 13	46		23
Average practice population • GPs • Paediatricians • *Terapevty*	2250 718 2221		2 14 12	1679		22

Being a member of a professional organization – an association of GPs, paediatricians or *terapevty* – is much more usual among GPs in Stupino than among physicians in Shatura. In Shatura, 82% are not members of any professional association; in Stupino this is the case of only 41%.

One of the characteristics of the new GP system is that primary medical services for children and adults are provided by the same physician. In Stupino, all but one GP serve patients of all age groups (although nine GPs did not answer the question). In Shatura, 41% said they saw both children and adult patients (12 did not respond). This is much lower than in Stupino, but it still seems that a large number of *terapevty* (in particular in remote areas where no paediatricians are available) have a mixed practice population of all age groups.

On average, GPs are about five years younger than paediatricians and *terapevty*. In Stupino, two thirds of respondents were under the age of 50, while the proportion in Shatura was only one third. There is an even greater differences when the number of years of experience in the current profession is taken into account. On average, GPs in Stupino have between 3 and 4 years of experience as a GP; in Shatura, paediatricians have more than 23 years of experience and *terapevty* 15 years.

Without exception, physicians in Shatura and Stupino were employed (either by the state or by a regional or local authority) and were paid a salary. In most cases this was a flat salary, but 5 physicians in Shatura and 11 in Stupino said that they could earn a supplement to their salary for specific services, such weekend duty, check-ups or health promotion sessions.

GPs can work either alone, with one or more colleagues in a group practice, or in a practice or polyclinic with both GPs and other medical specialists. Figure 4 below gives an overview – only the GPs who responded were taken into consideration.

Figure 4:   Breakdown of GPs according to type of practice (estimated %)
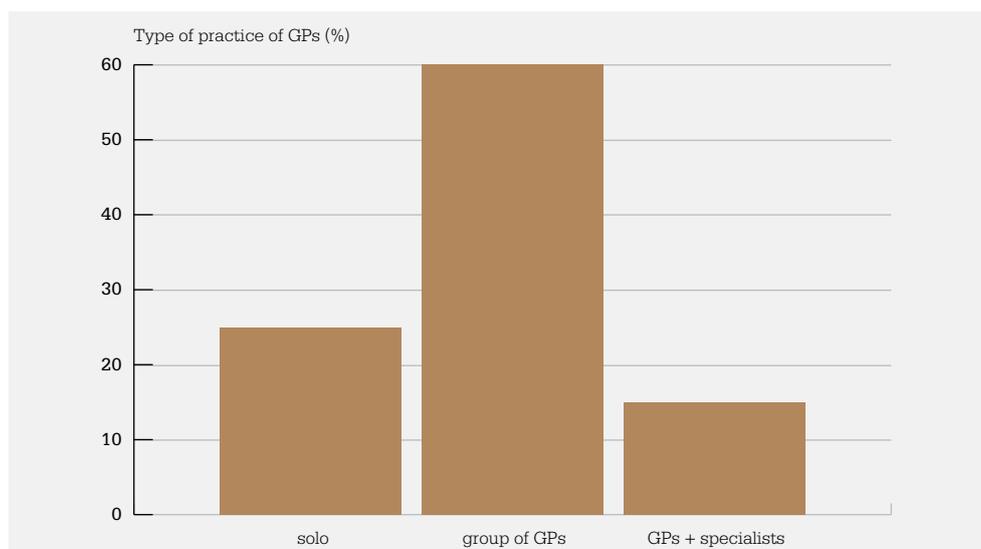
Most GPs (about 60%) work with one or more other GPs in a primary care group practice. An estimated one quarter of GPs work alone – this is mostly the case in remote areas. Some 15% work in a polyclinic with other GPs and medical specialists.

2.3.2 Accessibility of care

- **Dimension: organizational access**

Workload

Table 8 gives an overview of various aspects of physicians' workload and the time they devote to professional activities. The size of the practice and the number of patients a physician is responsible for vary by type of practitioner: the average list sizes we found for GPs in Stupino (1697 patients) and paediatricians in Shatura (708 children) were close to the national norms for these disciplines. The averages for terapevty and the two GPs in Shatura (both around 2200) were considerably above the national norm for terapevty (1800) and GPs (1700). This may point to shortages in Shatura – or perhaps the attractiveness of the new GPs.

Table 8:   Physicians' workload and use of time

Aspects of workload	Shatura (N=29)		Stupino (N=23)	
	Abs.	Valid N	Abs.	Valid N
List size (# patients) • GPs • Paediatricians • *Terapevty*	2250 708 2122	2 14 12	1697	22
# patient consultations per day • GPs • Paediatricians • *Terapevty*	16 24 23	2 13 13	23	23
# home visits per day • GPs • Paediatricians • *Terapevty*	5 8 5	2 13 12	5	23
# working hours per week (formal) • GPs • Paediatricians • *Terapevty*	37.0 36.4 31.0	1 9 12	35.9	14
# calculated working hours per week[1] • GPs • Paediatricians • *Terapevty*	47.0 49.6 44.0	1 6 9	53.8	13
# hours per week for: face-to-face patient care • GPs • Paediatricians • *Terapevty*	25.0 29.6 22.5	2 11 13	27.2	22
# hours per week for: other clinical activities • GPs • Paediatricians • *Terapevty*	6.0 3.5 3.7	1 6 9	11.2	13

Aspects of workload	Shatura (N=29)		Stupino (N=23)	
# hours per week for: meetings with other health workers				
• GPs	3.0	2	3.4	
• Paediatricians	1.9	10		14
• *Terapevty*	3.7	12		
# hours per week for: administration and management				
• GPs	1.5	2	3.4	
• Paediatricians	0.2	5		13
• *Terapevty*	3.7	9		
# hours per week for: travel (home visits/ meetings)				
• GPs	11.5	2	8.6	20
• Paediatricians	14.4	10		
• *Terapevty*	10.4	11		

[1] This is the sum of the average number of hours spent on the activities specified in the following rows of this table.

The number of patients seen per day in consultations is 23 or 24 for all physicians except for the two GPs in Shatura who reported only 16 consultations a day. Five home visits per day are made on average by all GPs and *terapevty*. Paediatricians normally make 8 home visits a day.

GPs and paediatricians reported that their working week was normally 36 to 37 hours. *Terapevty* reported a mean of only 31 hours per working week. If, however, we add all hours reported as spent on separate activities (see Table 8), the number of working hours was much higher: 54 hours for GPs in Stupino, 50 hours for paediatricians and 44 for terapevty. These calculated working hours, which come close to the number reported for independent GPs in western Europe, are 35% to 50% above the official number of working hours (however, this calculation probably overestimates the situation, because those who did not fill in an item may have meant to answer that they were not involved in the activity).

Figure 5:   Working time spent on various activities (in hours per week)
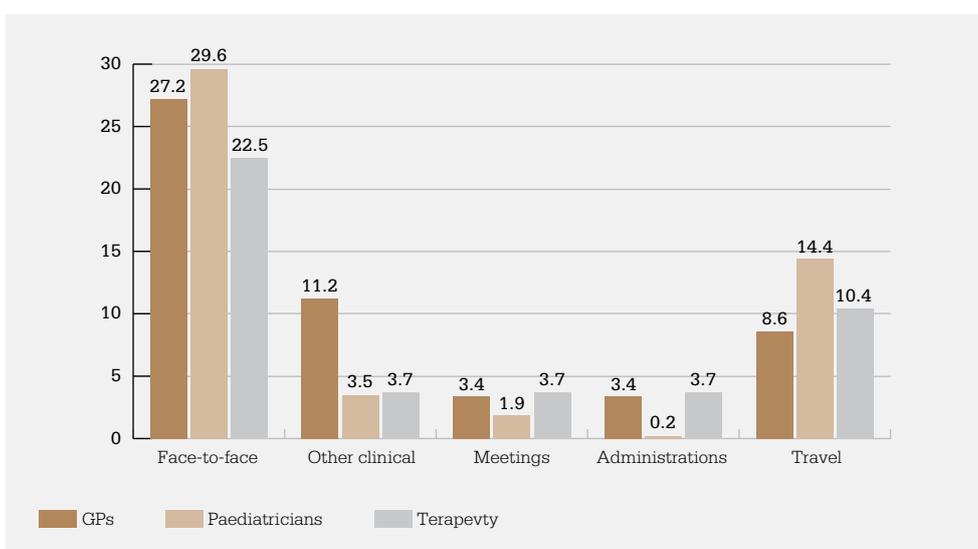
All physicians reported spending at least half of their time on face-to-face consultations with patients; paediatricians lead in this respect with 30 hours per week, that is, 60% of their overall 50 hours. Compared to the other groups, GPs spent a large proportion of their time (more than 11 hours a week, or 21%) on 'other clinical activities'. Furthermore, a surprising amount of time was taken by travel. Obviously, in rural areas, transport takes more time than in cities. But, overall, GPs stated that travel accounts for the equivalent of a full working day per week (almost 9 hours, or 16% of the total time); terapevty travelled more than 10 hours (24%) and paediatricians even over 14 hours (or 29%). This points to the inefficient use of human resources, probably resulting from a lack of vehicles, or inefficient planning of home visits.

Allocation of time was different in urban and rural practices (not shown in table). For instance, in Stupino rayon, urban GPs spent more time on direct patient care than their rural colleagues (30 compared to 23 hours per week); but fewer hours on other clinical activities (7.8 compared to 13.4); and more hours again on meetings with other health care workers (5.2 compared to 2.4).

Patients' access and availability of primary care services

All respondents in both locations reported fixed opening hours for the primary care facilities (see Table 9). The average number of hours per week that primary care facilities were open was 44 in Shatura and 50 in Stupino (not shown in table). Urban facilities seem to have more extended opening hours than those in rural areas. When practices are open, patients can, if they wish, generally see the doctor the same day. In Stupino, all GPs reported opening hours in the evening at least once per week, while this was less usual in Shatura, where it was reported by half of the physicians. Opening hours at the weekend (normally on Saturday) are routine in both locations. It was more common in Shatura (79%) than in Stupino (57%) to have a telephone number for patients to use out of hours. This may be related to the availability of emergency services outside office hours, which was much better in urban Stupino than in Shatura, with fewer (secondary) health facilities and more physicians working in rural areas. The bottom line of the table shows that all GPs in Stupino work within five kilometres of a general hospital (actually, almost half of them work in the central polyclinic next door). In Shatura, however, one quarter of physicians work more than five kilometres from the nearest general hospital. Only one physician in each district reported that their practice had a website.

- **Dimension: responsiveness**

Appointment systems can contribute to efficient practice management and reduce waiting times for patients. Half of the respondents in Stupino and 60% in Shatura did not use an appointment system. Where such a system was operational, it was used for most (more than 70%) of the consultations. Irrespective of whether an appointment system was used, only few respondents indicated that patients normally need to wait more than 30 minutes between arrival in the practice and the start of the consultation.

Table 9:   Aspects of patients' access to care and responsiveness of services

Aspects of patients' access	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Fixed opening hours	100	29	100	23
Same day visits are possible	100	29	96	22
Evening opening at least once per week	48	29	100	22
Weekend day opening at least once per month	93	29	95	22
Phone number available for patients when practice is closed	79	29	57	21
Practice operates a web site	4	28	5	20
Appointment system • not in use • for most consultations (> 70%)	60 30	20 20	50 45	22 22
Short waiting time in practice before consultation (no more than 30 min.)	82	27	96	23
Clinics or sessions in use for special patient groups • for diabetes patients • for hypertension patients • for family planning • for the elderly	85 38 46 23	13 13 13 13	100 96 - 45	23 23 - 23
Practice situated more than 5 kms distance from nearest general hospital	28	23	-	-

Special clinics or sessions for patients with diabetes were organized by almost all physicians in both places. Sessions for patients with hypertension were routine in Stupino but not in Shatura, where only a third of the physicians reported having them. Family planning clinics were not held in Stupino; in Shatura they were reported by half of the respondents. Special sessions for the elderly were reported by almost half of the physicians in Stupino and a quarter of those in Shatura.

2.3.3   Continuity of care

• **Dimension: informational continuity**

Routine record-keeping of patients' visits and their condition, medical prescriptions, referrals, etc. is a major contributor to the quality and continuity of care: this was fairly standard in both rayons (see Table 10). Retrieval of information is something different but equally important. The identification of patient groups on the basis of a shared diagnosis, health risk or simply age may enable efficient approaches in terms of active monitoring, screening and prevention activities. The practice information systems in Shatura seemed to be better tailored to generate category lists than those used by the GPs in Stupino. Only three GPs in Stupino (13%) said that they could generate such information easily; in Shatura, 16 physicians (59%) could do so.

One of the core elements of cooperation between primary and secondary care is the information that accompanies patients when they are referred to medical specialists or are hospitalized, and after such referrals or hospitalization. Not all respondents said they wrote referral letters for most patients referred. In Shatura, only two thirds and in Stupino no more than 57% did so. Only 50% of respondents in Stupino, and 59% in Shatura reported receiving feedback after patients had completed treatment at secondary level. Discharge reports after hospitalization were provided quickly in Stupino; almost all GPs said they received them within four days. In Shatura, only 59% did so.

Table 10:   Availability and use of clinical information

Use of clinical information – items	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Routine medical record-keeping	90	29	96	23
Easy to generate a list of patients by diagnosis or health risk	59	27	13	23
Referral letters written for all or most referred patients	69	29	57	23
Medical feedback usually received from specialists after treatment	59	29	50	22
Full report within 4 days after discharge from hospital	59	29	91	23
Use of computer for: • medicine prescriptions • keeping patients med. records • writing referral letters • searching information (internet) • not using a computer	14 3 14 - 14	29 29 29 29 29	87 35 39 4 13	21 23 23 23 23

Computers are used in most practices. Four physicians in Shatura and three GPs in Stupino did not use a computer. In Stupino, computers seemed to be used for a wider range of applications than in Shatura. None of the applications mentioned in the table were used by more than four physicians in Shatura. In contrast, almost all the GPs in Stupino used a computer for medicine prescriptions. It was remarkable that only one physician in Shatura and only eight in Stupino used computers to keep their patients' medical records. This indicates that medical records are still mainly kept on paper in both rayons. Only one respondent, from Stupino, reported using the computer to search for information on the internet.

2.3.4   Coordination of care

• Dimension: cohesion within primary care

In Shatura, the physicians were working in relatively small teams. In Stupino, the units were much larger, with up to 15 GPs and sometimes terapevty as well. Very often there were also medical specialists working in the same building. In Stupino, almost half the respondents were working in the large central polyclinic.

In Stupino, all the GPs were working with a practice nurse, while in Shatura only two thirds of the *terapevty* and paediatricians did so. In Shatura, on the other hand, the doctors worked with a home care nurse more frequently than the GPs in Stupino.

The most frequently reported mode of coordination (see Table 11) is when one practicing physician takes over additional coordination functions. One third of the physicians in Shatura and half of the GPs in Stupino reported this in their facility. The second most frequent answer (35%) in Stupino was the existence of a full-time coordinator. In Shatura, a quarter of the physicians said that their practice was managed externally from a larger centre, and another quarter answered, remarkably, that there was no explicit coordination function.

Table 11: The coordination function at practice level

Mode of coordination	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
One physician coordinates	32	28	48	23
Full time coordinator / manager available	18	28	35	23
External management (from larger facility)	25	28	13	23
Coordination function not explicit	11	28	4	23
Don't know	14	28	-	23
TOTAL	**100**	**28**	**100**	**23**

According to most of the respondents, the most important responsibilities of the coordinator were: to provide patients' information to other health care workers and to improve the quality of care; these were judged more important than, for example, dealing with the maintenance of the building or other financial issues. In addition, three quarters of the GPs in Stupino but only one third in Shatura mentioned maintaining links with the community and its governing bodies. Five physicians in Shatura and one in Stupino were not able to list the responsibilities of a coordinator.

In terms of multidisciplinary teams, the situation is clear: the team consists of the physician and the (practice/community) nurse, and rarely more. No other discipline was mentioned in Stupino. In Shatura, 10 physicians could rely on an assistant for laboratory work. None of the respondents mentioned any secretarial support. This probably means that practice nurses have heavy administrative responsibilities and other paperwork, and only few specific nursing responsibilities (for instance, in care for chronically ill patients).

Regular meetings with colleagues of the same discipline were reported by most respondents: all GPs in Stupino and all but one *terapevt* in Shatura (not shown in table) had such meetings (see Table 12). Furthermore, practically all GPs in Stupino and about three quarters of the physicians in Shatura had regular meetings with their practice nurse. Meetings with community nurses were mentioned by about half of the physicians in both rayons. In contrast to *terapevty* in Shatura, only a few of the GPs in Stu-

pino had meetings with a midwife (not shown in table). In Shatura, 12 out of 29 physicians and 14 out of 23 in Stupino reported regular meetings with physiotherapists. A large majority in Stupino and about half of the physicians in Shatura said they also had meetings with pharmacists at least once per month.

Table 12:   Face-to-face meetings with other primary care workers*

Meeting face-to-face at least 1x per month with:	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
(Other) GP	28	29	100	23
(Other)terapevt	72	29	87	23
Practice nurse	72	29	96	23
Community nurse	55	29	52	23
Midwife / birth assistant	41	29	9	23
Physiotherapist	41	29	61	23
Pharmacist	55	29	83	23
* Not having filled in an item has been taken as 'no' (no meetings).				

- **Dimension: coordination with other care levels**

GPs are now supposed to provide some of the services in primary care that used to be provided by 'narrow specialists', such as paediatricians and internists. Therefore it is not surprising that GPs in Stupino did not have regular consultations with these specialists (see Table 13). However, physicians in Shatura also had very weak relationships with internists; only three physicians said that they usually ask for advice. On the other hand, almost half of the physicians in Shatura had regular consultations with paediatricians. For the other specializations shown, except for geriatricians, the situation in the two rayons was similar. A small majority had usual consultations with neurologists and surgeons, almost half with dermatologists and about one third of the respondents with gynaecologists. Whereas in Shatura, only one physician asked a geriatrist for advice on a regular basis, in Stupino one third did so. In addition to those listed in the table, the following were mentioned by the respondents as specialists they consult on a regular basis: cardiologists, tuberculosis specialists, endocrinologist, ophthalmologist and otolaryngologist.

Table 13:   Consultation with and asking advice from medical specialists*

'Always' or 'usually' asking advice from:	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Paediatricians	45	29	-	23
Internists	10	29	-	23
Gynaecologists	34	29	35	23
Surgeons	52	29	57	23
Neurologists	55	29	61	23
Dermatologists	45	29	43	23
Geriatricians	3	29	35	23
* Not having filled in an item has been taken as 'no' (not asking advice).				

The conditions – geographically at least – for consulting with colleagues are good, especially in Stupino: primary care facilities are situated not far from a hospital where specialists work (see Table 9).

2.3.5   Comprehensiveness of care

- **Dimension: material for preventive care**

Physicians were asked whether information materials such as leaflets or posters had been displayed or made available in the waiting room of their practice. Results are shown in Table 14.

The provision of patient information material was somewhat better in Stupino than Shatura. Practically all the GPs in Stupino indicated the availability of material on CVDs, healthy diet, smoking cessation, obesity, diabetes and vaccinations. In Shatura, material on CVDs, diabetes and vaccinations was easily available. A smaller majority of physicians in Shatura reported the availability of material on smoking cessation and healthy diet, while 40% said that information on obesity and sexually transmitted infections (STIs) was available. Material on contraception and self-treatment, for example, of the common cold, was least available in both rayons. Social services information was clearly better available in Shatura (40%) than in Stupino (13%).

Table 14:   Availability of information materials for patients in the waiting room

Subject of information material	Shatura (N=15) (excluding paediatricians		Stupino (N=23)	
	%	Valid N	%	Valid N
Cardiovascular diseases	87	15	100	23
Healthy diet	60	15	100	23
Smoking cessation	67	15	100	23
Obesity	40	15	91	23
Diabetes	80	15	96	23
Sexually transmitted infections	40	15	39	23
Vaccinations	80	15	83	23
Contraception	20	15	9	23
Self-treatment for colds/coughs	20	15	19	23
Social services	40	15	13	23

Notes to Table 14:
All respondent answered this question, but several items were omitted by of the physicians. We have assumed that not having filled in an item meant 'no' (not available). Inspection of the data confirms this. None of the respondents who omitted items used the answer option 'no'; and none of the respondents who used the answer option 'no' omitted items.
In Shatura, paediatricians were excluded because most of the items were not really relevant to children. Information on healthy diet and vaccinations was available in almost all paediatric practices; information on social services in half of the practices.

- **Dimension: medical equipment**

One of the preconditions for comprehensive care is the availability of a minimum set of medical equipment. For this project, a list of 30 items was defined and tested for general availability, meaning that the listed items are either available in the physicians' own consulting room or are shared with a colleague next door, and therefore within easy reach when needed for a patient. Table 15 and the diagram below summarize the findings for Shatura and Stupino.

GPs in Stupino were clearly better equipped than their colleagues in Shatura. The average number of items of equipment per physician from a list of 30 items was almost 18 in Shatura and almost 24 in Stupino. In Shatura, 12 out of 29 physicians had no more than 15 items at their disposal; there was even one with only 5 items. In Stupino, the worst equipped GP still had 18 items. In Shatura, the differences between paediatricians and *terapevty* were only small. The paediatricians had slightly less equipment (16.9) than the *terapevty* (18.6).

Table 15:   Number of items of practice equipment available to physicians

Number of items of equipment	Shatura		Stupino		Total	
	Abs.	%	Abs.	%	Abs.	%
15 or less	12	41	-	-	12	23
16–20	6	21	7	30	13	25
21–25	6	21	5	22	11	21
26–30	5	17	11	48	16	31
TOTAL	**29**	**100**	**23**	**100**	**52**	**100**
Average number of items per physician (from list of 30)	17.8		23.7		20.4	

Figure 6 below gives a more detailed picture per item: the situation in Stupino is clearly better than in Shatura. In Stupino, 16 items were available to (almost) all GPs, whereas this was the case in Shatura with only four items. About eight items were widely available in both districts (to at least three quarters of the physicians). It was somewhat surprising to find that almost 40% of the physicians reported not having a sphygmomanometer. There were sharp differences between the two rayons, which may point to different tasks and diagnostic possibilities. The following equipment was (almost) generally available in Stupino but not usually available in Shatura: otoscope, ophthalmoscope, ear syringes, reflex hammer, nasal speculum and tuning fork. However, there may be room for improvement in Stupino too. Only three GPs had a scale for children. One third did not have access to a car for home visits. One quarter had no materials to stitch wounds. Only three GPs had access to a gynaecological chair and 40% had no specula. More than 40% had no peak flow meter available. Furthermore, it seems that patients in Stupino usually have to go outside the practice for urine and blood (haemoglobin) diagnostic tests and for ultrasound imaging. The majority of practices in Stupino did not have any of this equipment.

Figure 6: Available practice equipment (% of physicians)

Equipment	Shatura	Stupino
Aspirator	65	24
Tuning fork	96	24
Emergency kit	96	76
Ultrasound (abdomen)	13	38
Hemoglob. Meter	52	41
Peak flow meter	57	10
Ophthalmoscope	96	34
Speculum	61	34
Gynaec. coach	13	45
Nasal specula	91	31
Reflex hammer	100	31
Ear syringe	100	38
Wound stitch mat.	74	31
Enema	83	45
Urine test strips	52	31
Vision chart	100	76
ECG	100	86
Otoscope	100	31
Car for home visits	65	93
Dressing/bandages	100	79
Height measure	100	86
Blood sugar test kit	96	93
Scales (infants)	13	79
Scales (adults)	91	86
Tape measures	96	90
Syringer/needles	96	100
Tongue depressor	100	100
Thermometer	100	97
Stethoscope	100	97
Sphygmomano-meter	61	62

Shatura Stupino

In addition, physicians were asked about the availability of laboratory and X-ray diagnostics, either inside the practice or elsewhere. As Table 16 shows, practices do not usually have these facilities. It turned out, however, that many physicians also had no or insufficient access to them outside the practice. This was particularly true for X-ray, where more than half of the physicians said they had no or insufficient access. The situation for laboratory diagnostics was only a little better in Shatura, and relatively good in Stupino, where only 13% of physicians said they were not satisfied.

Table 16:   Physicians' access to X-ray and laboratory facilities

Type of facility and mode of access	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Availability of laboratory				
• Full in practice	26	27	17	23
• Full outside practice	22	27	70	23
• Not / insufficient available	52	27	13	23
Availability of X-ray				
• Full in practice	7	27	9	23
• Full outside practice	37	27	30	23
• Not / insufficient available	56	27	61	23

- **Dimension: service delivery**

Clinical task profiles
The clinical task profiles of primary care physicians consist of three distinct elements: their role as the physician of first contact for patients with health problems; the provision of technical medical procedures; and the treatment and follow-up of diseases. Each of these elements was measured against a specific list that represents the typical tasks of a PC physician in the country concerned: the content of the lists was discussed with the national working group to ensure its proper adaptation to the country. For the analysis, the items on the list were weighted and scored in order to better indicate the degree of involvement of physicians in each of the tasks (see also explanation under each table).

Role as physician of first contact for patients with health problems
The role as physician of first contact was measured using 17 events related to a variety of health problems affecting men, women and children. Physicians could indicate whether their patients would consult them with these problems 'always', 'usually', 'occasionally', or 'seldom/never'. Table 17 gives an overview of the findings. Numbers and percentages refer to physicians who considered that they would always or usually be the doctor of first contact.

Table 17 shows striking differences between Shatura and Stupino. It appears that GPs in Stupino (still) had a limited role as the doctor of first contact for patients with health problems. It also seems that the population in Stupino did not go to their GP if their children had health problems; this might be an issue of trust. Also the GP did not seem to be the obvious point of entry to health care for younger women with gynaecological problems or problems related to fertility or family planning. The first contact role of GPs in Stupino seemed to be limited to men and older women. The percentages in brackets

in Table 17 refer to health problems for which GPs thought they were occasionally the doctor of first contact. These percentages may point to items where their involvement is increasing. GPs were occasionally the first point of contact for psychosocial problems and for gynaecological problems. These can probably be considered as the GPs' growth market in Stupino. Children (or their mothers), however, will most probably continue to bypass GPs if they are not feeling well.

Table 17:   Physicians' self-reported role as point of first contact for patients with health problems

Physician estimated to be the first contact in case of:	Shatura (N=29)			Stupino (N=23)	
	% terapevty*)	% paedia-trician*)	Valid N	% GPs*)	Valid N
Child with rash	31 *(23)*	100	14 / 14	- *(-)*	21
Child with severe cough	31 *(31)*	100	14 / 14	- *(-)*	21
Child aged 7 with enuresis	8 *(46)*	64 *(29)*	14 / 14	- *(-)*	21
Child aged 8 with hearing problem	- *(30)*	62 *(23)*	11 / 13	- *(-)*	21
Woman aged 18 asking for oral contraception	8 *(27)*	- *(-)*	12 / 10	- *(71)*	21
Woman aged 20 for confirmation of pregnancy	17 *(8)*	- *(-)*	13 / 10	- *(68)*	22
Woman aged 35 with irregular menstruation	31 *(38)*	- *(-)*	14 / 10	9 *(73)*	22
Woman aged 50 with lump in the breast	23 *(54)*	- *(-)*	14 / 10	59 *(41)*	22
Woman aged 60 with polyuria	92 *(8)*	- *(-)*	15 / 10	96 *(4)*	22
Anxious man aged 45	85 *(15)*	- *(-)*	15 / 10	77 *(23)*	22
Man aged 28 with a first convul-sion	85 *(15)*	9 *(-)*	15 / 11	76 *(10)*	21
Physically abused child	15 *(85)*	64 *(36)*	15 / 11	- *(45)*	20
Couple with relationship problems	- *(31)*	- *(10)*	14 / 10	- *(76)*	21
Man with suicidal inclination	- *(46)*	- *(-)*	14 / 10	- *(71)*	21
Woman aged 50 with psycho-social problem related to work	38 *(38)*	- *(-)*	15 / 10	77 *(14)*	22
Man aged 32 with sexual problems	23 *(23)*	- *(-)*	14 / 10	- *(73)*	22
Man aged 52 with alcohol addic-tion problems	77 *(23)*	9 *(-)*	14 / 11	36 *(50)*	22
TOTAL SCORE 'First contact' (range 1-4) **)	**2.54**	**2.08**		**2.68**	

* Percentages represent the sum of the answers 'always' and 'usually' and are calculated over the number of valid cases; percentages in brackets refer to the answers 'occasionally' being the doctor of first contact.
** For the calculation of the score, answers have been weighted as follows: seldom/never = 1; occasion-ally = 2; usually = 3; (almost) always = 4.

Terapevty and paediatricians in Shatura gave a broader range of health problems for which they were the point of first contact. This is the traditional situation of doctors in rural areas where there is less access to specialists. The table shows that, to some extent, paediatricians and *terapevty* have complementary roles. Paediatricians were generally the first point of contact for all children's problems. Other health problems clearly came more in to the domain of *terapevty*.

In sum, the tandem of paediatricians and *terapevty* – who, under the old system, were responsible for primary care together – had a clearer role as the entry point for health problems than did the GPs in Stupino, on the basis of the answers "always" and "usually". However, when "occasional" or "seldom "contact was also taken into consideration, the GPs in Stupino scored slightly better than their *terapevt* and paediatrician colleagues in Shatura. Overall, the scores ranging between 2 and 2.7 out of 4 show that the primary care physicians had only an average role as first contact point.

Involvement of primary care physicians in the treatment of diseases

The involvement of primary care physicians in the treatment and follow-up of chronic and other diseases in their practice populations was measured by 18 diagnoses, as listed in Table 18.

Table 18:   Physicians' involvement in treatment and follow-up of diseases

Involvement in treatment of:	Shatura (N=29)			Stupino (N=23)	
	% terapevty*)	% paedia-trician*)	Valid N	% GPs*)	Valid N
Hyperthyroidism	71 *(29)*	9 *(27)*	14 / 11	95 *(5)*	20
Chronic bronchitis	100	92 *(8)*	15 / 12	100 *(-)*	22
Hordeolum (stye)	92 *(-)*	100	13 / 13	100 *(-)*	22
Peptic ulcer	93 *(7)*	18 *(18)*	15 / 11	100 *(-)*	22
Herniated disclesion	64 *(36)*	10 *(10)*	14 / 10	83 *(17)*	18
Acute cerebro-vascular accident	100	- *(-)*	14 / 10	100 *(-)*	22
Congestive heart failure	100	9 *(18)*	14 / 11	100 *(-)*	22
Pneumonia	93 *(-)*	*100*	15 / 14	96 *(4)*	22
Peritonsilar abscess	50 *(43)*	33 *(58)*	14 / 12	89 *(6)*	18
Ulcerative colitis	71 *(14)*	33 *(42)*	14 / 12	96 *(-)*	22
Salpingitis	15 *(62)*	20 *(-)*	13 / 11	12 *(6)*	17
Concussion of brain	50 *(50)*	36 *(36)*	14 / 11	18 *(65)*	17
Parkinson's disease	71 *(29)*	- *(-)*	14 / 10	52 *(43)*	21
Uncomplicated diabetes (type II)	100	30 *(10)*	15 / 10	96 *(4)*	22
Rheumatoid arthritis	93 *(7)*	55 *(18)*	15 / 11	96 *(4)*	22
Depression	54 *(38)*	40 *(10)*	13 / 10	18 *(65)*	17

Involvement in treatment of:	Shatura (N=29)			Stupino (N=23)	
Myocardial infarction	100	10 *(-)*	14 / 10	86 *(10)*	21
Palliative care	86 *(7)*	11 *(22)*	14 / 9	100	21
TOTAL SCORE 'Treatment tasks' (range 1-4) **)	**3.55**	**2.34**		**3.32**	

* Percentages are sum of the answers 'always' and 'usually' and calculated over the number of valid cases; percentages in brackets refer to the answers 'occasionally' being involved in this treatment.
** For the calculation of the score, answers have been given the following weights: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

GPs in Stupino were extensively involved in the treatment of patients with most of the diseases specified in Table 18. In 14 out of the 18 conditions, at least 83% of the GPs said they were always or usually involved. Usual involvement in the treatment of Parkinson's disease was reported by half of the GPs. GPs were rarely involved in treating pelvic inflammatory disease (salpingitis), brain concussion or depression. *Terapevty* in Shatura reported involvement in rather fewer diseases but, for 10 out of the 17 items, at least 86% of them said they were always or usually involved; the figures were between two-thirds and three-quarters for another four items. In fact, there was only one condition (salpingitis) in which involvement of *terapevty* (as of GPs) was minimal.

Treatment of these diseases by paediatricians was much less frequent, primarily because the list does not reflect the disease pattern among children. Paediatricians were relatively more involved in growth monitoring and prevention than in the treatment of diseases. They were also very involved in the treatment of diseases applicable to paediatricians' practice populations, such as chronic bronchitis, hordeolum and pneumonia.

Preventive and medical technical procedures in primary care

The questions on the provision of preventive and technical procedures, such as vaccinations and minor surgery, were worded differently from those in the previous section: instead of asking whether the physicians were personally involved, the question asked whether the service was provided at the health facility either by the responding physician or by one of his/her team members, notably in comparison with the services provided by specialists. A total of 16 items were included, as shown in Table 19.

The role of GPs in providing technical medical procedures seemed to be clearly delimited: those related to women, eyes and ears were outside their remit. In Stupino, these would probably be addressed by gynaecologists, ophthalmologists and otolaryngologists. On the other hand, GPs were very much involved in procedures like infusions, immunization, vaccinations, casting plasters and strapping ankles. They were also relatively involved in minor surgical procedures, such as removal of cysts, suturing of wounds and removal of warts (ingrown toenails, however, were generally left to the surgeon).

With a few exceptions, *terapevty* were not very much involved in the provision of the services listed in Table 19. The exceptions were mostly the same as for GPs. Like GPs, *terapevty* were almost generally involved in providing infusions, immunization and vaccinations. In addition, most of them would always or usually strap an ankle. Only

one third said they were usually involved in wound suturing and the results were similar for the application of plaster casts.

Overall, the score system shows that GPs have a broader task profile than either *terapevty* or paediatricians alone.

Table 19:   Self-reported involvement of physicians or practice staff in the provision of preventive and medical-technical procedures

'Always' or 'usually' provided by physician or practice staff:	Shatura (N=29)			Stupino (N=23)	
	% terapevty*)	% paedia-trician*)	Valid N	% GPs*)	Valid N
Wedge resection of ingrown toenail	8	-	13 / 14	-	23
Removal of sebaceous cyst from hairy scalp	8	-	13 / 12	70	23
Wound suturing	31	14	13 / 14	78	23
Excision of warts	8	8	13 / 12	65	23
Insertion of intrauterine device	15	-	13 / 13	-	23
Removal of rusty spot from cornea	15	-	13 / 13	-	23
Fundoscopy	-	-	10 / 11	6	17
Joint injection	8	8	12 / 12	64	22
Maxillary (sinus) puncture	8	-	12 / 13	64	22
Myringotomy of eardrum (para-centesis)	8	-	12 / 12	5	22
Applying plaster cast	38	21	13 / 14	70	23
Strapping an ankle	62	29	13 / 14	87	23
Cryotherapy (warts)	8	8	12 / 12	70	23
Setting up intravenous infusion	92	54	12 / 13	100	23
Immunizations for influenza or tetanus	92	79	12 / 14	100	23
Allergy vaccinations	92	83	12 / 12	100	23
TOTAL SCORE 'Medical procedures/prevention' (range 1-4) **	**2.14**	**2.16**		**2.69**	

* Percentages are sum of the answers 'always' and 'usually' and calculated over the number of valid cases.
** For the calculation of the score, answers have been given the following weights: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

Involvement of primary care physicians in public health activities

Activities aimed at specific groups can involve primary care physicians in screening programmes, collective vaccination and monitoring of population categories. Fourteen public health activities are listed in Table 20. Primary care physicians were asked whether they were involved – or not – in each of those activities. Findings are displayed in Table 20.

Terapevty, paediatricians and GPs were generally involved in influenza vaccination for high risk groups. Furthermore, most GPs in Stupino were involved in screening programmes for breast cancer and tuberculosis, and in school health care. Involvement in other activities mentioned in the table was practically nil, except for immunization of young children, reported by one third of the GPs.

In addition to influenza vaccination, most paediatricians were involved in the usual immunization services for young children, paediatric surveillance, mother and child health, and school health care; but also in tuberculosis screening. Antenatal care was also an area of activity for 58% of them and HIV/AIDS screening, for 42%.

Table 20: Physicians self-reported involvement in activities aimed at specific groups

Self-reported involvement in:	Shatura (N=29)			Stupino (N=23)	
	% terapevty*)	% paedia-trician*)	Valid N	% GPs*)	Valid N
Screening for STIs	18	25	12 / 11	6	16
Screening for HIV / AIDS	42	42	12 / 12	6	16
Mother and child health programmes	14	85	13 / 7	6	16
TB screening programme	64	83	12 / 12	83	23
Influenza vaccination programme for high-risk groups	100	100	14 / 13	100	23
Rehabilitative care	100	92	12 / 14	100	23
School health programmes	38	77	10 / 13	96	22
Mental health programmes	9	--	9 / 11	6	16
Cervical cancer screening programmes	9	--	9 / 11	6	16
Breast cancer screening programmes	46	--	9 / 13	86	22
Family planning/contraception **)	21	8	14 / 12	4	23
Routine antenatal care **)	--	58	13 / 12	5	22
Normal immunizations to children under 4 years **)	8	100	13 / 14	32	22
Routine paediatric surveillance (up to the age of 4) **)	15	100	13 / 14	5	22
TOTAL coverage for 'Specific groups'	**33.5%**	**36.4%**		**47.8%**	

* Percentages calculated over number of valid cases; valid cases may fluctuate by the item.
** Provided to at least most of those eligible for this service.

All the *terapevty* were involved in influenza vaccination, two thirds in tuberculosis screening and almost half in breast cancer screening. Around 40% were active in HIV/ AIDS screening and school health care. Family planning did not seem to be an important area of activity for any of the three groups of respondents, concerning one fifth of the terapevty, just 8% of the paediatricians and only 4% of the GPs in Stupino. Furthermore, primary care physicians seem not to be involved in cervical cancer screening or mental health programmes.

Physicians were asked how they considered their knowledge and skills in the areas of family planning and child health: all the paediatricians in Shatura answered that they 'definitely' had sufficient knowledge of and skills in immunization of young children and paediatric surveillance (see Table 21). Of the other groups, neither the GPs in Stupino nor the *terapevty* in Shatura thought that they had enough skills in family planning, antenatal care or child health. These results are in line with those shown in the previous table, pointing to the fact that GPs and terapevty were hardly involved at all in these tasks.

Table 21:   Perceived knowledge and skills in family planning and child health

'Definitely sufficient' knowledge & skills on:	Shatura (N=29)			Stupino (N=23)	
	% terapevty*)	% paedia-trician*)	Valid N	% GPs*)	Valid N
Family planning and contraception	27	--	15 / 12	35	23
Routine antenatal care	18	36	11 / 14	--	22
Normal immunizations to children under 4 years	33	100	12 / 14	32	22
Routine paediatric surveillance (up to the age of 4)	42	100	12 / 14	--	22

- **Dimension: quality of care and improvement mechanisms**

A number of aspects related to the quality improvement of medical and organizational services for patients are included under this heading. Physicians were asked to report on their personal situation, and how the issue was dealt with in their health centres and polyclinics.

As Table 22 shows, most physicians always or usually felt able to keep up-to-date with the latest developments in medical research. Also, respondents spent an average of about 8 hours per month on reading journals and other professional information. And with regard to the frequent usage of clinical guidelines, over 80% of all respondents in both locations confirmed that they use them in their clinical practice.

Patient complaint procedures did not exist everywhere. Only half of the physicians in Stupino and two thirds in Shatura said that their health centre had a procedure.

Surveys of the practice population's satisfaction with (primary) health care services seemed to be more common in Stupino, where 12 GPs (out of 16 who answered the question) confirmed that one had taken place. In Shatura, only 5 (out of 22) physicians said that had been the case.

Meetings with local and community organizations to hear their opinions of the health services were reported by 40% of respondents in Shatura and 64% in Stupino.

Reporting performance data, such as health data or vital statistics, can be an instrument for evaluating services. The use of this method was reported by a large majority of physicians in both rayons.

And finally, in addition to external quality improvement mechanisms, internal mechanisms can be also explored: regular interviews with practice staff on their job satisfaction and motivation were reported by two thirds of physicians in Shatura and well over one third in Stupino.

Table 22:   Physicians' perceived competence; use of mechanisms for quality improvement

Items	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Feeling able to keep up with latest relevant medical developments (always or usually)	79	28	83	23
Frequent use of guidelines	89	28	83	23
Any complaint procedure in place for dissatisfied patients	64	28	48	23
Satisfaction survey held among practice population	23	22	75	16
Meeting held with community organization(s) about satisfaction with the health centre or practice	40	18	64	14
Reporting of local health data or vital statistics	89	26	83	23
Job satisfaction interviews held with practice staff	62	21	38	21
	hours		hours	
Average number of hours per month spent on reading journals and other professional information	9.1	25	6.9	21

- **Dimension: community orientation**

The information in Table 23 does indicate close ties between the community and the health centres and polyclinics. Half of the physicians in Shatura and 39% in Stupino said that they had regular meetings with local authorities. Regular meetings with social workers were more common in Stupino (75%) than in Shatura (36%). Eight physicians from Shatura said that there were community representatives on the board of the health centre or polyclinic. Linkages with religious groups were incidental.

Table 23:   Connections with the community*

Type of relationships	Shatura (N=29)		Stupino (N=23)	
	%	Valid N	%	Valid N
Regular meetings with local authorities	54	28	39	23
Regular meetings with social workers	36	28	74	23
Linkage with religious groups	18	28	9	23
Community representatives on the board of the practice	29	28	-	-

* Some respondents omitted items selectively. Inspection of the data revealed that not having filled in an item most probably meant that no relationship existed. Consequently, percentages have been calculated over the total number of respondents.

2.4   Patients on primary care services in Stupino and Shatura: some results of the survey

The patient survey was carried out in the practices of the GPs in Stupino and of the *terapevty* and paediatricians in Shatura who participated in the doctor's survey. The aim was to include 20 patients per doctor. Field workers who visited the practices to collect the data asked patients to participate in the survey until the target of 20 completed questionnaires was achieved. Consequently, the information gained from the patient survey applies to the same health centres and polyclinics as the information from the survey of physicians. The results are based on the experiences and opinions of patients.

2.4.1   Background information on respondents

The total number of patient respondents in the study was 1229. The response rate in Shatura was 528 and in Stupino 701. Characteristics that might be of interest for the further interpretation of the findings are as follows: as usual, female patients were the majority of visitors and users of primary care services. In Shatura, almost three quarters of the patients who filled in a questionnaire were women, whereas 61% in Stupino were women. In Shatura, only 11% of the respondents were from urban practices. In Stupino, urban respondents were predominant, at 81%.

Table 24:   Gender distribution of patients in Shatura and Stupino

Characteristics		Shatura (N=29)			Stupino (N=23)		
		Urban	Rural *)	*Total*	Urban	Rural*)	*Total*
		N (%)	N (%)	*N (%)*	N (%)	N (%)	*N (%)*
Gender	Male	11 (20)	133 (28)	*144 (27)*	171 (40)	101 (37)	*272 (39)*
	Female	45 (80)	335 (71)	*380 (72)*	256 (60)	171(63)	*427 (61)*
	Unknown	--	4 (1)	*4 (1)*	2 (0)	--	*2 (0)*
Total		**56 (11)**	**472 (89)**	***528** (100)*	**429 (81)**	**272 (19)**	***701** (100)*

*) Including small towns and rural areas

Table 25 shows that respondents in Stupino were generally older than those in Shatura. In Shatura, 37% of respondents were 30 or younger. In Stupino, only 17% belonged to this age group. The situation was reversed for the population over 60 years old: 28% in Stupino and 15% in Shatura.

The educational level of the respondents was slightly higher in Stupino than in Shatura. More people in Shatura (69%), than Stupino (59%) had secondary (general, vocational or technical) as their highest level of education In Stupino, 25% of the respondents had completed a higher professional or university education in contrast to 16% in Shatura.

In both rayons, about half of the patients who filled in the questionnaire were employees. Very few respondents – less than 10% – gave their occupation as looking after their family. Related to the different age structure of the respondent groups, the proportion of retired people was higher in Stupino (28%) than in Shatura (16%). In Shatura, there were somewhat more school children.

In Shatura, more respondents (64%) lived either with parents or in a family with children. In Stupino, more people lived alone or with only a partner (55%).

Table 25:   Patients' age, educational and occupational background and living situation

Patients' backgrounds	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
Age				
• under 20	40	9	24	3
• 21 - 30	129	28	99	14
• 31–40	77	17	122	18
• 41–50	55	12	136	20
• 51–60	87	19	121	17
• Over 60	68	15	197	28
Total age	456	100	699	100

Patients' backgrounds	Shatura (N=528)		Stupino (N=701)	
Education				
• literate/primary school	40	8	52	7
• secondary (general)	139	29	150	22
• secondary (vocational/technical)	194	40	256	37
• lower professional	32	7	62	9
• higher professional/university	80	16	178	25
• other	3	1	1	0
Total education	488	100	699	100
Occupation				
• in school	60	12	39	6
• unemployed / unable to work	34	5	42	6
• looking after family	41	8	22	3
• employee	246	47	367	52
• retired	83	16	198	28
• other	60	12	32	5
Total occupation	524	100	700	100
Living situation				
• alone	74	14	156	22
• with parents	98	19	71	10
• with husband / wife	101	19	231	33
• with family (incl. children)	238	45	217	31
• other	14	3	25	4
Total living situation	525	100	700	100

2.4.2　　Accessibility of care

• Dimension: financial access

Most of the primary care services listed in Table 26 appeared to be available free of charge. The only exceptions were injections or medicines prescribed by primary care physicians, for which half of the respondents in both Shatura and Stupino indicated that they had to pay, and visits to specialists.

Table 26:　Patients' reporting to pay co-payments for (primary) health care services

Type of service	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
Visit to PC physician	7	1	7	1
Injection or medicines prescribed by PC physician	246	50	364	53
Home visit by PC physician	14	3	20	3
Regular check up of baby or young child	10	3	17	5
Obtaining a sickness certificate or health license	17	4	6	1
Visit to specialists on referral by PC physician	52	11	61	9

Although few patients said that they had ever abstained in the past year from visiting a primary care physician for financial reasons, the 6% of respondents in Shatura who had done so is still too high to speak of a fully financially accessible service. More people had abstained from a visit to a medical specialist for financial reasons: in Stupino, the figure was 18%. More than one third of the patients reported having had difficulties in paying for prescribed medicines.

Table 27:   Patients reporting co-payments as obstacles to access to services

Decision taken in past year	Shatura (N=528)		Stupino (N=701)	
	Abs.	%	Abs.	%
Abstinence from visit to a PC doctor for financial reason	29	6	11	2
Abstinence from visit to medical specialist for financial reason	39	8	126	18
Difficulty in paying for medicines prescribed by PC doctor	205	39	260	37

- **Dimension: geographical access/ responsiveness**

This section concerns the service aspects of the primary care centres or polyclinics. The following aspects will be considered: attainability and geographical accessibility, opening hours, convenience and patient friendliness.

As Table 28 and Figure 7 show, most patients could reach their nearest primary care facility, other providers or a hospital from their home within 20 minutes. GPs, *terapevty* and paediatricians were usually the nearest. Even in the more rural area of Shatura, three quarters of the patients did not need more than 20 minutes to get there. In Stupino, 80% of the respondents needed no more than 20 minutes. Travel times of more than 40 minutes were rare (5% and 2% in Shatura and Stupino respectively). The distribution of times needed to reach pharmacies was roughly the same in the two rayons. Almost two thirds of respondents could be there within 20 minutes, while about one quarter said they took 20 to 40 minutes. Dentists were somewhat further away (or rarer), especially in Stupino, where half of the respondents said they needed more than 20 minutes to get to the dentist. In Stupino, 18% said it took them more than 40 minutes to reach the dentist. In Shatura, 57% had a dentist within 20 minutes' travel and one quarter had travel times of more than 40 minutes. Two thirds of the patients in Shatura and 57% of those in Stupino wee under the 20 minutes limit for a visit to the physiotherapist. Between 10% and 12% said that it would take them more than 40 minutes. Around 60% of the patients in both rayons were able to reach a general hospital within 20 minutes. For 15% in Shatura and 10% in Stupino, the hospital was more than 40 minutes away from their home.

The travel time refers to the usual means of transportation available to patients: if they normally used the bus, it would be the time needed for that; equally for transportation by car or on foot.

Table 28:   Patients' travel time to nearest health provider

Provider and distance	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
Primary care doctor				
• under 20 minutes	362	73	564	81
• 20–40 minutes	112	22	120	17
• 40–60 minutes	21	4	13	2
• more than 1 hour	3	1	1	0
Total	498	100	698	100
Pharmacist				
• under 20 minutes	278	65	348	61
• 20–40 minutes	100	23	163	28
• 40–60 minutes	33	8	56	10
• more than 1 hour	17	4	7	1
Total	428	100	574	100
Dentist				
• under 20 minutes	245	57	282	49
• 20–40 minutes	84	20	192	33
• 40–60 minutes	41	10	86	15
• more than 1 hour	57	13	18	3
Total	427	100	578	100
Hospital				
• under 20 minutes	306	62	378	58
• 20–40 minutes	111	23	207	32
• 40–60 minutes	57	12	63	10
• more than 1 hour	13	3	1	0
Total	487	100	649	100

Figure 7:   Patients with travel time of up to 20 minutes to nearest health provider (%)
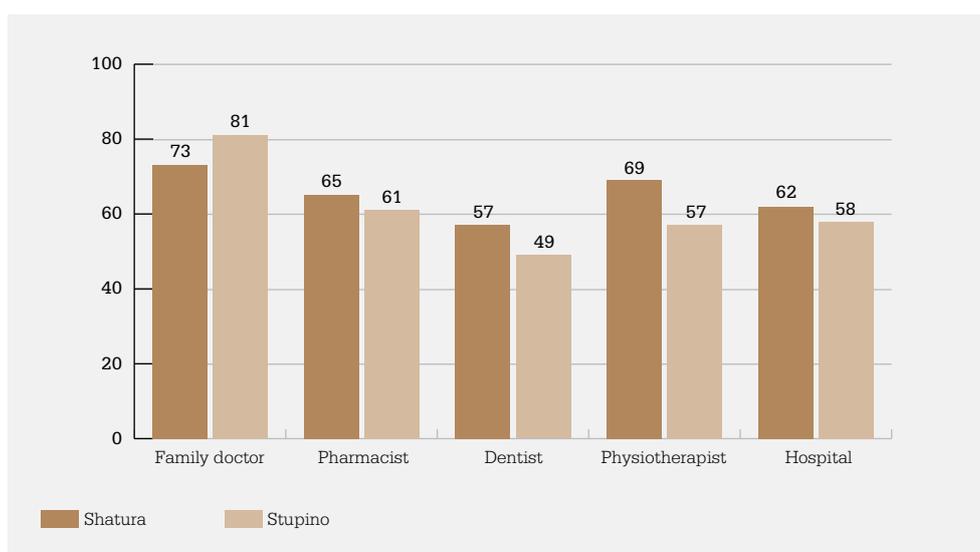
Responses to the statements listed in Table 29 indicate how patients appreciated the services of family health centres, such as the ease of access to and comfort of the facilities, the personal treatment by staff, and the length of waiting time.

About 88% of responding patients said they could easily reach their health centre or polyclinic by public transport. The answers in respect of physical access to the premises for the handicapped or those using a wheelchair were less positive. In Shatura, there seems to be much room for improvement in this respect, since only one quarter of the respondents thought it was well organized. In Stupino, where 58% stated that access by wheelchair was good, the situation was clearly better, but not optimal.

Patients were moderately positive about the quality of the waiting rooms. One third of the patients in Shatura and a quarter in Stupino said that the waiting rooms were not well arranged.

A website as a service and source of information to patients was probably not very relevant to most respondents. Asked about the existence of such a website, more than half of the patients said they did not know; only 11% in Shatura and 15% in Stupino seemed to use one. Overall, this points to little use of websites for communication with and information to patients.

Three quarters of the patients – slightly more in Stupino than in Shatura – said that there was an official complaints procedure. Eighteen percent did not know.

In general, respondents said they were well informed about opening hours and how to get services outside normal hours. Their general experiences regarding opening hours and getting appointments with doctors, either in person or by telephone, were positive. A large majority of patients said that, during opening hours, a doctor was always available and that it was possible to visit a doctor the same day if necessary. However, about one quarter were not satisfied with the time it took to make an appointment. About 80% of the respondents said there was a telephone number for patients to use if they fell ill outside opening hours.

It is less easy to visit a doctor in the evening or at the weekend in Shatura than in Stupino. Almost all practices (88%) in Stupino open at least one evening per week but only 41% of the patients from Shatura said that was the case. Half of the respondents in Shatura and two thirds in Stupino said they could see a doctor at the weekend. Despite these limitations, the level of patient satisfaction with current opening hours was good in both rayons. More than 80% of patients found the staff at the reception desk both kind and helpful and three quarters said that waiting time at the reception desk was short. However, one third of the respondents said the time they subsequently had to spend in the waiting room was too long.

Table 29:   Quality of health centres and polyclinics as experienced by patients

Patients agreeing with following statements:	Shatura (N=528)		Stupino (N=701)	
	Absolute #	% *)	Absolute #	% *)
I can easily reach the centre by public transport	400	85	629	91
The centre is easily accessible for the disabled and persons in a wheelchair (don't know: 21%)	112	24	397	58
The waiting room for patients is well arranged	306	66	478	73
My centre has a website (don't know 54%)	48	11	95	15
If I am not satisfied with the treatment in my centre there is a possibility to officially submit a complaint (don't know 18%)	365	73	558	80
I am well informed about opening hours and how to get evening, night, weekend services	384	78	554	80
When the practice is open and I want to urgently visit a doctor, it is possible to get an appointment the same day	400	82	627	91
During opening hours, it is easy to get a doctor on the phone for medical advice or questions (don't know 10%)	373	75	516	74
When I visit the centre there is always at least one doctor available	412	86	650	95
I have to wait too long to get an appointment with my doctor	106	22	179	26
When the centre is closed there is a telephone number to call if I fall ill	417	84	536	77
In my centre it is possible to visit a doctor on Saturdays or Sundays	250	50	466	68
In my centre it is possible to visit a doctor after 18h00 (at least once per week)	202	41	612	88
I am satisfied with the current opening hours	410	83	587	85
Staff at the reception desk are kind and helpful	410	81	606	87
Waiting times at the reception desk are short	367	75	546	79
I need to wait too long in the waiting room to see the doctor	172	35	240	34

*) If 10% or more indicated that they did not know, the percentage has been added in brackets in the first column

2.4.3   Continuity of care

• **Dimension: longitudinal continuity**

On average, patients visited their primary care doctor six to seven times a year (see Table 30). The visiting pattern was largely identical in the two rayons. Not having seen the doctor during the previous year was exceptional. Around 40% reported one to three visits and one quarter of the patients answered that they had visited the doctor four to

six times in the previous year. The category of frequent attenders, with more than 12 visits, was somewhat larger in Stupino than in Shatura.

The average number of contacts with a nurse was around six per patient in the previous year. In Shatura 19% and in Stupino 16% of the patients said they had not visited a nurse in the previous year. As with the number of annual contacts with physicians, the category that reported more than 12 visits to a nurse was a little larger in Stupino than in Shatura.

Table 30: **Frequency of patients' visits to their primary care doctor and nurse during the previous 12 months (utilization rate)**

Visits over the previous 12 months	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
Doctor				
• no visits	8	2	3	0
• 1–3 visits	200	40	271	39
• 4–6 visits	125	25	169	24
• 7–9 visit	47	9	65	9
• 10–12 visits	79	16	103	15
• 13 or more visits	41	8	89	13
Total doctor	500	100	700	100
Average annual frequency of visits to physician	6.2		6.7	
Nurse				
• no visits	90	19	115	16
• 1–3 visits	141	29	229	33
• 4–6 visits	86	18	114	16
• 7–9 visit	49	10	51	7
• 10–12 visits	71	14	81	12
• 13 or more visits	48	10	111	16
Total Nurse	485	100	701	100
Average annual frequency of visits to nurse	5.9		6.6	

- **Dimension: interpersonal continuity**

This section deals with the patients' perception of their doctor's social and technical competence. Important aspects are perceived medical competence, communication and information skills, and the ability to build up mutual trust. How well doctor and patient know each other is influenced by how long they have known each other, how exclusive their relationship is and how much time they spend together in consultations. Table 31 contains indications of these 'enabling' conditions for a patient-doctor relationship that can detect nonmedical reasons for ill-health.

The length of time that patients have been registered with their primary care physician is an indicator of continuity of care. It also serves as a background for the evaluation of the primary care physician.

Table 31: Patients' experiences with their primary care physician

Statements	Shatura (N=528)		Stupino (N=701)	
	Absolute #	% *)	Absolute #	% *)
Length of time as a patient with current PC physician • less than one year • 1–3 years • more than 3 years	96 117 295	19 23 58	75 149 476	11 21 68
If I visit a PC doctor I see the same doctor each visit	456	89	633	90
Estimated duration of a consultation • up to 5 minutes • 6–10 minutes • 11–15 minutes • more than 15 minutes	6 81 172 250	1 16 34 49	10 104 299 288	1 15 43 41
Average length of a consultation (in minutes)	18.1		17.2	
During the consultation no other persons are in the room except the doctor and myself	366	73	581	84
My doctor has my medical record(s) available during my visit	451	92	623	94
My doctor knows my personal situation (e.g. work or home situation) (don't know 10%)	361	70	540	77
My doctor knows the medical problems and illnesses that I had in the past	426	83	615	88
My doctor takes sufficient time to talk to me	471	91	646	92
My doctor listens well to me	491	95	664	95
My doctor gives clear explanations about prescribed medicines	497	96	667	95
My doctor gives clear explanations about my illness and health problems	463	94	621	93
My doctor keeps to promises and appointments	485	94	661	95
My doctor is available not just for medical problems but also for personal problems and worries (don't know 10%)	273	54	492	71
I am satisfied with how my doctor treats me	491	95	649	93
My doctor has sufficient medical equipment	367	75	546	79
(don't know 28%)	217	44	413	62
My doctor would refer me to a medical specialist if I were to ask	455	93	618	93
My doctor would visit me at home if I were to ask	445	91	599	90
After a visit to my doctor, I feel able to cope better with my health problem/illness	447	92	617	93
My doctor is a good doctor	445	91	624	94

*) If 10% or more indicated that they did not know, the percentage has been added in brackets in the first column.

The conditions for continuity of the doctor – patient relationship were good in both Stupino and Shatura. Practice populations seemed to be relatively stable. Patients had been registered with their current doctor for a relatively long time. Fifty eight percent of the patients in Shatura and 68% of those in Stupino said they had been with their current physician for more than three years. In Stupino only 11% and in Shatura only 19% of respondents had been with their current doctor for no more than a year. Being registered with a physician did mean that patients would see that doctor on every visit to the primary care centre or polyclinic. Only 10% of the patients said that was not always the case. The average length of consultations was between 17 and 18 minutes. Consultations of 10 minutes or less were mentioned by only 16% of the respondents. Consultations of a duration of more than 15 minutes were normal according to half of the patients in Shatura and 41% in Stupino.

For reasons of confidentiality, patients may prefer to be alone with their primary care physician during a consultation. According to almost three quarters of the patients, this was normally the case. However, one quarter of the patients had had the experience that another person, probably a nurse, was present during the consultation. We have no information on whether this was in line with the patients' preference. In Stupino, 16% said they were not alone with the doctor during consultations.

What patients think about their doctor is summarized in the bottom row of Table 31. There were very few people, either in Shatura or in Stupino, who disagreed with the statement: 'my doctor is a good doctor'. This general judgement, pointing to a large degree of trust by the populations in Shatura and Stupino in their physicians, was confirmed by answers to other questions as well.

Patients' medical records were routinely available during consultations. That is probably why almost all patients said that the doctor knew their medical history. They were less sure, however, whether the doctor was also aware of their personal work and living situation. Around one quarter did not think so or did not know. Communication skills were widely appreciated. Almost without exception, the respondents said that their doctor took sufficient time to talk, listened well and gave clear explanations about prescribed medicines, health problems and illnesses. Equally high proportions found that their doctor kept to promises and appointments. There appeared to be some reservation as to whether physicians would be open to dealing with other than medical problems. In Shatura, well over half of the patients said their doctor would also be prepared to help if they had personal problems. In Stupino, more people (71%) thought they could go to their doctor with such problems.

Patients in both rayons almost generally expressed satisfaction with the way they were treated by their doctor. Nevertheless, there appeared to be questions as to whether the doctor had sufficient equipment at his or her disposal. In Shatura, most patients said either that there was not sufficient equipment or they did not know. In Stupino, patients were more positive about the level of medical equipment but one third still did not know or said it was inadequate. There was very little doubt among patients in Shatura and Stupino that they would be referred to a medical specialist by their doctor and that their doctor would make a home visit if they were to ask. Patients also said that they usually feel able to cope better with health problems or illness after a visit to their doctor.

2.4.4 Coordination of care

- **Dimension: cohesion within primary care/ coordination with other care levels**

The patient-centeredness of primary care can benefit from the patients' freedom to choose their own health provider and to be allowed to change providers if desired. Table 32 shows that this is not the case for patients in Stupino and Shatura. Around 90% of the respondents in both rayons reported they were assigned to their current doctor. Furthermore, almost half of the patients in Shatura and one third in Stupino responded that they could not go to another primary care physician if they wanted to. About equal proportions (one third) in the two rayons answered that they did not know. Overall, this indicates that the policy on choice and gatekeeping principles is either not very well defined, or not well communicated to the patients. Choice and gatekeeping do not exclude each other: other countries, for example, give patients the right to change their family doctor once every 3 or 6 months

Table 32: Patients' freedom to choose and change their primary care physician

Options	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
Patients reporting being assigned to their current doctor	457	90	630	91
Patients reporting they cannot change to another doctor (don't know 32%)	240	46	197	28

*) If 10% or more indicated that they did not know, the percentage has been added in brackets in the first column.

Although patients largely agreed that a referral from a primary care doctor was needed to see a medical specialist, 21% in Shatura and 10% in Stupino thought a referral was not necessary or they did not know (see Table 33). However, the real position of primary care physicians as the doctor of first contact was clear. More than 90% of the patients in both districts would first see their primary care physician with a new health problem before going to a medical specialist.

Table 33: Patients' perception of referral rules and the gatekeeping role of primary care doctors

Statements	Shatura (N=528)		Stupino (N=701)	
	Absolute #	% *)	Absolute #	% *)
'To see a specialist I need a referral from my primary care doctor' • Yes • No • Don't know	403 88 20	79 17 4	626 57 15	90 8 2
Total	511	100	698	100

Statements	Shatura (N=528)		Stupino (N=701)	
'With a new health problem I go to my primary care doctor before going to a medical specialist'				
• Yes	486	95	643	92
• No	19	4	32	5
• Don't know	7	1	21	3
Total	512	100	696	100
'It is possible to buy antibiotics without a doctors prescription'				
• Yes	362	69	477	69
• No	87	17	100	14
• Don't know	71	14	116	17
Total	520	100	693	100

Improper use of antibiotics is a threat to public health and therefore the free availability of antibiotics is not desirable. Physicians should control the 'gate' to antibiotic use; however this gatekeeping role was not well developed in either rayon. Antibiotics seemed to be easily available without any medical advice. More than two thirds of the respondents in both Shatura and Stupino answered that it was possible to buy antibiotics without a doctor's prescription.

Table 34: **Patients' experiences with information and cooperation policies**

Statements	Shatura (N=528)		Stupino (N=701)	
	Absolute #	%	Absolute #	%
If a laboratory test has been done I get the results of my tests	455	89	632	91
I can look at my medical records if I want to	430	83	599	86
If I visit a doctor other than my own, he/she has all the information needed to treat me correctly (don't know 14%)	357	70	554	80
If I have been treated by a medical specialist, my doctor knows the results	430	84	634	91
When I am referred, my doctor informs the medical specialist about my illness (don't know 18%)	374	73	552	79
Sometimes a nurse conducts the consultation, making it unnecessary to see my doctor	369	72	569	82
My doctor and the practice nurse work well together (don't know %)	471	92	649	93
*) If 10% or more indicated that they did not know, the percentage has been added in brackets in the first column.				

And finally, Table 34 looks at the patients' impressions of the way health staff handle and communicate information on their health: for example, being informed by the physician of the results of laboratory tests was not a problem. In both Shatura and Stupino, almost all patients reported that they were well informed about their test results and

83% and 86%, respectively, indicated that they would be able to see their own medical records on request.

Overall, patients had positive views on the exchange of information between their primary care physician and other treating physicians. In Shatura 70% and in Stupino 80% of the respondents answered that, if they were to see another doctor, ht/she would have all the necessary information. After being treated by a medical specialist, 84% in Shatura and 90% in Stupino, answered that the primary care physician would know the result of the specialist treatment. And 73% in Shatura and 79% in Stupino believed that, on referring them to a specialist, their own doctor would send the relevant information. There was widespread agreement that doctors and nurses worked well together. Many patients (three quarters in Shatura and over 80% in Stupino) answered that sometimes the nurse would seem them alone, making a consultation with the doctor unnecessary.

2.5   Lessons learned from the pilot project

The following observations and lessons learned are based on the experiences of the team members involved in the pilot implementation in Turkey and the Russian Federation – as well as of the international experts who reflected on the Primary Care Evaluation Tool and the draft report during the review meeting in April 2008 in Copenhagen.

Lessons learned
- Three questionnaires (national level, primary care physicians and patients level), which together form the draft Primary Care Evaluation Tool, were discussed by national experts in Turkey and the Russian Federation, and subsequently successfully tested in surveys in those countries.

- Based on the experiences from the pilot implementation and the extensive feedback given during the international review meeting in Copenhagen, the following major changes have been made to the Tool for its future use:

  » in general, questions have been made more factual; questions asking for opinions have been removed or rephrased;
  » the sequence of topics and questions has been reordered;
  » the character of the national level questionnaire has been changed from a questionnaire for stakeholders to a questionnaire/template for a background document to be prepared by a small team of experts;
  » the questionnaires for patients and primary care physicians have been reduced in size, for instance, by removing questions considered to be outside the scope of family doctors or patients;
  » the consistency of terminology and wording throughout the questionnaires has been improved.

- The sensitivity of the instrument could be improved if the quantitative elements (questionnaires) were supplemented with qualitative methods. New sources of information might include group interviews with primary care workers, additional inspection of documents, direct observations and site visits. These additional ap-

proaches would help to clarify questions remaining after the quantitative analyses, compensate for possible low rates of response and thus improve the validity of the Tool.

- In an early stage of the Tool's application in a Member State, a check is needed to determine whether terms and answer categories in the questionnaires are appropriate. Possible adaptations need to be made before the translation.

- The applicability of the Tool could be further improved by extending the generic core with a variable section that would take the local primary care policy priorities in Member States into account.

- Correct translation of the Tool, using a check and double-check procedure, is essential. Both linguistic and health care expertise are required.

- In general, the following data collection methods can be identified for the surveys:

  » postal survey (with or without postal or telephone follow-up);
  » survey via the Internet;
  » distribution and collection of questionnaires via instructed local health care officials (for instance, chief physicians in districts);
  » transfer and collection of questionnaires via the appropriate organization in the health administration;
  » distribution and collection of questionnaires via trained fieldworkers;
  » distribution and collection of questionnaires via the network of professional associations;
  » involvement of nongovernmental organizations.

- The choice of data collection method (e.g. using commercial fieldworkers or fieldworkers from the health administration, nursing schools, etc.)is related to available resources and local circumstances.

- It has an added value if, within a country, the Tool is implemented in contrasting regions or areas. These regions may differ, for instance, in terms of the stage of primary care reform or the model of service provision. The choice of regions or areas should be explicitly discussed. The selection of regions for comparison should be driven by relevant questions related to health policy, reform processes, different models of service provision, etc. The formulation (at the beginning of the project) of expected differences between regions may serve as a reference for the interpretation of results and offer a starting point for follow-up activities.

- Successful implementation of the Tool, including the dissemination of results and follow-up activities, depends on the involvement and commitment of stakeholders. Although the ministry of health will usually play a leading role, organizations representing health care professionals, health insurers, patient organizations, donors and others should be involved. The more stakeholders are able to contribute, the richer and more useful the information generated by the Tool will be.

- The pilot studies in Turkey and the Russian Federation showed clearly that the surveys had a wider impact than simply in terms of data collection. Introduction of the activities at central, regional and local levels involved information transfer and awareness-raising on issues of quality in primary care. The more intensive the approach and the more personal the way in which the surveys were introduced, the stronger the action effect achieved.

Limitations of the Tool

- The Tool relies strongly on self-reported behaviour, rather than on direct observations or recording. The resulting information may be biased and may not correctly reflect the real situation. Attempts have been made to reduce this bias. Revisions of the Tool have been made with the explicit aim of reducing a positive answering tendency. However, this still cannot be excluded. As a counterbalance, additional observations, checks and interviews have been included in the revised Tool. Quantitative results from the surveys can be validated by these additional measures.

- The focus of the Tool is those aspects of primary care that were defined as essential: coordination, comprehensiveness, accessibility and continuity, embedded in the structure of the WHO health systems framework. The aim of this report is therefore not to give a full chronological overview of the reform process in primary care that has taken place in a given country but to point to possible improvement areas for policy-makers and other interested stakeholders. The set of proxy indicators developed is therefore to be seen as a helpful indication for improvements – especially when compared to primary care practices in other countries – but not as cast in stone. Because the Tool and the corresponding report are based on a defined structure and framework, findings might, however, be selective. Since health reforms are much more comprehensive than the topics covered by the PCET, the results produced should not be considered as a way of fully monitoring those reforms. Such monitoring would require the collection of much more varied data.

The fundamental revision of the Tool and the many suggestions and lessons for future application are valuable outcomes of the project.

3 MAIN CONCLUSIONS AND RECOMMENDED ACTIONS

The table below provides an overview of the results and conclusions, structured according to the health system functions, selected dimensions and proxy indicators, as outlined in the Primary Care Evaluation Scheme in Table 2 of this report.

Table 35: Findings from the surveys and system checklist in Stupino and Shatura, Moscow oblast, Russian Federation

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
Stewardship				
Policy development	Primary care as priority area	• Legislation specifically dealing with primary care (PC): none • Department in Ministry of Health for PC only: no	Although a first policy paper on primary care was issued two decades ago, as well as corresponding appraisals in various basic documents of the federal ministry such as strategic concepts and prikases, primary care does not seem to be placed yet among the highest political priorities as far as the implementation of primary care reforms is concerned. The fact that primary (health) care does not have its own department in the Ministry of Health may also point to a lack of priority in this respect. Primary care is part of the work of the department for medical care within the Ministry.	National level questionnaire

	Regional variation	• % of regions, territories and republics in the Russian Federation:
		  » without any GPs: 10.2%
		  » with more than 20% GPs: 6.8%
			There seems to be considerable regional diversity in primary care policy and service provision. Differences are related to decentralization of powers and to poor central coordination, and lack of resources and managerial capacity at the regional level.	National level questionnaire

	Subjects of debate		Subjects of debate are: staff shortages in primary care; improvement of efficiency; improvement of quality of care through clinical guidelines; improvement of premises and equipment; encouragement of self-care and health awareness among the population.	National level questionnaire
Conditions for the care process	Laws and regulation		Despite the lack of direct attention, federal laws and regulations adopted since 1992 have contained clear implications for primary care. Examples are: more policy freedom for republics and oblasts to set their own health care priorities; measures to ensure the quality of health services in general; acknowledgement of basic rights/patients' right in health care.	National level questionnaire

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
Conditions for responsiveness	Involvement of professionals and patients in policy process		There is little or no formal involvement of organizations of (medical) professionals and organizations representing patients or consumers in the health care policy process. There seems to be little awareness that inputs from professionals and patients can be valuable for policy development.	National level questionnaire
	Patient rights	• % of primary care centres with patient *complaints procedure* reported to be in place: 57%	There is general legislation on consumer protection, but no specific regulation on patients' rights. Health facilities are therefore not obliged to have a procedure for dealing with patient complaints. Patient complaints procedures did not generally exist in either Shatura or Stupino. If there were such procedures, they were not generally known to the patients.	National level questionnaire/ patient survey
Financing				
Incentives for providers		• *Employment status* of PC physicians: 100% state employed	The general income situation of GPs and other staff in primary care has improved since 2005. Although salary levels differ between oblasts, primary care doctors are now generally better paid than specialists working in polyclinics.	National level questionnaire
Financial access for patients		• % patients reporting *co-payments* for drugs prescribed in PC: 52%	Most primary care services were free of charge, except medicines and injections prescribed in primary care, for which co-payments were required. This was given as a reason for some patients abstaining from seeking care.	Patient survey
Resource generation				
Professional development	Workforce	• % of all active physicians *working in PC* (as GP, terapevt, or paediatrician): 12% • % of all PC physicians working *as GP*: 8.5% • Average *age* of PC physicians: 48 years	Workforce data show that the introduction of GPs in primary care is in its infancy. In most places, primary care is still provided by *terapevty* and paediatricians. To some extent, this may be a result of the severe shortage of GPs. It may point to a lack of educational capacity in general practice or to a lack of interest on the part of physicians in (or not enough incentives to undertake) a career as a GP. It is however also important to mention that the municipal administration can choose their preferred "organizational model" depending on their resources and needs; it means that they can either choose the "reform model" based on GP solo or group practices or by retaining the former organizational structures of "policlinics and women consultations".	National level questionnaire

Evaluation of the organizational model of primary care in the Russian Federation

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
	Shortages	• % of positions currently *vacant* in the Russian Federation (expert estimations) » GPs: 50% vacant positions » *Terapevty*: 10% vacant » Paediatricians: 10% vacant	Because of shortages of physicians, many primary care practices have more patients per physician than the official norm. This may lead to excessive workloads and represent a threat to the quality of medical services.	Provider survey
	Quality assurance	• Number of hours PC physicians report spending on *professional reading*/information per month: 8.1 hours • % of PC physicians who report frequent *use of clinical guidelines*: 87%	Quality control and quality improvement are primarily carried out by formal inspections of medical files and periodical obligatory courses. 'Horizontal' and more informal methods, such as mutual structured practice visitation and peer review are rare. Effective use of clinical guidelines could be improved. The guidelines are currently drawn up by medical specialists with only minor inputs from GPs. Guidelines are not well distributed among GPs; they have to be purchased. There has not been any evaluation of their acceptance and use.	National level questionnaire/ provider survey
	Human resources planning	• % of PC physicians reporting that *job satisfaction interviews* are held with PC staff: 52%	There are complete and up-to-date registers of physicians in primary care, throughout the country; but this is not the case for other disciplines, such as nurses. Forecasting studies are occasionally carried out. Job satisfaction interviews are held with over half of the responding physicians.	National level questionnaire/ provider survey
	Organization of professionals		There are national organizations with substantial numbers of members for GPs, terapevty and paediatricians. These organizations are involved in educational and scientific activities and professional development but do not actively defend the material interests of their members, nor do they seem to be partners in the process of health policy development.	National level questionnaire
Delivery of care				
Accessibility				
Geographical access		• % of patients who report that they live *within 20 minutes travel* from PC facility: 77%	Both primary care facilities and general hospitals are easy to reach for patients. Only dentists are further away.	Patient survey
Organizational access	Practice population	• Reported *number of patients per PC physician*: » GPs: 1697 patients » *Terapevty*: 2140 patients » Paediatricians: 708 patients	The size of practice populations of GPs in Stupino and paediatricians in Shatura were near to the national norms. *Terapevty* in Shatura, however, were responsible for numbers of patients far above the national norm. This would seem to indicate shortages of terapevty in Shatura.	Provider survey

Evaluation of the organizational model of primary care in the Russian Federation

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
	Working hours	• Reported number of *patient consultations* per day per PC physician: » GPs: 23 » *Terapevty*: 23 » Paediatricians: 24 • Reported number of *home visits* per day per PC physician: » GPs: 5 » *Terapevty*: 5 » Paediatricians: 8 • Reported number of *working hours* per week per PC physician: » GPs: 36 » *Terapevty*: 31 » Paediatricians: 36	There were indications that the actual number of hours worked per week was higher than the contractual figure. The large proportion of time spent by physicians on travelling points to an inefficient use of resources probably resulting from a lack of available transportation.	Provider survey
	Access to and availability of services	• Reported *average annual utilization rates* per patient: 6.5 visits per year • Reported *length of a patient consultation in* PC: 18 minutes • % PC physicians reporting that they use an *appointment system* for most consultations » GPs: 45% » *Terapevty*: 30% » Paediatricians: 30%.	Access to primary care was better in Stupino than in Shatura. But, overall, patients were positive about the opening hours of the centres and polyclinics and about the availability of medical staff, either in person or by telephone, even at times when the practice was closed. The use of an appointment system was not usual, but nevertheless waiting times to see a doctor were not long. Practices and polyclinics only sporadically used a website for communication with and information to patients.	Patient survey
Coordination				
Cohesion within primary care	Practice management		In most practices and centres, the coordination function was combined with medical practice (with one GP acting as coordinator). The tasks of a coordinator include: provision of patient information to external care providers; improving the quality of care; and maintaining relations with the community.	Provider survey

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
	Collaboration	• % PC physicians reporting that they work with other PC physician(s) in same premises: 60% • % of PC physicians reporting having regular face-to-face meetings with: » practice nurse: 85% » social worker: 51%	The geographical conditions and the working environment differed in Shatura and Stupino. In Shatura, physicians mainly worked in rural practices in small units, while those in Stupino mostly worked in an urban environment in larger teams. Generally, physicians were supported by a nurse; sometimes there was an assistant for laboratory work. The absence of secretarial support suggests that nurses are heavily involved in paper work, with little time for real nursing tasks. Primary care providers had regular meetings with colleagues of their own discipline only.	Provider survey
Coordination with other care levels	Referral system	• Number of *referrals* by PC physicians to medical specialists per 100 patient contacts: not available • Number of *hospital admissions* ordered by PC physicians per 100 patient contacts: not available • Number of pharmaceutical *prescriptions* per 100 patient contacts: not available	Although it was not generally known among patients whether a referral is needed to see a medical specialist, in practice, patients usually consulted their primary care doctor before visiting a medical specialist. In Stupino, the GP's role as the doctor of first contact was weak; it was limited to men and older women. People did not tend to go to their GP if their children felt ill. Also for younger women, the GP was not the obvious point of entry. *Terapevty* in Shatura had a broader field of health problems for which they were the point of first contact than did GPs in Stupino. The 'tandem' of paediatricians and *terapevty*, which, in the old system, was jointly responsible for primary care to the population continued to have a much stronger role as the entry point for health problems than the (new) GPs in Stupino.	Patient survey Provider survey
	Collaboration with secondary level		Consultation links between primary care providers and medical specialists were very weak in both Stupino and Shatura.	Provider survey
Continuity				
Informational continuity		• % PC physicians reporting keeping medical records of all patient contacts on a routine basis: 92%	Medical records were kept routinely, but computers were rarely used for this purpose. The information systems seemed to have great difficulties in retrieving group-based information on patients at risk or patients with shared diagnoses. This hampers active monitoring and prevention.	Provider survey

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
Longitudinal continuity		• % of patients reporting that they were assigned to their PC physician (rather than having a choice): 90% • % of patients reporting having been with their PC physician for at least 3 years: 64%	Patients had no freedom to choose their doctor but, rather, had been assigned to their current doctor. Many did not know whether they were free to change to another doctor. Patients had been registered with their current doctor for a relatively long time, which is a good condition for an enduring doctor-patient relationship. Patients normally saw their own doctor when visiting the centre or polyclinic. The patients generally visited their primary care doctor six to seven times a year. The category of frequent visitors, with more than 12 visits a year, was somewhat larger in Stupino than in Shatura.	Patient survey
Interpersonal continuity			Doctors took sufficient time for their patients, and patients generally appreciated their communication and social skills as well as their reliability. Answers pointed to a situation in which most patients had a relationship of trust and confidence with their doctor.	Patient survey
Comprehensiveness				
Practice conditions	Convenience of services		Wheelchair access to the facilities was problematic and patients were not generally satisfied with the quality of the waiting room. However, experiences with the services at the reception desk were positive.	Patient survey
	Information material		The availability of patient information materials/leaflets was somewhat better in Stupino than in Shatura. Both rayons, however, had little material on contraception or self-treatment in the case of, for example, colds.	Provider survey
Medical equipment		• Number of items of medical equipment reported to be available to PC physicians (from a list of 30 items): 20.4 items (= 68%) • % of PC physicians with a computer available in the centre/practice: 86%	GPs in Stupino were clearly better equipped than their colleagues in Shatura, although, surprisingly, blood pressure meters were often absent in both places. This finding was confirmed by patients. Patients in Shatura were unsure whether their physicians had sufficient medical equipment. Significant differences between Shatura and Stupino indicated that the care providers had different tasks and diagnostic possibilities. However, results from Stupino show that improvements could be made in terms of equipment. Many physicians in both districts had insufficient or no access at all to laboratory and X-ray facilities outside the practice.	Provider survey

Selected dimension	Information items	Proxy indicators from this assessment	Findings from the pilot assessment	Source
Services delivery	Population groups served	• Consolidated score for the PC physician in his/her role of the doctor of *first contact* (based on 17 items; range of score 1–4): » GPs: 2.68 » *Terapevty*: 2.54 » Paediatricians: 2.08	Although many more GPs in Stupino had a mixed practice population (including children), this was less of a distinctive feature than might be expected of GPs in general, because quite a number of terapevty in Shatura also served practice populations consisting of all age groups, especially those practicing in rural areas.	Provider survey
	Involvement of primary care physicians in the treatment of diseases	• Consolidated score for the provision of treatment of diseases by PC physicians (based on 18 items; range of score 1–4): » GPs: 3.32 » *Terapevty*: 3.55 » Paediatricians: 2.34	In contrast to their weak position as doctor of first contact, GPs in Stupino were strongly involved in the treatment of diseases in their patient population. *Terapevty* in Shatura were also strongly involved in treatment. As expected, paediatricians were relatively more involved in growth monitoring and prevention than in the treatment of diseases.	Provider survey
	Provision of preventive and medical technical procedures	• Consolidated score for the provision of *medical procedures and prevention* by PC physicians (based on 16 items; range of score 1–4): » GPs: 2.69 » *Terapevty*: 2.14 » Paediatricians: 2.16 • % of *services to specific* groups of patients covered by PC physicians (based on 14 items): » GPs: 47.8% » *Terapevty*: 33.5% » Paediatricians: 36.4%	The provision of medical procedures related to women's health needs, and concerning ophthalmology and otolaryngology were clearly outside the domain of GPs in Stupino. They did, however, generally provide other procedures such as infusions, immunization, vaccinations, plaster casts and, to a lesser degree, minor surgery. The involvement of terapevty in technical medical procedures was much lower. *Terapevty*, paediatricians and GPs were generally involved in rehabilitative care and influenza vaccination for high risk groups. Most GPs in Stupino were involved in screening for breast cancer and tuberculosis, but not in other screening tasks, such as for sexually transmitted diseases, HIV/AIDS, mother and child health, or cervical cancer. Other tasks related to family medicine, such as family planning, antenatal care and paediatric surveillance were also absent from their work. Antibiotics seemed to be easily available without prescription.	Provider survey Patient survey
Quality of care and evaluation of services		• Number of hours per month PC physicians report spending on professional reading/information: 8.1 • % of PC physicians reporting frequent use of clinical guidelines: 87%	Physicians in both rayons feel they are up-to-date with the latest medical developments; they reported frequent use of medical guidelines and monitoring of local health data or vital statistics. Quality of care could be improved by implementing complaint procedures in all practices; and organizing interviews with practice populations, practice staff and community organizations.	Provider survey
Community orientation		• % of PC physicians reporting regular meetings with local authorities: 47%	There are no strong ties between the community and primary care practices in either rayon. However, about half of the physicians in both rayons have regular meetings with local authorities and social workers.	Provider survey

Moscow oblast – Russian Federation: recommended policy actions

- Promote primary care as a federal strategic priority, either strengthening the leadership at federal level or strengthening the coordinating role of the federal ministry.

  » The evaluation has shown that there seems to be considerable regional diversity in primary care policy and service provision throughout the Federation, between oblasts as well as between rayons within oblasts. These differences are related both to decentralization of power and to weak central coordination; there is also a lack of resources and managerial capacity at the oblast and rayon levels. Health management courses could be organized for senior and middle-level managers and administrators working in the different institutions that steer primary care at rayon and oblast level and in health facilities might be considered.

- Involve associations of health professionals and nongovernmental organizations more formally in the process of health policy development and aspects of its implementation.

  » The evaluation has shown that organizations of professionals and patients are already involved in the policy-making process but this tends to be on an ad hoc basis. The inclusion of stakeholders on a more formal basis, for example through a standing committee or by officially delegating health policy and implementation responsibilities to them, might be considered.

- Further develop and formalize the role of patients in primary care, for instance by improving complaint procedures in health centres, ensuring better communication of referral rules, and promoting patients' responsibilities in prevention or monitoring their needs on a regular basis.

  » The evaluation has shown that the important role and position of patients is formally acknowledged, but patients are not always aware of their rights; nor are they or PC physicians fully aware of the potential of informed and active patients achieving better health outcomes, for example, in the area of noncommunicable diseases. A public information campaign targeting both the general population and physicians with differentiated messages, using mass media such as radio or television might be beneficial.

- Take measures to reduce the shortages of primary care physicians and nurses. This may also reduce the current high workload of, for example, terapevty in some rayons. Consider expanding the job profile for GPs and practice nurses.

  » The evaluation of workforce data has shown that the introduction of GPs in primary care in the whole of the Russian Federation is still in its infancy. In most places primary care is still provided by terapevty and paediatricians. To some extent, this may be a result of the severe shortage of GPs. This may point to a lack of educational capacity in general practice or to a lack of interest among physicians (or not enough incentives) embarking on a career as a GP. Full use of existing educational capacities should be considered – and even the possibility of expanding them. Incentives such as free Internet connections and e-learning programmes for GPs and nurses in rural areas could prove attractive. The reputation of GPs as a profession could be improved by subsidizing and supporting research by them or expanding the general practice task profile, in particular, the GPs' role as the health care entry point, the provision of family planning, some paediatric services and some gynaecological services such as cervical cancer screening. The introduction of new disciplines in primary care could also be considered: the nurse practitioners would free GPs for other tasks and would enhance the role of the nurse towards being more of a full team member, with more clinical tasks and less paper work and secretarial tasks.

- Improve the coordinating role of GPs by removing obstacles to collaboration and working relations between GPs and secondary level medical specialists (strengthening the GPs' role as the first contact point); and support cooperation with the community and social services.

  » The evaluation has shown that there is almost no formalized multidisciplinary team work within primary care or between levels of care to the benefit of, for example, patients with chronic diseases or multiple morbidities. Team working schemes for the core primary care team should be introduced and training provided. Disease management programmes that include pathways for patients through primary and secondary care levels should be formalized. Stronger links between primary health care facilities and the community should be stimulated to enhance coordination between the health and social services.

ANNEX 1 GLOSSARY OF TERMS ON PRIMARY CARE

Accessibility: the patients' ability to receive care where and when it is needed, given possible physical, financial or psychological barriers *(10)*.

Comprehensiveness: the extent to which services provided comprise curative, rehabilitative and supportive care, as well as health promotion and disease prevention *(16)*.

Confidentiality: the right to determine who has access to one's personal health information *(1)*.

Continuity: the ability of relevant services to offer interventions that are either coherent over the short term both within and among teams (cross-sectional continuity), or are an uninterrupted series of contacts over the long term (longitudinal continuity) *(10)*.

Coordination: a service characteristic resulting in coherent treatment plans for individual patients. Each plan should have clear goals and necessary and effective interventions, no more and no less. Cross-sectional coordination means the coordination of information and services within an episode of care. Longitudinal coordination means the interlinkages among staff members and agencies over a longer period of treatment *(10)*.

Financing: function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively, in the health system *(8)*.

Family medicine teams: Family medicine teams can vary from country to country and in size: the core team usually encompasses the general practitioner and a nurse, but can consist of a multidisciplinary team of up to 30 professionals, including community nurses, midwifes, feldshers (medical attendants), dentists, physiotherapists, social workers, psychiatrists, speech terapevty, dieticians, pharmacists, administrative staff and managers, etc. *(18)*. In 2003, WHO used the description that a primary care team is a group of "fellow professionals with complementary contributions to make in patient care. This would be part of a broader social trend away from deference and hierarchy and towards mutual respect and shared responsibility and cooperation *(19)*. By definition, family medicine teams are patient-centred and therefore their composition and organizational model cannot but change over time: it is a flexible construct.

General practice: General practice is a term now often used loosely to cover the general practitioner and other personnel as well, and is therefore synonymous with primary care and family medicine. Originally, it was meant to describe the concept and model around the most significant single player in primary care: the general practitioner or primary care physician, while family medicine originally encompassed more the notion of a team approach. Whenever the notion of solo practitioner (general practice)

versus team-based approach (family medicine) is relevant, the distinction should be made. According to Atun, the specificity of the general practitioner is that he/she is "the only clinician who operates in the nine levels of care: prevention, pre-symptomatic detection of disease, early diagnosis, diagnosis of established disease, management of disease, management of disease complications, rehabilitation, palliative care and counselling" (20).

Primary health care: This term should be used when it is intended to refer to the broad concept elaborated in the Declaration of Alma Ata (1978) with its principles of equity, participation, intersectoral action and appropriate technology and its central place of the health system (21).

Primary care: is more than just the level of care or the gatekeeping – it is a key process in the health system. It is the first contact, accessible, continued, comprehensive and co-ordinated care: first contact care is accessible at the time of need; ongoing care focuses on the long-term health of a person, rather the short duration of the disease; comprehensive care is a range of services appropriate to the common problems in the respective population and coordination is the role by which primary care acts to co-ordinate other specialists that the patient may need (20). Primary care is a subset of primary health care.

Performance: (or composite goal performance) is defined as a relative concept: the extent to which the health system involves relating goal attainment to what could be achieved in the given context of the country (1).

Resource generation: the provision of essential inputs to the health system, including human capital, physical capital and consumables (1).

Responsiveness: is measure of how the system performs relative to non-health aspects, meeting or not meeting a population's expectations of how it should be treated by providers of prevention, care or non-personal services (not a measure of how the system responds to health needs, which shows up in health outcomes). Enhancing responsiveness to the expectations of the population, includes: (a) respect for persons (including dignity, confidentiality [of information] and autonomy of individuals and families to decide about their own health); and (b) client orientation (including prompt attention, access to social support networks during care, providing quality of basic amenities and choice of provider) (1).

Stewardship: a function of a government responsible for the welfare of the population, and concerned with the trust and legitimacy with which its activities are viewed by the citizenry. It includes the overseeing and guiding of the working and the development of the nation's health actions on the government's behalf. The components of stewardship are: Health policy formulation (defining the vision and direction for the health system); Regulation (setting fair rules of the game with a level playing field) and Intelligence (assessing performance and sharing information) (1,8).

ANNEX 2 PRIMARY CARE PHYSICIANS IN THE RUSSIAN FEDERATION

Table 36: Number of GPs, paediatricians and terapevty in oblasts, territories and republics of the Russian Federation; GPs as a percentage of the total of generalist physicians in primary care[1]

Republics, regions, territories	GPs	Paediatr.	Terapevty	Total (G+T+P)	GPs as % of total
Adygeya, Republic of	0	84	129	213	0%
Aginsk-Buryat adm.district	1	22	30	53	1.9%
Altai territory	89	530	839	1458	6.1%
Altay, Republic of	14	25	28	67	20.9%
Amur region	22	194	291	507	4.3%
Arkhangelsk region	96	281	310	687	14.0%
Astrakhan region	22	186	263	471	4.7%
Bashkortostan, Republic of	116	932	1356	2404	4.8%
Belgorod region	135	289	498	922	14.6%
Bryansk region	28	264	390	682	4.1%
Buryatia, Republic of	78	176	232	486	16.0%
Chechnya, Republic of	0	144	195	339	0.0%
Chelyabinsk region	84	615	730	1429	5.9%
Chita region	38	250	259	547	6.9%
Chukotka adm. District	0	14	16	30	0.0%
Chuvashia, Republic of	256	267	295	818	31.3%
Dagestan, Republic of	85	637	720	1442	5.9%
Evenk adm. district	0	2	5	7	0.0%
Ingushetia, Republic of	14	89	115	218	6.4%
Irkutsk region	47	459	536	1042	4.5%
Ivanovo region	26	226	384	636	4.1%
Jewish adm. district	6	45	32	83	7.2%
Kabardino-Balkaria, Republic of	1	171	191	363	0.3%
Kaliningrad region	19	186	249	454	4.2%
Kalmykia, Republic of	16	78	94	188	8.5%
Kaluga region	66	174	233	473	14.0%
Kamchatka region	13	79	93	185	7.0%
Karachaevo-Cherkessia, Rep.	0	92	119	211	0.0%
Karelia, Republic of	31	152	238	421	7.4%
Kemerovo region	129	543	662	1334	9.7%
Khabarovsk territory	44	310	430	784	5.6%
Khakasia, Republic of	36	111	110	257	14.0%
Khanty-Mansi adm. district	96	420	447	963	10.0%
Kirov region	21	257	441	719	2.9%
Komi, Republic of	25	203	229	457	5.5%
Koryak adm.district	12	5	7	24	50.0%
Kostroma region	6	139	202	347	1.7%
Krasnodar territory	109	960	1422	2491	4.4%
Krasnoyarsk territory	48	603	814	1465	3.3%
Kurgan region	20	138	162	320	6.3%
Kursk region	31	184	348	563	5.5%
Leningrad region	114	207	371	692	16.5%
Lipetsk region	75	200	318	593	12.6%
Magadan region	0	36	58	94	0.0%
Mari El, Republic of	5	155	221	381	1.3%

1   *Source: Ministry of Health and Social Development, Russian Federation, 2007.*

Table 36 cont'

Republics, regions, territories	GPs	Paediatr.	Terapevty	Total (G+T+P)	GPs as % of total
Mordovia, Republic of (ctd.)	146	171	218	535	27.3%
Moscow	87	1657	2952	4696	1.9%
Moscow region	120	1272	1908	3300	3.6%
Murmansk region	74	178	205	457	16.2%
Nenets adm.district	0	7	8	15	0.0%
Nizhny Novgorod region	24	625	1030	1679	1.4%
North Osetia, Republic of	25	181	284	490	5.1%
Novgorod region	26	119	187	332	7.8%
Novosibirsk region	12	604	940	1556	0.8%
Omsk region	97	463	627	1187	8.2%
Orel region	99	149	227	475	20.8%
Orenburg region	15	481	712	1208	1.2%
Penza region	82	266	403	751	10.9%
Perm territory	91	597	900	1588	5.7%
Primorye territory	62	407	503	972	6.4%
Pskov region	7	120	165	292	2.4%
Rostov region	101	784	1127	2012	5.0%
Ryazan region	6	220	464	690	0.9%
Saint-Petersburg	282	821	1355	2458	11.5%
Sakha, Republic of	42	256	381	679	6.2%
Sakhalin region	0	103	154	257	0.0%
Samara region	770	701	561	2032	37.9%
Saratov region	83	466	755	1304	6.4%
Smolensk region	68	187	326	581	11.7%
Stavropol territory	279	519	618	1416	19.7%
Sverdlovsk region	107	583	703	1393	7.7%
Taimyr adm. district	1	12	15	28	3.6%
Tambov region	34	178	317	529	6.4%
Tatarstan, Republic of	768	762	709	2239	34.3%
Tomsk region	20	228	364	612	3.3%
Tula region	120	262	365	747	16.1%
Tver region	131	274	461	866	15.1%
Tyumen region	133	862	971	1966	6.8%
Tyva, Republic of	0	53	57	110	0.0%
Udmurtia, Republic of	24	396	559	979	2.5%
Ulyanovsk region	10	253	430	693	1.4%
Ust-Ordyn adm.district	2	14	25	41	4.9%
Vladimir region	27	284	483	794	3.4%
Volgograd region	31	833	510	1374	2.3%
Vologda region	44	282	238	564	7.8%
Voronezh region	202	411	616	1229	16.4%
Yamal-Nenets adm.district	1	163	173	337	0.3%
Yaroslavl region	31	268	490	789	3.9%
All regions / territories (88)	**6358**	**28606**	**39608**	**74572**	**8.5%**

REFERENCES

1. *The world health report 2000: Health systems: improving performance*. Geneva, World Health Organization, 2000 (http://www.who.int/whr/2000/en/whr00_en.pdf, accessed 8 September 2008).

2. WHO Regional Committee for Europe resolution EUR/RC55/R8 on Strengthening health systems as a continuation of the WHO Regional Office for Europe's Country Strategy "Matching services to new needs". Copenhagen, WHO Regional Office for Europe, 2005 (http://www.euro.who.int/Governance/resolutions/2005/20050920_2, accessed 16 December 2008).

3. Murray C, Frenk J. World Health Report 2000: a step towards evidence-based health policy. Lancet, 2001, 357:1698–1700.

4. Atun RA et al. Introducing a complex health innovation-Primary health care reforms in Estonia (multimethods evaluation). *Health Policy*, 2006, 79:79–91.

5. Kelley E, Hurst J. *Health care quality indicators project. Conceptual framework paper*. Paris, Organisation for Economic Co-operation and Development, 2006 (OECD Health Working papers no. 23) (http://www.oecd.org/dataoecd/1/36/36262363.pdf, accessed 8 September 2008).

6. Sibthorpe, B. *A proposed Conceptual Framework for Performance Assessment in Primary Health Care. A Tool for Policy and Practice*. Canberra, Australian Primary Health Care Research Institute, 2004 (http://www.anu.edu.au/aphcri/Publications/conceptual_framework.pdf, accessed 10 December 2008).

7. Watson, DE et al. *A results-based logic model for primary health care: laying an evidence-based foundation to guide performance measurement, monitoring and evaluation*. Vancouver, Centre for Health Services and Policy Research, 2004.

8. Health Systems Performance: Glossary [web site]. Geneva, World Health Organization, 2001 (http://www.who.int/health-systems-performance/docs/glossary.htm, accessed 8 September 2008).

9. Starfield, B. *Primary Care. Balancing health needs, services and technology*. New York, Oxford University Press, 1998.

10. Health Evidence Network. What are the arguments for community-based mental health care? Annex 2. Key principles for balanced community-based mental health services [web site]. Copenhagen, WHO Regional Office for Europe, 2004 (http://www.euro.who.int/HEN/Syntheses/mentalhealth/20030903_1, accessed 12 December 2008).

11. Starfield B et al. Continuity and coordination in primary care: their achievement and utility. *Medical Care*, 1976, 14:625–636.

12. Saultz JW. Defining and measuring interpersonal continuity of care. *Annals of Family Medicine*, 2003, 1:134–143 (http://www.annfammed.org/cgi/content/full/1/3/134, accessed 10 December 2008).

13. Reid, R., Haggerty, J, McKendry, R. *Defusing the confusion: Concepts and measures of continuity of healthcare*. Ottawa, Canadian Health Services Research Foundation, 2002 (http://www.chsrf.ca/funding_opportunities/commissioned_research/projects/pdf/defusing_e.pdf, accessed 10 December 2008).

14. Boerma WGW. Coordination and integration in European primary care. In: Saltman RB, Rico A, Boerma WGW, eds. *Primary Care in the Drivers Seat? Organizational reform in European primary care*. Maidenhead, Open University Press, 2006 (http://www.euro.who.int/Document/E87932_chapt1.pdf, accessed 8 September 2008).

15. Starfield B. Primary care and health. A cross-national comparison. *Journal of the American Medical Association*, 1991, 266:2268–2271.

16. Boerma WGW. *Profiles of general practice in Europe. An international study of variation in the tasks of general practitioners*. Utrecht, NIVEL, 2003 (http://www.nivel.nl/pdf/profiles-of-general-practice-in-europe.pdf, accessed 5 September 2008).

17. Tragakes E, Lessof S. *Health care systems in transition: Russian Federation*. Copenhagen, WHO Regional Office for Europe, 2003 (http://www.euro.who.int/document/e81966.pdf, accessed 17 March 2009).

18. Meads G. *Primary care in the twenty-first century – an international perspective*. Oxford, Radcliffe Publishing, 2006.

19. *A review of primary health care in Europe*. Draft version. Copenhagen, WHO Regional Office for Europe, 2003.

20. Atun R. *What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services?* Copenhagen, WHO Regional Office for Europe, 2004 (Health Evidence Network report; http://www.euro.who.int/document/e82997.pdf, accessed 9 February 2007).

21. *Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata, USSR, September 6-12 1978*. Geneva, World Health Organization, 1978.

SUMMARY

Although the strengthening of primary care services is a priority of health reforms in many countries, both in central/eastern and in western Europe, the backgrounds to and reasons for the reforms are not similar. In western Europe, emphasis on primary care is expected to be an answer to questions of rising costs and changing demand as a result of demographic and epidemiological trends. Central and eastern European countries, as well as countries of the former Soviet Union, are struggling to fundamentally improve the performance of their entire health systems. Primary care is now being reorganized in many countries to bring adequate and responsive health services closer to the population.

In many countries in transition, health reforms are part of profound and comprehensive changes in essential societal functions and values. Reforms of (primary) care are not always based on evidence, and progress is often driven by political arguments or the interests of specific professional groups, rather than by the results of sound evaluations. However, policy-makers and managers nowadays increasingly demand evidence of the progress of reforms and the responsiveness of services.

This report evaluates developments in primary care in Moscow oblast, Russian Federation, using a methodology that characterizes a good primary care system as one that is comprehensive, accessible, coordinated and integrated; that ensures continuity; and that recognizes that all health system functions outlined in the WHO framework are considered to improve the overall health system equally. This means that the financing arrangements, service delivery, human and other resources (such as appropriate facilities, equipment and drugs) and, finally, all the necessary legal frameworks and regulations are in place, and the system is steered by the right leader. The report thus offers a structured overview of the strengths and weaknesses of a country's organizational model for primary care services – including the voices of the professionals and patients concerned – to interested policy-makers and stakeholders.