



World Health  
Organization

REGIONAL OFFICE FOR

Europe

**EVALUATION OF THE STRUCTURE AND  
PROVISION OF PRIMARY CARE IN**

**SLOVAKIA**

A survey-based project

Primary care in the WHO European Region

April 2012

**Design, layout & production**

Phoenix Design Aid, Denmark

**EVALUATION OF THE STRUCTURE  
AND PROVISION OF PRIMARY CARE IN  
SLOVAKIA**

A survey-based project

April 2012



# ABSTRACT

Health reforms are part of the profound and comprehensive changes in essential societal functions and values occurring in many eastern European countries in economic and political transition. Primary care reform is not always evidence based and may be driven by political arguments or the interests of specific professional groups. However, policy-makers and health care managers now increasingly demand evidence of the effects of reforms and the responsiveness of services.

The WHO Primary Care Evaluation Tool (PCET) aims to provide a structured approach to evaluation. It focuses on health systems functions, such as governance, financing and resource generation, and the characteristics of a good primary care service delivery system, which include accessibility, comprehensiveness, coordination and continuity. This report provides an overview of findings from the use of PCET in Slovakia.

The project was carried out in 2010 as part of the 2010/2011 biennial collaborative agreement between the WHO Regional Office for Europe and the Ministry of Health of Slovakia, an agreement that lays out the main areas of collaborative work. It also involved the Netherlands Institute for Health Services Research (NIVEL) – a WHO collaborating centre for primary care – Agency NOVUM PRO and other stakeholders in the Slovak health system, including national policy experts, managers, medical educators, primary care physicians and patients.

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>).

## Keywords

PRIMARY HEALTH CARE  
EVALUATION STUDIES  
HEALTH SYSTEMS PLANS – organization and administration  
HEALTH CARE REFORM  
HEALTH POLICY  
QUESTIONNAIRES  
SLOVAKIA

## © World Health Organization 2012

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

# CONTENTS

<b>Acronyms</b> .....	<b>4</b>
<b>Acknowledgements</b> .....	<b>5</b>
<b>Foreword</b> .....	<b>7</b>
<b>Executive summary</b> .....	<b>8</b>
<b>Recommended policy action</b> .....	<b>15</b>
<b>1. Evaluating primary care: background and application</b> .....	<b>19</b>
1.1 Primary Care Evaluation Tool theoretical framework .....	19
1.2 Health system functions .....	20
1.3 The Primary Care Evaluation Framework .....	22
1.4 The Primary Care Evaluation Scheme .....	24
1.5 The PCET .....	26
<b>2. Introduction to Slovakia</b> .....	<b>31</b>
2.1 The country .....	31
2.2 Population and health .....	34
2.3 The health care system .....	37
<b>3. PC in Slovakia: national situation and context</b> .....	<b>41</b>
3.1 Stewardship/governance .....	41
3.2 Policy development .....	43
3.3 Current issues and plans for PC .....	52
<b>4. GPs and their position in PC</b> .....	<b>54</b>
4.1 Respondents' characteristics .....	54
4.2 Accessibility of care .....	56
4.3 Continuity of care .....	58
4.4 Coordination of care .....	60
4.5 Comprehensiveness of care .....	64
<b>5. Patients' views of PC</b> .....	<b>72</b>
5.1 Respondents' characteristics .....	72
5.2 Accessibility of care .....	73
5.3 Continuity of care .....	78
5.4 Perceived coordination of care and choice of provider .....	82
<b>6. Structured summary</b> .....	<b>85</b>
<b>References and other sources</b> .....	<b>95</b>
<b>Annex 1. Tables A1–A6</b> .....	<b>101</b>
<b>Annex 2. Glossary of terms relevant to PC</b> .....	<b>107</b>

# ACRONYMS

ADOS	Agentúry Domácej Ošetrovateľskej Starostlivosti [Home Care and Nursing Agencies]
BCA	biennial collaborative agreement [between WHO Regional Office for Europe and Member State]
CME	continuing medical education
CVD	cardiovascular disease
ECG	electrocardiogram
EU	European Union
EU15	countries belonging to the EU before May 2004
GDP	gross domestic product
GP	general practitioner
GPA	general practitioner for adults
GPC	general practitioner for children and adolescents
HCSA	Health Care Surveillance Authority
LSPP	Lekárske Služby Prvá Pomoc [First Aid Medical Services]
MoH	Ministry of Health of Slovakia
NCHI	National Centre for Health Information
NGO	nongovernmental organization
NIVEL	Netherlands Institute for Health Services Research
PC	primary care
PHA	Public Health Authority
PPP	purchasing power parity
PCET	WHO Primary Care Evaluation Tool
SDR	standardized death rate
SIDC	State Institute for Drug Control
STI	sexually transmitted infection
TB	tuberculosis
VŠZP	Všeobecná Zdravotná Poist'ovňa (VŠZP) [General Health Insurance Company]

# ACKNOWLEDGEMENTS

The WHO Regional Office for Europe thanks all those who contributed to the achievements of this project.

## **The project implementation team**

### *Principal writers*

Wienke G.W. Boerma, Netherlands Institute for Health Services Research (NIVEL) (author and technical project leader)

Therese A. Wieggers, NIVEL (author)

Valentina Baltag, WHO Regional Office for Europe (author)

### *Project coordination (at the Regional Office)*

Valentina Baltag

Christine Beerepoot

### *Country team*

Darina Sedláková, WHO Country Office, Slovakia

Lucia Poláková, Agency NOVUM PRO (coordinator of data collection)

## **The following individuals provided valuable inputs and advice:**

### *Ministry of Health*

Peter Bánovčín, chief expert in paediatrics

Ján Gajdošík, chief expert for general practitioners for adults

Adam Hochel, Director General of Health Section (until 2010)

Adriána Liptáková, Director of Department of Health Care

Márió Miklóši, Director General of Section of Health (until 2011)

Martin Olej, chief expert for general practitioners for children and adolescents

Iva Soukopová, Department of Health Education

### *Stakeholder organizations*

Eva Antóniová, Slovak Association of General Practitioners for Children

Jana Bendová, Slovak Society of General Practice of the Slovak Medical Association

Jozef Botka, Chief Manager, AGEL private hospital

Andrea Černianská, University Children's Hospital, Bratislava

Helena Hupková, General Health Insurance Company

Gabika Káderová, Slovak Association of General Practitioners for Children

Bohuš Kolčák, Slovak Association of General Practitioners for Children

Peter Lipták, Slovak Society of General Practice of the Slovak Medical Association

Ladislav Pázstor, Association of Private Physicians

Ružena Rolná, General Health Insurance Company

Katarína Šimovičová, Council of the Slovak Medical Chamber

Zuzana Slezáková, Director of Department of Health Education

Zuzana Teremová, Presidium of Slovak Medical Chamber, Health Care Committee

Mária Trnková, UNION Health Insurance Company

Karin Valdnerová, Slovak Association of General Practitioners for Children

Iveta Vaverková, Slovak Society of General Practice of the Slovak Medical Association

Milan Vojtikevič, Slovak Association of General Practitioners for Children  
Soňa Zatlukalová, Slovak Association of General Practitioners for Children  
Jozef Zavřel, Slovak Association of General Practitioners for Children

*Self-governing regions*

Vladimír Bzdúch, Bratislava  
Danica Bezáková, Trenčín  
Marián Brídik, Trenčín  
Miluša Džupinová, Poprad  
Milan Jedlička, Nitra  
Anna Ježová, Žilina  
Stanislav Križan, Trenčín  
Karol Kralinský, Banská Bystrica  
Milan Kuchta, Košice  
Juraj Kováčik, Žilina  
Ján Kovaľ, Poprad  
Ján Krištúfek, Bratislava  
Mária Kuniaková, Banská Bystrica  
Štefan Kohler, Žilina  
Ludmila Lysinová, Banská Bystrica  
Štefan Lipčák, Košice  
Anna Majbíková, Žilina  
Michal Medovarský, Nitra  
Peter Makara, Poprad  
Katarína Naďová, Trnava  
Zuzana Nedelková, Trnava  
Otilia Ostróová, Košice  
Valerián Potičný, Bratislava

The project implementation team is grateful for the participation of all patients, general practitioners for children and adolescents, general practitioners for adults, fieldworkers and local organizers throughout the country.



# FOREWORD

Primary health care embodies the values and principles that WHO pursues in its worldwide effort to help countries strengthen their health systems to make them more equitable, inclusive and fair. WHO renewed its commitment to global health improvement, particularly for the most disadvantaged populations, in the *World health report 2008 (1)*, which urges countries to strengthen primary health care as the most efficient, fair and cost-effective way to organize a health system. The subtitle of the report underscores the urgency of its message: “primary health care: now more than ever”.

The WHO European Region has a long history of developing health strategies based on scientifically sound and socially acceptable interventions that promote solidarity, equity and active involvement of various sectors and civil society. Health in the 53 European Region Member States has improved considerably over the past 30 years despite significant changes in patterns and trends of disease occurrence, demographic profiles and exposure to major risks and hazards in a rapidly evolving socioeconomic environment. The Region has also witnessed the development of more integrated models of care and greater pluralism in 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. The new WHO European policy framework for health and well-being, Health 2020, is an example of such reflection. It offers practical pathways for addressing current and emerging health challenges in the Region and emphasizes that primary health care is one of the preeminent instruments for integrating prevention within the wider health system.

This report evaluates primary care developments in Slovakia using a methodology that characterizes a good primary care system as one that is comprehensive, accessible, coordinated and continuous. The methodology assesses whether primary care service delivery is supported by an adequate legal and normative framework, financing mechanisms, human resource strategies, supply of appropriate facilities, equipment and medicines, and effective leadership. The report therefore offers a structured overview of the strengths and weaknesses of the country’s organization and provision of primary care services – built on the perceptions of professionals and patients – for policy-makers and stakeholders. The Regional Office hopes that the report will inform further primary care reform in Slovakia, helping health care to meet people’s needs and expectations.

I thank the many stakeholders who have generously contributed to this project with their ideas and insights. I would also like to acknowledge with gratitude the financial assistance of the Netherlands Ministry of Health, Welfare and Sport in the framework of the partnership programme between the Regional Office and the Netherlands.

## **Hans Kluge**

Director, Division of Health Systems and Public Health  
WHO Regional Office for Europe

1 *The world health report 2008. Primary health care: now more than ever.* Geneva, World Health Organization, 2000 ([http://www.who.int/whr/2008/whr08\\_en.pdf](http://www.who.int/whr/2008/whr08_en.pdf), accessed 11 July 2012).

# EXECUTIVE SUMMARY

The WHO Primary Care Evaluation Tool (PCET) was implemented nationwide in Slovakia in 2010 and 2011 as part of the framework of the 2010/2011 biennial collaborative agreement (BCA) between the WHO Regional Office for Europe and the Ministry of Health (MoH) of Slovakia. The BCA describes the main areas of collaboration between the parties. The other involved partners were the Netherlands Institute for Health Services Research (NIVEL) (a WHO collaborating centre for primary care), Agency NOVUM PRO and health system stakeholders in Slovakia, including national policy experts, institutes for medical education, regional authorities, general practitioners for children and adolescents (GPCs), general practitioners for adults (GPAs) and patients.

The PCET addresses supply- and demand-side aspects of primary care (PC). It aims to help ministries of health and other stakeholders to monitor the progress of PC-related policies and reforms and provide evidence to support new priorities for its development.

## Methods

The PCET's underlying methodology derives from the WHO world health report from 2000 (1), which states that the performance of a health system is determined by the way its functions – stewardship, resource generation, financing and service provision – are organized. It addresses these functions and the key characteristics of PC services, including accessibility of services, continuity of care, coordination of care and comprehensiveness. Key dimensions and subthemes are identified for each, translated into indicators or appropriate proxies.

The PCET gathers information from different levels and from demand and supply sides to evaluate the complexity of PC systems. It has three instruments: a questionnaire addressing the status, structure and context of PC at national level; a questionnaire for PC physicians; and a questionnaire for patients. Together, these cover the key PC functions, dimensions and subthemes derived from the framework.

The questionnaires for PC physicians and patients are prestructured with precoded answers. The national version has prestructured and open-ended questions, with capacity for collecting statistical data.

The questionnaires were completed during 2010 and early 2011 by, respectively:

- national policy experts and other health system stakeholders
- GPAs and GPCs randomly selected from throughout the country
- patients who visited these general practitioners (GPs).

The project team processed and analysed data from February to April 2011. The draft report was discussed at a validation meeting in Bratislava on 2 November 2011, with the final version being completed in April 2012.

The approach means that the results reflect respondents' self-reported behaviour and experiences. Reports of physicians' involvement in services to their patients do not imply a measure of quality. The confidence interval for the GP survey was  $\pm 4.5\%$  and  $\pm 2.5\%$  for the patient survey.

## Results

### National-level results

National-level results are based on responses to the national questionnaire and interviews with policy experts and health professionals.

#### Stewardship/governance

Priorities for health sector reform have fluctuated with successive governments. Managed competition and individual responsibility were central themes between 2002 and 2006, but the subsequent government reestablished state involvement. The 2010 elections saw a return to market mechanisms, profit-making health insurance companies, hospitals being transformed into joint stock companies and diagnosis-related group-based funding. This government ended in October 2011. The new government, which took office in April 2012, may decide not to continue with its predecessor's policy.

In addition to its role in developing health policy and regulation, the government owns major health care facilities and a health insurance company that has a two-thirds market share. Several departments within the MoH hold responsibilities for PC, with general practice being divided along adult and children's lines. The Ministry of Education and MoH share responsibilities for medical education and curricula. The National Centre for Health Information and the Health Care Surveillance Authority (HCSA), which is a general supervisory body, support the MoH.

Health insurance companies purchase care through contracts. The contracting process can be selective but is not used as a quality assurance tool. Professional organizations take part in annual negotiations for the health insurance framework contract, but they do not perform trade union activities on behalf of their members. The framework contract is a non-binding recommendation.

Self-governing regions hold important responsibilities in planning and delivering PC services in their territories, including issuing practice permits to GPs. No regional differences in the availability of PC services were reported, but large differences between districts and within regions were found.

The government focused on PC in 2006, publishing a policy paper (2) which, among other things, defined GP tasks. The government stressed the key role of first-contact doctors (that is, those to whom patients typically present first with health-related problems) and strengthened their position within the health system.

There is currently no upper limit to the number of patients per GP, meaning it is difficult to quantify if there is a shortage in the country. Over a quarter of GPs nevertheless reported shortages of GPs and PC nurses in their area. There is a nationwide shortage of dentists.

Patient rights and interests are not topical in Slovakia, and there is a lack of strong patient advocacy organizations. GPs and PC facilities are not required to have a patients' complaints procedure in place, although patients can complain to various agencies and bodies, including the HCSA, the MoH, health insurance companies, the Medical Chamber and self-governing regions. It is not clear whether complaints submitted to these bodies are coordinated.

### **Financing**

Around 4.4% of the total health budget is spent on PC (2009 figures). Health insurance companies cover costs of PC visits, but copayments apply to prescribed drugs and to services not included in benefit packages. GP remuneration involves a mixed-payment system of capitation and fee for service. Payment levels are not related to quality or performance indicators.

### **Human resources**

There were 3080 GPs in 2011 (2030 GPAs and 1050 GPCs), an increase of 8.6% from 2009. Almost all work in independent practice with contracts to health insurance companies. One GPC is available for every 1008 people of 18 years or younger (most GPCs also care for students until the age of 28) and one GPA for every 2141 aged 19 and older. Fewer than one in five active physicians is a GP. The number of PC nurses almost equals that of GPs.

### **Quality management**

Quality of care regulation is mainly focused on structural aspects, such as setting criteria for equipment or staff qualifications. Health care providers are required to have a written quality system, but there is no enforcement. Disease-specific clinical guidelines developed with and for GPs are not available. Health insurance companies' role in quality control is marginal.

### **Service provision**

Almost all GPs are self-employed and solo practice is the dominant mode. GPs' official referral rates are extremely high at around 245 referrals per 1000 contacts per year. Two thirds of patient contacts result in a prescription. Patients visit a GP five times per year on average. The GP referral system, introduced in 2008, was abolished in 2010.

### **GP and patient results**

Three hundred and fifty three GPs (235 GPAs and 118 GPCs) and 2224 patients visiting both types of GPs responded; this was in line with target numbers, but many GPs had to be approached to achieve this response. Almost all GPCs and two thirds of GPAs were women. The average age was 54 years.

### **Accessibility of care**

Geographical distribution of GP practices nationwide seems even, although evidence from outside the survey suggests strong imbalances at district level. Two thirds of patients live within 20 minutes travel from a practice. Most can reach it easily by public transport, but practice access for disabled people and those using a wheelchair is poor. Almost half of the patients reported waiting rooms as unsatisfactory ("inconvenient"), but most were positive about opening hours, reception areas and accessing a doctor by telephone or in person in urgent cases.

GPs have around 50% larger patient lists and list size is higher in rural areas. The workload of GPs is very high. The number of face-to-face patient contacts is 47 per day for GPs and 39 for GPCs, with around 7 telephone and 5 e-mail consultations and 10 patients visiting the practice for repeat prescriptions.

Home visits are few at 4 to 5 per week, with a large majority of patients reporting GPs' reluctance to make home visits. Same-day visits are generally possible, but opening at evenings and weekends is rare. Most GPs provide patients with their private telephone number for use outside office hours, although additional payment may be required for this service.

Most patients have to pay for medicines or injections prescribed by their GP and more than a quarter pay for a GP visit: this does not comply with current regulations, which state that no payments should be made for home visits. Nine per cent of patients report that having to pay for medicines had caused them to delay or cancel a visit to their GP in the previous year.

### **Coordination of care**

Half of GPs work alongside other health care workers, although 30% report that they do not have a practice nurse working in the same building (even though it is compulsory for GPs to employ a nurse). Most have regular face-to-face contacts with peers, nurses (GPCs tend to meet with practice nurses and GPs with home care nurses from the home care and nursing agencies (ADOS)) and, to a lesser extent, pharmacists. They also regularly request medical specialist consultations and advice. Connections with the community through meetings with local authorities or community or social workers, however, are not well developed.

Patients do not view exchanges of information between their GP and other treating physicians well, but are more positive about information transfer in the opposite direction. They generally agree that their GP and practice nurse work well together.

### **Continuity of care**

Seventy per cent of patients have been with their doctor for more than three years, and most people are positive about their GP. Three quarters feel their doctor knows about their past problems and illnesses and their communication skills are widely appreciated.

All GPs routinely keep medical records for all patient contacts, but not all are able to identify at-risk patients who may require preventive interventions. Medical records are not always available in practices as patients may take them when consulting with a medical specialist. Routine use of referral letters is widespread. All GPs use computers, with "composing prescriptions" being the most frequently reported application, and well over a quarter employ e-mail consultations. More than a quarter do not computerize patients' medical records, however.

### **Comprehensiveness of care**

Variation in availability of medical equipment between GPs is small. From a list of 30 items of medical equipment, 18 (on average) are available in practice offices. Half of patients report, however, that their practice has insufficient medical equipment, and

some compulsory items do not seem to be generally available. Laboratory and X-ray facilities are available, although not usually within the practice building.

Most GPs report having health education materials available to patients in waiting rooms. Availability of materials on sexually transmitted infections, contraception and social services is, however, poor.

Clinical service profiles of each type of GP differ. GPAs are relatively heavily involved in treatment and follow up of diseases, but this is less so for GPCs.

Both types of GP have poorly developed roles as first contact for patients with health problems. Women with health problems related to, for example, family planning, menstruation or breast health and individuals with psychological and social problems do not tend to present to their GP. Most patients disagree with the idea that their GP will deal with their personal problems and worries. Reported involvement in the provision of minor surgical and other medical procedures and prevention services is very low among both types of GP, with a more variable picture emerging in relation to screening and vaccination.

GPAs do not provide mother and child health services. GPCs are routinely involved in paediatric surveillance and childhood immunization, but are much less involved in family planning and antenatal care.

Most patients report that their GP discusses healthy eating and physical activity with them, but many fewer patients speak to their GP about alcohol and tobacco use.

### Quality assurance

A minority of GPs use clinical guidelines frequently and fewer than 60% use expert directives. Only a fifth have a complaints procedure in place in the practice and about a quarter undertake investigation of patient satisfaction as an evaluation method.

### Selected indicators

The table below provides an overview of findings by indicators from the GP and patient surveys.

#### Selected PC indicators in Slovakia, 2010

Functions	Selected proxy indicators	Findings GPAs (N=235) GPCs (N=118) Patients (N=2 224)
<b>Stewardship/ governance</b>	Department in MoH specifically dealing with PC	No
	GPs reporting patient complaints procedure in the practice	21%
<b>Financing</b>	GPs being self employed (based on survey)	GPCs: 77% GPAs: 72%
	Patients reporting copayments for drugs prescribed in PC	59%
<b>Resource generation</b>	Proportion of active physicians working in PC (GPCs and GPAs)	19%
	Average population per GP (nationwide)	GPCs: 1 008 (<18 years) GPAs: 2 141 (>18)

<b>Functions</b>	<b>Selected proxy indicators</b>	<b>Findings</b> GPAs (N=235) GPCs (N=118) Patients (N=2 224)
	GPAs having completed specialization studies	94%
	Average age of GPs (years)	GPCs: 53 GPAs: 54
	Reported time spent on professional reading (hours per month)	GPCs: 20 GPAs: 17
	Medical faculties at universities with a specialty in general medicine	3 (out of 4)
	Number of professors in general medicine	0
	Items of medical equipment available to GPs (from a list of 30 items)	GPCs: 18 GPAs: 19
	GPs reporting no or insufficient access to laboratory facilities	GPCs: 4% GPAs: 3%
	GPs reporting no or insufficient access to X-ray facilities	GPCs: 5% GPAs: 4%
	GPs with a computer in the practice	GPCs: 99% GPAs: 98%
	GPs using the computer for patients' records	GPCs: 64% GPAs: 76%
<b>Service delivery</b>		
<b>Access to services</b>	Proportion of patients living within 20 minutes travel from GP practice	GPCs: 70% GPAs: 66%
	Average number of registered patients per GP	GPCs: 1 154 GPAs: 1 750
	Average number of patient consultations per day per GP	GPCs: 39 GPAs: 47
	Average number of home visits per week per GP	GPCs: 4 GPAs: 5
	Average working hours of GPs per week	GPCs: 38 GPAs: 41
	Average length of patient consultations (minutes)	GPCs: 16 GPAs: 16
	Number of contacts with GP reported by patients per year	GPCs: 4.7 GPAs: 5.6
	GPs offering evening opening at least once per week	GPCs: 10% GPAs: 4%
	Patients reporting same-day consultations possible if requested	GPCs: 62% GPAs: 69%
	Patients finding waiting room unsatisfactory ("inconvenient")	GPCs: 46% GPAs: 44%
	Patients finding that the practice is inaccessible to disabled people and wheelchair users	GPCs: 48% GPAs: 48%
	Referral rate to secondary level specialists (as a proportion of all office and home care contacts)*	GPCs: 9.8% GPAs: 7.5%
	Referral rate to secondary-level specialists by urban and rural location*	Urban: 9.1% Rural: 7.6%
<b>Coordination</b>	GPs sharing premises with other GP(s), PC workers or medical specialists	GPCs: 85% GPAs: 72%
	GPs reporting regular meetings with practice nurses	GPCs: 54% GPAs: 41%

Functions	Selected proxy indicators	Findings GPAs (N=235) GPCs (N=118) Patients (N=2 224)
	GPs reporting regular meetings with pharmacists	GPCs: 59% GPAs: 58%
<b>Continuity</b>	GPs keeping medical records routinely	GPCs: 98% GPAs: 98%
	Patients reporting their GP is unlikely to make a home visit	GPCs: 85% GPAs: 72%
	Patients reporting having been with same GP for at least 1 year	GPCs: 85% GPAs: 87%
<b>Comprehensiveness</b>	GPs' role in first contact care (for 18 selected health problems; range of score: 1 (never) – 4 (always))	GPCs: 1.63 GPAs: 1.78  Urban: 1.75 Rural: 1.71
	GPs' involvement in treatment of diseases (for 19 selected diseases; range of score: 1 (never) – 4 (always))	GPCs: 1.97 GPAs: 2.95  Urban: 2.67 Rural: 2.66
	GPs' involvement in the provision of a selection of 16 preventive services and medical-technical procedures (range of score: 1 (never) – 4 (always))	GPC: 1.27 GPA: 1.30  Urban: 1.28 Rural: 1.29
	GPs' coverage of public health activities (based on 8 items = 100%)	GPCs: 32% GPAs: 34%
	GPs performing cervical cancer screening	GPCs: 3% GPAs: 3%
	GPs providing family planning/contraception services	GPCs: 14% GPAs: 3%
	GPs providing routine antenatal care	GPCs: 27% GPAs: 5%
	GPs performing tuberculosis screening	GPCs: 14% GPAs: 20%
	GPs having regular meetings with local authorities	GPCs: 15% GPAs: 17%
<b>Quality assurance</b>	Available clinical guidelines developed with inputs from GPCs or GPAs	None
	GPs reporting frequent use of clinical guidelines	GPCs: 46% GPAs: 49%
	GPs reporting frequent use of expert directives	GPCs: 58% GPAs: 58%
	GPs investigating patient satisfaction	GPCs: 20% GPAs: 28%

\* Calculation based on reported contacts and referrals made by GPs; self referrals are not included.

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](http://www.who.int/whr/2000/en/whr00_en.pdf), accessed 12 July 2012).

2. *Koncepcia štátnej politiky zdravia [Concept of state health policy]*. Bratislava, Government of Slovakia, 2006 ([http://www.uvzsr.sk/docs/kspz/koncepcia\\_SP\\_zdravia\\_SR.pdf](http://www.uvzsr.sk/docs/kspz/koncepcia_SP_zdravia_SR.pdf), accessed 12 July 2012).



# RECOMMENDED POLICY ACTION

The following recommendations are presented to the Ministry of Health of Slovakia (MoH) for consideration as they move forward in the area of primary care (PC). The recommendations are based on data from: the surveys among general practitioners for adults (GPAs), general practitioners for children and adolescents (GPCs) and patients; information gathered from experts at national level; observations made during site visits; and the validation meeting on the draft report with stakeholders.

## Governance and regulation

### PC policy development

A coherent policy on PC and general practice should be developed, reflecting changing population health needs and current challenges in the health care system. Central and local leadership would be required to implement this policy.

*Weaknesses and challenges identified in this report point to the need for a vision for PC and for leadership to deliver the vision in collaboration with stakeholders. This might include: providing a more comprehensive package of services in PC and reducing high referral rates; improving coordination of care for patients with chronic conditions; achieving a more systematic approach to prevention in PC; and improving PC health care workers' definition, roles and responsibilities. Many points such as this were included in the concept of state health policy (1) but have not yet been addressed effectively.*

### PC at the MoH

Consideration should be given to more effectively organizing responsibilities for PC at the MoH.

*Four departments are currently involved with PC, while general medicine for adults and general care of children and adolescents have their own chief specialists. This fragmentation may pose an obstacle for integrated policy-making. An option could be to establish a special unit for PC in the Health Section of the MoH to coordinate all relevant issues.*

### Referral system

A reintroduction of the referral system in PC should be considered.

*General practitioners' (GPs') high referral rates suggest inefficiencies and underuse of PC's potential. The current task profile of GPs provides sufficient grounds for seeking improvement. Removal of the obligatory referral system seems to be a move in the wrong direction; international evidence has shown that strong PC, including a referral system, is better able to control the cost of health care and maintain quality of care.*

### **Human resources for PC**

A human resource planning strategy for GPs and nurses in PC should be developed with education plans to ensure sufficient doctors and nurses to meet future needs, based on established norms. Obstacles to becoming a GP should be removed.

*Only 19% of all active physicians are working in PC. The rising age profile of GPs is alarming, with many due to retire in the near future. Although official norms for GP establishments do not exist, a quarter of GPs in the survey reported shortages in their area. The inflow of new GPs is stagnating and insufficient, probably because the profession is not sufficiently attractive to potential recruits. Fifteen per cent of graduates take positions outside PC. Migration of health personnel is another unfavourable factor.*

### **Practice information system**

The use of computers for medical records and exchanging information with other health care workers should be strongly encouraged.

*The survey showed that many GPs are neither using their computer to keep medical records nor to send referral letters to medical specialists.*

### **Patients' voices**

Greater opportunities to hear the voice of patients in PC should be created. Complaints procedures should be formalized and coordinated and other forms of feedback from patients in GP practices should be encouraged.

*Complaints are dealt with at central level by various bodies and agencies but without much coordination, and the survey showed an absence of complaints procedures in most GP practices. The central handling of complaints should not replace a complaints procedure in GP practices. In addition, systematic feedback from patients (other than in the form of complaints) can serve as a powerful tool for GPs to improve the quality of their services. The survey suggests that most GPs do not investigate patient satisfaction.*

### **Premises in PC**

Norms for the quality of PC practice facilities should be maintained and expanded, if necessary.

*Patients were critical about accessibility of practice premises for disabled people and wheelchair users, which is a formal requirement. Many patients found waiting rooms unsatisfactory ("inconvenient"). Results from the GP survey pointed to the absence of medical equipment that should be available according to official norms.*

### **The role of self-governing regions**

An investigation should be mounted into whether self-governing regions have sufficient competencies and resources to control the distribution and quality of services.

*Regions are largely responsible for supply of PC services in line with local needs. There are indications of inequities between regions and between districts within regions. No information was available on the activities that regions undertake to control health care services (such as inspections of practices and publication of audit*

results) and explanations as to why some regions are more active in this respect are lacking. Regions and health insurance companies could work together to maintain good PC services at decentralized levels.

## **Education and professional development**

### **GP clinical guidelines**

Clinical guidelines specifically for GPs should be promoted. Guidelines should have a practical focus and be produced with inputs from practitioners and professional organizations.

*While directives are produced and distributed by the MoH, there is no structure for the production and updating of GP clinical guidelines. The survey showed that fewer than half of the GPs indicated that they used guidelines frequently. For practical reasons, using clinical guidelines from another country, such as the Czech Republic, in cooperation with a national GP association offers a feasible option.*

### **Postgraduate training**

An investigation should be mounted to establish to what extent the inflow of new GPs is hampered through no payment being available for the 36 months of specialization to become certified as a GP.

*Payment during the three-year specialization period is not stipulated in law. Trainees may be paid by their future employer, such as a hospital, but this is not an option for GPs, who are independent entrepreneurs. Those who cannot find a sponsor for the training period are unlikely to become GPs. Strategies aiming to address the expected shortage of GPs in the near future may fail because of this structural obstacle.*

## **Financing and incentives**

### **Role of health insurance companies**

Health insurance companies should be enabled and encouraged to use their role as contractors and purchasers of health care services to improve efficiency, quality and responsiveness in PC and to avoid geographical inequalities in service provision.

*Health insurance companies play a marginal role in maintaining and promoting the quality of care. The current framework agreement is not a binding recommendation. They nevertheless have an opportunity, in principle and in collaboration with regional authorities, to use (variable) contracts to stimulate the provision of services for which there is a need in defined geographic areas. Obstacles to developing this role should be removed.*

### **Payment system for GPs**

GPs' capitation payment should clearly define the services included. Additional payment should be available for specific services provided within PC.

*The package of services under the capitation fee is not currently sufficiently defined. Certain services, such as those focusing on care for chronic conditions or prevention services, are not provided due to financing being unavailable or unclear. The definition of services could include quality indicators.*

## **Service delivery**

### **Comprehensiveness of GP services**

The scope of GP services in care of patients with chronic conditions, minor surgical procedures and population-based prevention should be expanded. Opportunities and parameters for expansion should be investigated and coordinated with relevant stakeholders, following which expansion should be implemented in a stepwise fashion.

*The survey showed that GPs have high referral rates and a limited service profile. GPs' competencies and task package should be reconsidered. Legal barriers that prevent GPs from providing certain services in areas such as care of patients with chronic conditions, prevention and minor surgery should be removed. Other countries' experiences show that provision of good skill mix in a coherent PC system results in a broad range of services being offered to the population. GPs' service profile should reflect a comprehensive vision of PC's role in the health care system. The MoH, regions, health insurance companies, professional organizations and medical educators should be involved in implementation.*

### **Coordination in PC**

Teamwork and networking among PC providers should be actively promoted. Coordination between GPCs and GPAs should promote smooth transitions when young people reach age 18 and transfer between services. Ensuring continuity of reproductive health and prevention of sexually transmitted infection services is particularly important.

*Many GPs work in shared premises with other GPs and health care workers, but opportunities for effective coordination and teamwork are underutilized. GPs should be encouraged, preferably on a voluntary basis, to cooperate with others to promote integrated care and better-quality services. The contract with the health insurance companies could be used to promote this. Increased coordination between GPCs and GPAs is particularly important. Lack of continuity may persist in a structure in which PC services for people of different ages are provided by different types of physicians. Lack of continuity at age 18, a sensitive period in the development of young people, is particularly undesirable. GPCs, GPAs and gynaecologists should pay particular attention to young people's needs for prevention-related reproductive health services.*

1. *Koncepcia štátnej politiky zdravia [Concept of state health policy]*. Bratislava, Government of Slovakia, 2006 ([http://www.uvzsr.sk/docs/kspz/koncepcia\\_SP\\_zdravia\\_SR.pdf](http://www.uvzsr.sk/docs/kspz/koncepcia_SP_zdravia_SR.pdf), accessed 12 July 2012).

# I. EVALUATING PRIMARY CARE: BACKGROUND AND APPLICATION

## 1.1 Primary Care Evaluation Tool theoretical framework

### Evaluating primary care

Strengthening primary care (PC) services is a priority for many countries in the WHO European Region, but the nature of reforms varies from west to east. PC in western European countries contributes to addressing rising costs and changing demands resulting from demographic and epidemiological changes. In the central and eastern parts of the Region, however, countries that were formerly part of (or were closely allied to) the Soviet Union are struggling to improve the performance and cost-effectiveness of their entire health systems. These countries are now developing PC, which had functioned poorly in the past if it existed at all, to improve overall health system efficiency and bring adequate, responsive health services closer to populations. Health care reforms are part of the profound and comprehensive changes in essential societal functions and values occurring in many of these countries (1).

Careful monitoring is necessary for any health care reform process, especially for large-scale, fundamental changes such as those taking place in eastern European countries in economic and political transition. Performance evaluations and measurements play an increasing role in health care reforms. Stakeholders need information to decide how best to steer the health system towards better outcomes (2). Reforms have not always been based on evidence, with changes often being driven by political or professional interests rather than sound assessments. That situation is now changing: health care stakeholders are increasingly holding decision-makers to account and are demanding evidence of progress.

Demographic and epidemiological changes require health systems to adapt to new population demands. Systems must evaluate health services' responsiveness from the patient perspective to identify how accessible and convenient services are, how health workers treat patients, how patients access information that may affect their behaviour and well-being and how health care is managed at PC level and beyond.

Health system evaluations and performance assessments need to be contextualized before they can inform policy-making and regulation. In exercising their stewardship role, governments should ensure that relevant analytical capacity is in place to allow data from evaluations and performance assessments to generate a flow of appropriate information for health system stakeholders (2).

System evaluations and performance assessments should be based on a proper framework to ensure that indicators are relevant and cover key topics sufficiently. The following sections describe the framework used to develop the Primary Care Evaluation Tool (PCET).

### PC evaluation and the health systems framework

A health system is a structured set of resources, actors and institutions related to the financing, regulation and provision of health actions for a given population. A health

action is any activity 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-course (2).

Health systems aim to achieve three fundamental objectives (3,4):

- improved health (better health status and reduced health inequality);
- enhanced responsiveness to the expectations of the population, encompassing respect for the individual (including dignity, confidentiality and autonomy) and client orientation (prompt attention, access to services, basic amenities and choice of provider); and
- guaranteed financial fairness, including household contributions to national health expenditure and protection from financial risks resulting from health care.

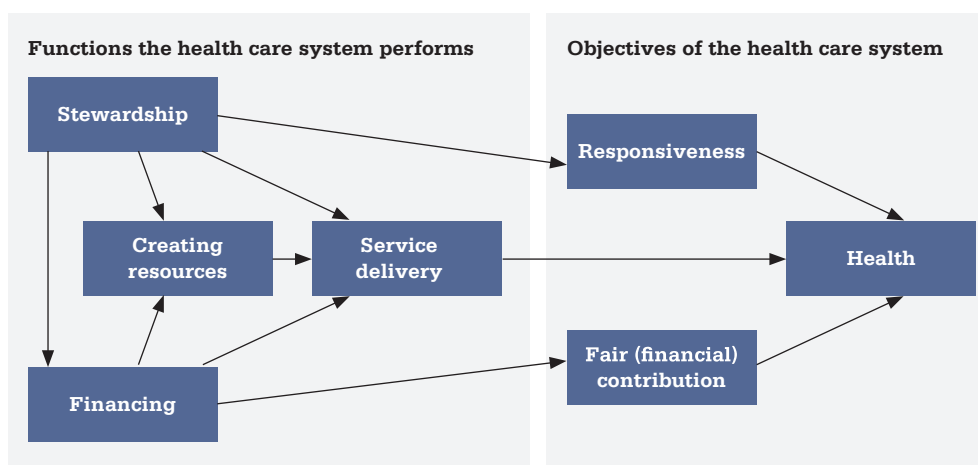
A health system's overall performance reflects how successfully it attains these goals, but country context needs to be considered when comparing health systems' performance as conditions and systems vary among countries. Measurement of performance therefore needs to cover not only goal attainment, but also available resources and processes.

## 1.2 Health system functions

The WHO health system performance framework (Fig. 1) indicates that the performance of a system is determined by the way in which four key functions are organized (4):

- stewardship
- creating resources
- financing
- service delivery.

**Fig. 1. WHO health system functions and objectives**



The four functions apply to the whole health system of a country but can relate to PC only, with specific subcharacteristics defined for PC service provision.

The international literature presents other approaches to performance measurement (5–8), but they each employ similar insights or related concepts.

### **Stewardship**

Stewardship is broader than regulation but has a similar focus in overseeing all basic health system functions. It affects health system outcomes directly and indirectly (3).

Stewardship is about defining the vision and direction of health policy, exerting influence through regulation and advocacy, and collecting and using information. It has three main aspects:

- setting, implementing and monitoring the rules for the health system
- assuring a level playing field for purchasers, providers and patients
- defining strategic direction for the health system as a whole.

It can also be subdivided into subfunctions of overall system design, performance assessment, priority setting, regulation, intersectoral advocacy and consumer protection (4).

### **Creating resources**

Every level of a health system needs a balanced variety of resources, including facilities, equipment, consumables, human resources, knowledge and information, to function properly. These need to be developed over time to sustain health services across levels and geographic areas.

The quantity and quality of human resources must adequately match demand for services across the levels of health care and be equitably distributed throughout the country. Health providers' skills and knowledge must be up to date and compatible with developments in technology and evidence-based medicine.

Policy development on human and physical resource planning falls under the stewardship function, alongside regulatory frameworks for assuring high-quality service provision and consumer protection. Workforce capacity, distribution and professional development (including training, continuing medical education (CME) and research) are usually measured as part of resource generation.

### **Financing**

Financing relates to accumulating, allocating and mobilizing funds to cover people's individual and collective health needs within the health system (9). Murray & Frenk (4) define the financing function in health systems 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 mobilizing funds from primary (such as households and firms) and secondary (governments and donor agencies) sources. Funds can be mobilized through a number of mechanisms that vary according to context and which include out-of-pocket payments, voluntary insurance rated by income or risk, compulsory insurance, taxes, donations from nongovernmental organizations (NGOs) and donor agency transfers. Fund pooling uses various forms of health insurance to share and reduce

health risks, and purchasing is the allocation of funds to cover health providers' costs for specific institutional or individual interventions, such as staffing, durable goods and operations (4). Their organization and implementation affects health services' accessibility.

### Service delivery

Service delivery involves the mix of inputs required to deliver health interventions within a specific organizational setting (4). It includes preventive, curative and rehabilitative services delivered to individual patients and larger populations (through, for instance, health education and promotion) in public and private institutions. Providing services is what the health system does, not what the health system is.

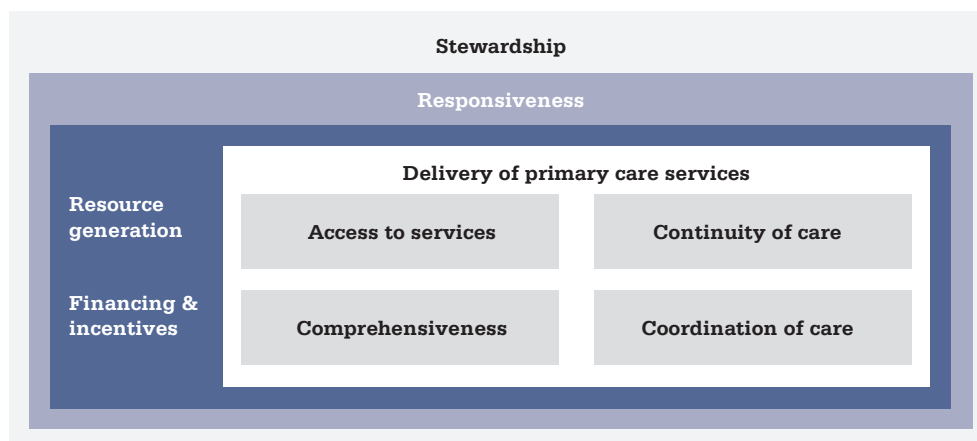
## 1.3 The Primary Care Evaluation Framework

The characteristics of PC vary from country to country and different definitions exist. A comprehensive or well-developed PC system should have 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 (10).

The Primary Care Evaluation Framework (3) (Fig. 2), from which the PCET was developed, encompasses the four health care system functions (as described above) combined with four key characteristics of PC services.

**Fig. 2. Primary Care Evaluation Framework**



### Four key characteristics of a good PC system

#### Access to services

This can be defined as the ease with which health care is obtained (6), or as “patients’ ability to receive care where and when it is needed” (11). Various physical, psychological, sociocultural, informational and financial barriers restrict accessibility. The Primary Care Evaluation Scheme (see below) addresses geographic obstacles (distance to and



distribution of general practices), obstacles in the organization of PC practices (office hours, distance consultations, waiting times) and financial obstacles (cost sharing, copayments).

### **Continuity of care**

Health care interventions should reflect patient needs over an extended period and cover episodes of care and treatment. A general definition of service continuity is “follow up from one visit to the next” (12), but Thornicroft & Tansella (11) provide a more comprehensive definition that takes into account the potential involvement of several health care providers, describing continuity 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).

Several levels of continuity have been distinguished (13):

- informational continuity signifies an organized body of medical and social history about a patient that is accessible to any health care professional caring for that patient;
- longitudinal continuity points to an accessible, familiar environment in which a patient customarily receives health care from a provider or team of providers; and
- interpersonal continuity is an ongoing personal relationship between patient and provider, characterized by personal trust and respect.

Reid et al. (14) add “management continuity”, the provision of timely, complementary services as part of a shared management plan, but the Primary Care Evaluation Scheme includes only informational, longitudinal and interpersonal continuity of care.

### **Coordination of care**

Coordination at PC level is a key determinant of the responsiveness of health service provision and the health system as a whole. PC is the most common entry point to health care and often provides a gatekeeping function to other levels of care.

The potential for coordination problems is particularly evident at the interfaces between primary and secondary care and between curative care and public health services/health promotion (15). Coordination is generally defined as “a technique of social interaction where various processes are considered simultaneously and their evolution arranged for the optimum benefit of the whole” (9). With respect to health care, 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 (11).

Dimensions of coordination within the Primary Care Evaluation Scheme include collaboration within the same PC practice, between providers (such as general practitioners (GPs), home care nurses and physiotherapists) and between primary and other levels of care through consultation and referral.

### Comprehensiveness

Comprehensiveness is the extent to which a health care provider directly offers a full range of services or specifically arranges for their provision elsewhere (16). It refers in the PC setting to the fact that services can encompass curative, rehabilitative and supportive care, health promotion and disease prevention (15,17) and to the capacity to manage several conditions simultaneously, particularly for those living with chronic conditions. Comprehensiveness of services refers not only to the range of services provided, but also to practice conditions, facilities, equipment and providers' professional skills. PC workers' links to community services and communities also play a role.

All these dimensions are incorporated in the Primary Care Evaluation Scheme.

## 1.4 The Primary Care Evaluation Scheme

Taking the Primary Care Evaluation Framework as its basis, the Primary Care Evaluation Scheme focuses on specific measurable topics and items relating to essential features, national priorities for change in PC and facilitating conditions. The scheme, which together with the Primary Care Evaluation Framework forms the basis of the PCET, includes key dimensions identified for PC system functions. Each dimension has in turn been translated into one or more information items or proxy indicators for the dimension (see Table 1).

**Table 1. Overview of selected functions, dimensions and information items from the Primary Care Evaluation Scheme**

FUNCTION	SUBFUNCTION	DIMENSION	SELECTED ITEMS/PROXIES
<b>STEWARDSHIP</b>		Policy development	<i>PC policy priorities</i>
		Professional development	<i>(Re)accreditation system for PC</i>
			<i>Quality assurance mechanisms</i>
		Conditions for the care process	<i>Laws and regulations</i>
			<i>Human resources planning</i>
		Conditions for responsiveness	<i>Involvement of professionals and patients in policy process</i> <i>Patient rights; complaint procedures</i>
<b>CREATING RESOURCES</b>		Workforce capacity	<i>Numbers and density</i>
		Professional development	<i>Role and organization of professionals</i>
			<i>Education</i>
			<i>Scientific development and quality of care</i>
		Professional morale	<i>Job satisfaction</i>
		Facilities and equipment	<i>Medical equipment</i>
	<i>Other equipment</i>		

FUNCTION	SUBFUNCTION	DIMENSION	SELECTED ITEMS/PROXIES	
<b>FINANCING</b>		Health care/PC financing	<i>PC funding</i>	
		Health care expenditure	<i>Expenditure on PC</i>	
		Incentives for professionals	<i>Entrepreneurship</i>	
			<i>Mode of remuneration</i>	
		Financial access for patients	<i>Cost sharing/copayment</i>	
<b>SERVICE DELIVERY</b>	<i>ACCESS TO SERVICES</i>	Geographic access	<i>Distance to PC practice</i>	
			<i>Distribution of PC physicians</i>	
		Organizational access	<i>List size</i>	
			<i>Provider workload</i>	
			<i>PC outside office hours</i>	
			<i>Home visits</i>	
			<i>Electronic access</i>	
				<i>Planning of non-acute consultations</i>
		Responsiveness	<i>Timeliness of care</i>	
	<i>Service aspects</i>			
	<i>Clinics for specific patient groups</i>			
	<i>CONTINUITY</i>	Informational continuity	<i>Computerization of the practice</i>	
			<i>Medical records</i>	
		Longitudinal continuity	<i>Patient lists</i>	
			<i>Patient habits with first contact visits/referrals</i>	
			<i>Endurance of patient-provider relationship</i>	
			<i>Patient-provider relationship</i>	
	<i>COORDINATION</i>	Cohesion within PC	<i>PC practice management</i>	
<i>Collaboration among GPs/family doctors</i>				
<i>Collaboration of PC physicians with other PC workers</i>				
Coordination with other care levels		<i>Referral system/gatekeeping</i>		
		<i>Shared care arrangements</i>		

FUNCTION	SUBFUNCTION	DIMENSION	SELECTED ITEMS/PROXIES
	COMPREHENSIVENESS	Practice conditions	<i>Premises, equipment</i>
		Service delivery	<i>Medical procedures</i>
			<i>Preventive, rehabilitative, educational activities</i>
			<i>Disease management</i>
		Community orientation	<i>Practice policy</i>
			<i>Monitoring and evaluation</i>
			<i>Community links</i>
		Professional skills	<i>Technical skills</i>

## 1.5 The PCET

The PCET gathers information from different administrative levels and supply and demand sides (health providers and patients) to evaluate the complexity of a PC system. It consists of three questionnaires:

- one for experts, concerning national PC policies and structures
- one for PC physicians
- one for patients.

Together, these questionnaires cover the PC functions, dimensions and information items identified in the Primary Care Evaluation Scheme. The physician and patient questionnaires are prestructured, while the national questionnaire (for experts) contains prestructured and open-ended questions with a list of statistical data requested.

### PCET development and pilot testing

Development commenced in February 2007 and concluded in May 2008, when the final instrument became available to WHO for its health system support activities with Member States. The successive stages of development are briefly explained below. The development process is described in more detail elsewhere (18, 19).

#### Literature review

As a first step, researchers at the Netherlands Institute for Health Services Research (NIVEL), a WHO collaborating centre for PC, conducted a directed literature review, based on the WHO performance framework (3), on ways to measure key PC system functions. The review focused on PC indicators and performance measurement and evaluation tools and questionnaires to produce a preliminary listing of dimensions and items for the tool.

#### First consultation with experts from the European Region

International experts discussed the outcomes of the literature review at a meeting convened in March 2007. Their main objectives were to reach consensus on key concepts and definitions, endorse the provisional set of dimensions, proxy indicators and information items for the PCET and improve the initial version of the Primary Care

Evaluation Scheme (see Table 1) to develop items for the questionnaires. Participants also took the first steps towards piloting the provisional tool.

### **Drafting, validating and translating the questionnaires**

Information and feedback from the expert meeting underpinned draft versions of the questionnaires. Experts' comments were incorporated into new versions tailored to reflect the situation in the countries in which they would be piloted: the Russian Federation and Turkey. Terms were adapted to reflect national situations and some additional questions on topics related to national PC priorities were added at the request of health authorities in the two countries. The final versions were translated into Russian and Turkish with input from a PC expert, reverse-translated into English and compared to the original version.

### **Pilot implementation**

The provisional tool was piloted in two provinces of Turkey and two raions of Moscow Oblast, Russian Federation. Local partners, working with the NIVEL technical leader and under the supervision of the Regional Office and respective health ministries, organized the details of the fieldwork, including sampling procedures, fieldworker training and the logistics of data collection and entry. Meetings were held with experts in both countries to discuss and validate answers to the national PC questionnaires. Data were analysed, conclusions and policy recommendations formulated and a report produced for each pilot implementation, including sections on lessons learned (18, 19).

### **Copenhagen meeting**

International experts reviewed the draft report in Copenhagen, Denmark on 14 and 15 April 2008. They revised the three questionnaires by:

- rewriting questions to encourage factual responses instead of soliciting opinions;
- reordering the sequence of topics and questions;
- restructuring the national-level questionnaire and developing a checklist of background information to be collected;
- reducing the extent of the physician and patient questionnaires;
- ensuring terms and wording were more consistent;
- complementing the survey results with other information sources, such as publicly available literature, interviews with health care workers and experts and personal observations during site visits;
- determining that individual countries would be able to add questions related to specific national priorities (such as tuberculosis (TB) care and reproductive health services in Belarus); and
- deciding that the final report would contain a set of proxy indicators.

NIVEL then revised the PCET and made it available to countries in the European Region with an implementation scheme describing the steps involved in its use.

### **Implementing the PCET in Slovakia**

#### **Biennial collaborative agreement**

The 2010/2011 biennial collaborative agreement (BCA) between the Government of Slovakia and the Regional Office specified implementation of the PCET. Regional Office

representatives visited Slovakia in January 2010, following which a national working group was established to guide the project and comment on the draft report.

The Regional Office's project partners were the Ministry of Health of Slovakia (MoH), Agency NOVUM PRO and NIVEL (in its capacity as a WHO collaborating centre for PC). Preparations for technical implementation effectively started in April 2010.

### **Country visits**

Experts from Regional Office and NIVEL paid three visits to the country. The first, in January 2010, aimed to introduce the tools to the MoH, inform stakeholders and build commitment, and identify candidates to provide local fieldwork coordination.

The second (12–16 April 2010) set out to:

- confirm commitment with national counterparts and the MoH on PCET implementation;
- conduct six practice visits to enable better understanding of the range of PC practice;
- meet representatives of the national associations of general practitioners for adults (GPAs) and children and adolescents (GPCs);
- conduct a workshop with the national working group to adapt the questionnaires to local circumstances and discuss next steps in the implementation process; and
- draft the national counterpart's terms of reference for project implementation.

The final visit (23–26 August 2010):

- prepared the fieldwork (including the sampling procedure and training for fieldworkers in Bratislava and Košice);
- discussed answers to the national questionnaire submitted by the national expert group and identified additional information needs;
- discussed the questionnaires and identified topics for additional questions;
- visited three more practices; and
- planned future activities.

### **Adaptation and extension of the PCET**

The national working group and other experts adapted the questionnaires to reflect the Slovak context and inserted additional questions. Changes and additions are shown in Box 1.

### **Target populations and survey approach**

The target populations for the physicians' survey were GPAs and GPCs nationwide and, for the patient survey, visitors to these physicians (an accompanying adult would be asked to complete the questionnaire for children attending a GPC). The sampling frame was compiled from official lists of GPAs and GPCs contracted to health insurance companies.

A 10% sample of the GP populations was drawn, with two reserves identified for each in case of refusal or unavailability.

The GP survey tool employed self-administered questionnaires distributed by mail or personally by a fieldworker: the latter option was preferred if the practice was also selected for the patient survey.

## **Box 1. Changes and additions to questionnaires**

### **GP questionnaire**

- Questions were adapted to the particular context of both groups of GPs.
- Answers to questions on employment status were adapted.
- “Contacts with patients only needing a continued (or repeat) prescription” and “e-mail consultations” were added as answer options.
- A question about GPs providing patients with personal telephone numbers for out-of-hours care was added.
- A question on the use of “expert directives” was added to provide additional information on the use of guidelines.
- Answers for questions about type/composition of practices were adapted.
- A question about the availability of joint facilities in shared premises was added.
- The list of specialists for referral was extended.
- The age limit in the question on child surveillance was changed to 18 years.

### **Patient questionnaire**

- Questions to adults accompanying a child during a visit to a GPC were adapted.
- A question about the time necessary to secure a home visit was added.
- A question regarding patients’ knowledge of practice opening times was added.

### **National-level questionnaire**

Questions on the following were added:

- the involvement of GPs (on a rota basis) in out-of-hours emergency care
- regulation of GPs’ working hours
- regulation of medicines that GPs can (and cannot) prescribe
- regional differences in the availability of GPs.

One hundred GPAs and 50 GPCs (and reserves) were randomly selected from the total country sample for the patient survey. Their practices were visited by trained fieldworkers who asked the patients who visited on that day (or accompanying adult if a child) to complete a questionnaire, with support from the fieldworker if necessary. Fifteen completed questionnaires from each practice was considered sufficient.

### **Response and analysis**

After intensive follow up by telephone, the net response from the postal survey was 203 GPs from 550 approached (36.9% response rate). Fieldworkers made 150 successful practice visits, achieving responses from 150 GPs and 2224 patients, which almost met the target figure of 2250. Information is lacking on the number of practices that had to be approached to achieve this response.

Responses were therefore received from 353 GPs (235 GPAs and 118 GPCs) and 2224 patients.

### **Fieldworker role**

Fieldworkers had a crucial role in data collection among patients, recruiting and informing patients and distributing and collecting questionnaires in the practices they visited. Agency NOVUM PRO recruited them and NIVEL offered training on the following topics:

- the context and objectives of the survey
- the basic principles and structure of the PCET and the type of questions used
- specific topics in the questionnaires
- approaching and assisting respondents
- establishing good rapport through clear explanation, stressing confidentiality
- creating a suitable environment for patients to complete the questionnaire
- checking readability and completeness of answers
- logistics, such as allocation to locations, planning and transport.

### Information gathering at national level

MoH experts responded to the questionnaire on the national situation, with further information being provided by the MoH and other experts at a later stage. Information and statistical data were forwarded to NIVEL for analysis: these provide the underpinning for discussion of the national situation in relation to PC in Chapter 3.

### Data processing, analysis and reporting

Agency NOVUM PRO performed data entry using a programme provided by NIVEL. Raw data files were sent to the NIVEL research team for processing and analysis. Slovak and WHO experts met in Bratislava on 2 November 2011 to discuss a draft report with results and preliminary recommendations. The report was revised on the basis of comments, suggestions and requests for additional information made at this meeting, and the final report was delivered in May 2012.

Table 2 summarizes application of the PCET in Slovakia.

**Table 2. Application of the PCET in Slovakia**

Elements of implementation	Explanation
<b>Target groups</b>	<ul style="list-style-type: none"> <li>• GPAs and GPCs with contracts with health insurance companies</li> <li>• Patients visiting GPA and GPC practices</li> <li>• Health care experts (for information at national level)</li> </ul>
<b>Locations</b>	<ul style="list-style-type: none"> <li>• All regions of Slovakia</li> </ul>
<b>Type of data collection</b>	<ul style="list-style-type: none"> <li>• GP survey using prestructured questionnaires (disseminated by fieldworkers and by mail; follow up by telephone)</li> <li>• Patient survey using prestructured questionnaires (personally distributed by trained fieldworkers)</li> <li>• Health care experts survey using questionnaire and meeting for validation and feedback</li> <li>• Observations during practice visits and interviews with GPs</li> </ul>
<b>Method of recruitment/inclusion</b>	<ul style="list-style-type: none"> <li>• GPAs and GPCs: random national samples</li> <li>• Patients: the first 15 patients attending the practice of 150 randomly selected GPs from the total country sample</li> <li>• Health care experts identified and recruited by the MoH</li> </ul>
<b>Planned sample sizes</b>	<ul style="list-style-type: none"> <li>• GPs: <math>\pm 1\ 100</math> (including reserves)</li> <li>• Patients: 2 250 (in 150 GP practices, 15 patients each)</li> </ul>
<b>Response</b>	<ul style="list-style-type: none"> <li>• GPs: 353 (response to postal survey 37%; overall response <math>\pm 32\%</math>)</li> <li>• Patients: 2 224</li> </ul>
<b>Instructions/training</b>	<ul style="list-style-type: none"> <li>• Local coordinator: sampling method and recruitment; identification of study populations; lists of GPs; logistics of surveys</li> <li>• Fieldworkers: explanation of questions; how to approach and assist respondents; quality aspects</li> <li>• Respondents: introduction to the questionnaires; support from fieldworkers</li> </ul>
<b>Coordination of fieldwork</b>	<ul style="list-style-type: none"> <li>• Local coordinator: overall responsibility</li> <li>• Fieldworkers: information to (candidate) respondents; correct administration of data collection in their facilities</li> <li>• NIVEL: general supervision during and after field visit</li> </ul>
<b>Data entry</b>	<ul style="list-style-type: none"> <li>• Organized by Agency NOVUM PRO under auspices of NIVEL</li> </ul>
<b>Analysis and draft reporting</b>	<ul style="list-style-type: none"> <li>• NIVEL</li> </ul>
<b>Validation and final report</b>	<ul style="list-style-type: none"> <li>• NIVEL, Regional Office, MoH</li> </ul>



## 2. INTRODUCTION TO SLOVAKIA

### 2.1 The country

Slovakia is a land-locked, medium-sized, rather mountainous country situated in the heart of Europe. The country borders the Czech Republic to the west, Poland to the north, Ukraine to the east, Hungary to the south and Austria to the south-west (Fig. 3). It has almost 5.4 million inhabitants.

**Fig. 3. Slovakia in Europe**



Source: WHO Regional Office for Europe (20).

Slovakia is one of only three former Communist countries that belong to the European Union (EU) and is also part of the Schengen area. It has 8 administrative regions, named after the region's capital, and 79 districts (Fig. 4). The regions have had a degree of autonomy since 2002 and are also referred to as "self-governing regions".

**Fig. 4. Slovakia**



Source: United Nations (21).

The process of transforming from an authoritarian–egalitarian state to a liberal–democratic society began with the fall of Communism in Europe in 1989. Czechoslovakia peacefully split into two independent states, the Czech Republic and Slovakia, in 1993. Economic decline was steep in the first years of Slovakia’s independence and it took 10 years for the economy to reach the level it had attained in 1989.

A pro-reform government elected in 1998 introduced measures to strengthen democracy and complete the transition to a market economy by stabilizing the banking sector and finalizing the privatization process. Slovakia was then able to join the Organisation for Economic Co-operation and Development in 2000 and the North Atlantic Treaty Organization and EU in 2004.

Significant tax and social welfare reforms were introduced after elections in 2002. These reforms, supported by EU membership, contributed to massive foreign investment in the country. The output of the economy increased, with Slovakia being among the fastest growing economies in Europe since 2005 (22).

Socioeconomic development within the country has not been equal, and there are particularly strong differences between the prosperous western and central parts and the more disadvantaged eastern and southern. Employment rates, labour markets and infrastructure in the four great cities (Bratislava, Košice, Banská Bystrica and Zvolen) score relatively well, but the counties of eastern Slovakia and the southern central part have lower scores (23).

Economic growth followed accession to the EU in 2004 and, probably as a consequence, attitudes towards the EU are positive. Large proportions of the Slovak population indicated that they trusted the EU and its bodies in surveys carried out in 2006 and 2010. The questions asked in each year were not identical, which makes comparison difficult, but the level of public trust was among the highest in the EU in both years (Table 3).

**Table 3. Public trust in the EU and EU bodies, 2004 and 2010**

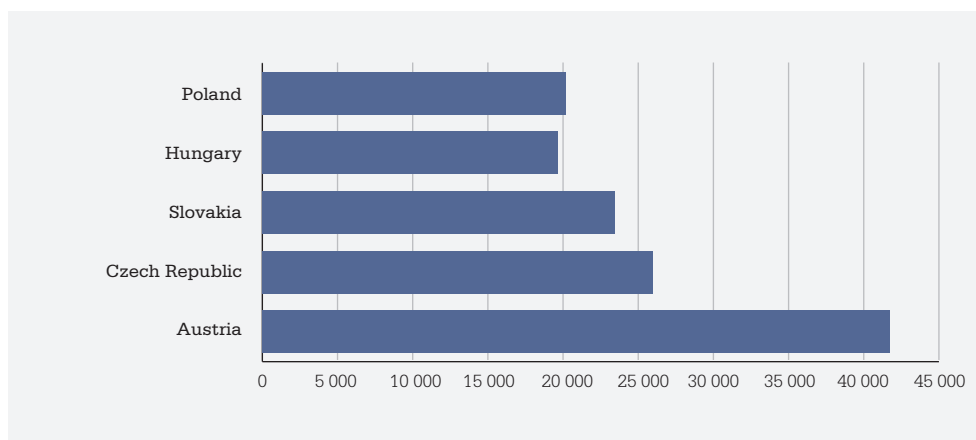
“Tend to trust”	2006*		2010**	
	Slovakia	EU	Slovakia	EU
European Parliament	71%	52%		
European Commission	66%	48%		
EU			65%	42%

\* Source: Eurobarometer (24).

\*\* Source: Eurobarometer (25).

Measured by gross domestic product (GDP) (corrected for differences in purchasing power), wealth is higher in Slovakia than in Poland and Hungary but lower than the Czech Republic. The gap with Austria continues to be considerable, despite strong economic growth in recent years: GDP in Austria is 1.8 times that in Slovakia (Fig. 5).

**Fig. 5. GDP per capita in Slovakia and neighbouring countries, 2011 (in purchasing power parity (PPP) US\$)**



Source: Central Intelligence Agency (26).

Regional differences in wealth are considerable. Two socioeconomic indicators are considered in Table 4: regional GDP and the proportion of the population at risk of poverty.

**Table 4. GDP per capita and people at risk of poverty in Slovak regions**

Region	GDP per capita (€, 2009 prices)	People at risk of poverty (%) (2010)
Bratislava	28 443	5.1
Trnava	12 928	6.7
Trenčín	10 265	10.1
Nitra	9 928	13.2
Žilina	10 038	9.6
Banská Bystrica	8 425	16.9
Prešov	6 654	18.7
Košice	9 022	12.7
Slovakia (total)	11 609	12.9

Source: Statistical Office of the Slovak Republic (27).

Bratislava Region has by far the highest GDP, with more than double that of the second highest, Trnava. Prešov, situated in the north-east, has the lowest GDP; it is less than one quarter of Bratislava Region and 57% of the national average.

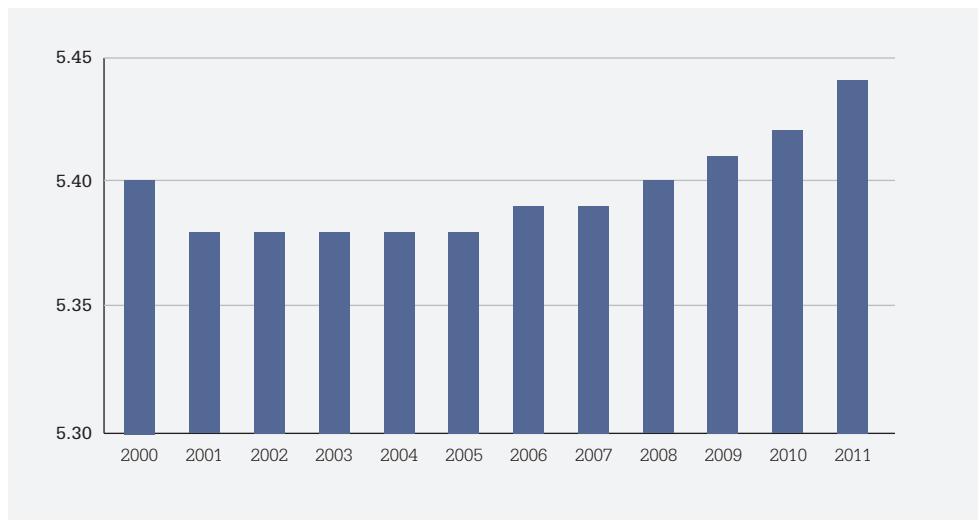
GDP decreases from west to east. Taking the GDP of western Slovakia as 100%, it is 85% in central Slovakia and 71% in the eastern part. The reverse is true for people at risk of poverty: just over 5% of the population of Bratislava Region are at risk of poverty, while it affects 18.7% in the Prešov Region, a factor of 3.7. Again, setting the poverty indicator in western Slovakia at 100%, it is 128% in central Slovakia and 154% in the east. Unemployment is four times higher in the Prešov Region (17.8%) than in Bratislava (4.6%),

but strong differences exist between districts within regions. In Banská Bystrica Region, which has 13 districts, unemployment rates between districts ranges from 8.4% to 33.3%.

## 2.2 Population and health

The (estimated) population in 2011 was 5.44 million (Fig. 6).

**Fig. 6. Population, Slovakia, 2000–2011**



Source: WHO (28).

The size of the population has been stable over the past decade, in contrast to some other countries in transition. It has grown slowly since 2005, mainly because of lower mortality and a modest increase in the fertility rate.

Over 85% of the population are Slovaks, with Hungarians comprising a significant minority of 9.7%. Although exact numbers are not available, Slovakia has one of the largest Roma populations in Europe. Estimations range between 420 000 and 500 000 Roma, which is equivalent to 8–10% of the population (29).

Over half of the population (57%) live in urban settings; compared to surrounding countries, a large proportion live in rural areas. Only two cities have more than 100 000 inhabitants: the capital, Bratislava, has a population of about 432 000 and the city of Košice in eastern Slovakia has 234 600. The next four biggest cities – Prešov, Žilina, Nitra and Banská Bystrica – have populations between 80 000 and 100 000 (30).

The population is relatively young, with the percentage between ages 0 and 14 being slightly higher than neighbouring countries and the average for countries belonging to the EU before May 2004 (EU15) and the number of those 65 years and older being relatively small. The proportion over 65 years is increasing, however, rising from 10.9% to 12.2% between 1995 and 2009 (a 12% increase) (Table 5). The proportion of children is decreasing: there were 2.07 young people up to 14 years for every Slovak citizen above the age of 65 in 1995, but the equivalent figure in 2009 was 1.26.

As Table 5 shows, the live birth rate in Slovakia is higher than that of surrounding countries and the EU15. It decreased from 11.5 to 10.1 per 1000 population between 1995 and 2005, but the 2009 rate of 11.3 is almost at the 1995 level. Total fertility rate is comparable to surrounding countries but lower than EU15.

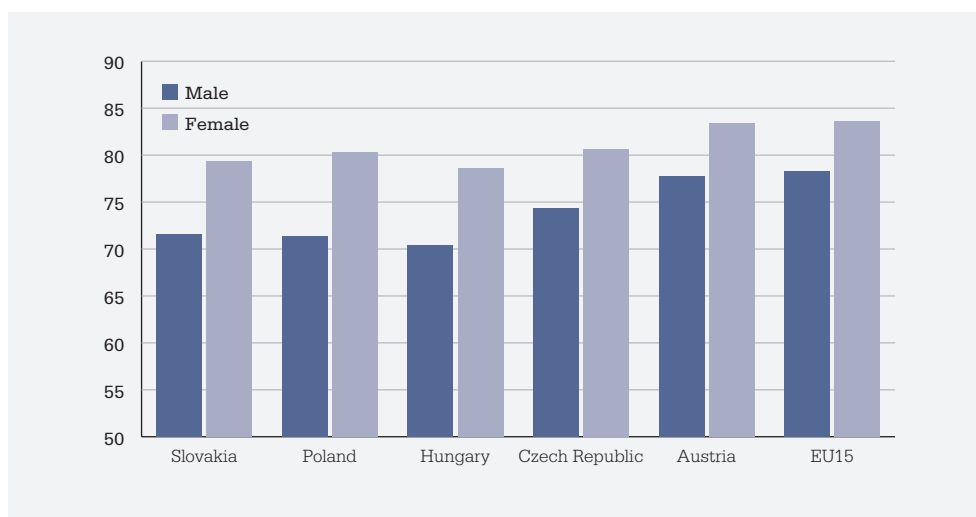
**Table 5. Selected demographic, health and lifestyle indicators, 2009 (unless otherwise indicated)**

Indicator	Slovakia	Poland	Hungary	Czech Republic	Austria	EU15
Population 0–14 years (%)	15.4	15.2	14.8	14.2	15.0	15.8
Population 65+ years (%)	12.2	13.5	16.5	15.0	17.5	17.9
Population density (per km <sup>2</sup> ) (2010)	110.8	122.4	107.5	133.4	100.0	Not available
Urban population (% of total) (2010)	55.0	61.0	68.1	73.5	67.6	76.8
Live birth rate (per 1 000 population)	11.3	11.0	9.6	11.3	9.1	10.7
Total fertility rate (children per woman)	1.4	1.4	1.3	1.5	1.4	1.6
Life expectancy at birth (years)	75.4	75.9	74.5	77.5	80.6	80.0
Death rate (per 1 000 population)	9.8	10.1	13.0	10.2	9.3	9.3
Maternal mortality (per 100 000 live births)	11.4	1.9	18.7	2.5	2.6	5.6
Infant mortality (per 1 000 live births)	5.7	5.6	5.1	2.9	3.8	3.7
Death from diseases of circulatory system (per 100 000 population (standardized death rate (SDR)))	446.6	356.3	421.2	357.0	213.1	174.6
Death from malignant neoplasms (per 100 000 population (SDR))	196.7	201.8	243.2	197.4	157.9	163.7
Death from external causes, injury and poisoning (per 100 000 population (SDR))	51.0	57.6	59.0	48.2	38.9	31.9
TB incidence (per 100 000 population) (2010)	7.1	18.3	15.4	6.0	4.3	7.1
HIV incidence (per 100 000 population)	1.0	1.7	1.4	1.5	Not available	6.0
Abortions (per 1 000 live births)	293.0	1.3	447.7	208.2	Not available	222.4
Regular smokers (% 15+)	M: 26.9 F: 12.4	M: 33.5 F: 21	M: 36.8 F: 26.7	M: 29.7 F: 18	M: Not available F: Not available	Denmark M:22/F:17 Italy M:30/F:17 Spain M:31/F:21

Source: WHO (28).

Average life expectancy is almost equal to that of Poland and higher than Hungary. It is nevertheless relatively low compared to other countries (five years lower than Austria and the EU15 but also two years lower than the Czech Republic). Fig. 7 shows that the gender gap in life expectancy is large and is comparable to Hungary and Poland. It is considerably smaller in Austria and the EU15.

**Fig. 7. Life expectancy of men and women in Slovakia, neighbouring countries and EU15, 2009**



Source: WHO (28).

A 2005 survey showed large regional differences in men's lifespan. Bratislava Region had the highest male life expectancy and the south-eastern area the lowest, with a difference of approximately seven years. Average female life expectancy across regions differed less. The highest for females was also in Bratislava Region and in northern and central Slovakia (78/79 years). The lowest (75/76 years) was in the south (excluding the city of Košice) (31).

The overall death rate is only slightly above the average in the EU15 and Austria, but below those of Poland, the Czech Republic and Hungary. Most frequent causes of death are lifestyle-related noncommunicable diseases, including cardiovascular disease (CVD) (52.7%), cancer (25.5%), gastrointestinal diseases (5%) and respiratory diseases (5.6%) (29). Mortality due to CVD is higher than in Poland, Hungary, the Czech Republic, Austria and the EU15 average, with death from circulatory system disease for men and women over 65 being highest in the southern and south-eastern regions (29). Death rates from malignant neoplasms are higher than in Austria and EU15 countries, equal to the Czech Republic, slightly below Poland and well below Hungary. This fairly positive position can partly be ascribed to the relatively low life expectancy of Slovak men and women: higher life expectancy is correlated with a higher death rate due to malignant neoplasms (32).

Statistics on maternal mortality have fluctuated over the years, but it can be concluded that the maternal death rate per 100 000 live births is much higher in Slovakia and Hungary than in Poland, the Czech Republic, Austria and the EU15. Infant mortality is

twice that of the Czech Republic, well above Austria and the EU15, slightly higher than Hungary and comparable to Poland. Research on geographic differences showed that the infant mortality rate varied between 2 and 6 per 1000 live births in one third of Slovak regions, particularly those in the western part of the country: this resembles mortality rates found in western Europe. By contrast, rates in eastern regions exceeded 10 per 1000 live births, which corresponds with those in Ukraine and the Russian Federation (31).

Deaths from external injury and poisoning decreased after 1991, as they did in the Czech Republic, Poland and Hungary, but the rates continue to exceed those found in Austria and the EU15 countries (33).

TB incidence is the same as the EU15 and much lower than Poland and Hungary, but higher than Austria and the Czech Republic. HIV incidence in former Communist countries is considerably lower than in the EU15, with Slovakia having the lowest incidence for HIV and AIDS (it has one of the lowest concentrations of newly registered AIDS cases in Europe (29)).

Although induced abortions per 1000 live births are much higher than in Poland and higher than in the Czech Republic and EU15, abortions have decreased significantly over the last few decades, declining from 606 per 1000 live births in 1990 to 355 in 2005 and 293 in 2009.

Smoking prevalence among men and women is lower than in all surrounding countries, but there are marked differences between men and women's smoking behaviour. Women smokers are few compared to the surrounding countries and to Denmark, Italy and Spain.

Differences in health status within Slovakia have been identified. A typology of Slovak districts on the basis of a set of socioeconomic indicators resulted in eight groups of districts varying from "very good" on all indicators to "very low" on all. The group with the lowest scores, consisting of counties situated in eastern and south-central parts, had the highest concentration of Roma. They also had the highest infant mortality rates and a lower life expectancy. The study concluded that a low level of education is a strong predictor of premature death from cancer and CVD (23).

Another study examined the relationship between education, unemployment, income, Roma population and regional mortality. Socioeconomic differences in regional mortality were found among men, but not among women. Education and unemployment rates explained mortality differences between regions (34).

## **2.3 The health care system**

### **Health insurance**

The health care system in Slovakia is funded by health insurance and is based on universal coverage and compulsory health insurance with a basic benefit package. One of the three health insurance companies is owned by the state. The system is to some extent ruled by market forces as insurance companies compete for contracts. They are, however, obliged to ensure accessible health care for those they insure and are supervised by the Health Care Surveillance Authority (HCSA).

Health insurance companies collect funds from employees' and employers' contributions, people who are self-employed and the voluntarily unemployed (such as those who are retired); the state provides for jobless people (amounting to one third of all health insurance contributions). Insurance companies pay providers through a contract.

### **Payment**

A mixed system of capitations and fees for services applies to PC, but outpatient specialists are paid a capped fee. Inpatient care is reimbursed using a case-based system. Cost-sharing arrangements are in place for patients, mainly through limits on sums paid for prescriptions and certain services, and copayments apply to spa treatments. Voluntary health insurance is a marginal concern due to the comprehensive state-guaranteed health benefits package.

### **Government's role**

In addition to possessing the health insurance company Všeobecná Zdravotná Poist'ovňa (VŠZP) [General Health Insurance Company], the state also owns the largest health care facilities in the country, including university hospitals, large regional hospitals, specialist institutions and psychiatric hospitals and sanatoria. Pharmacies, diagnostic laboratories and almost all outpatient facilities are privately owned. The MoH and self-governing regions (which have regional responsibilities mainly in outpatient care) manage the system, including issuing permits to providers. Medical professionals must obtain a licence from the Slovak Medical Chamber and a permit from a self-governing region or the MoH to provide services. They must also submit a request for a contract with a health insurance company (29).

### **Services**

Public health's major focus is monitoring communicable and chronic diseases (mainly CVD, cancer and obesity), environment and health, and tobacco and alcohol. GPs are involved in a national immunization programme financed by health insurance companies. Private physicians, including GPs and outpatient specialists, provide most ambulatory care, which is provided free of charge to patients (except for dental care). People can freely choose their GP and medical specialist. General and university hospitals and specialist hospitals provide inpatient care and a network of private and public providers are involved in emergency medical services (29).

### **Resources and utilization**

Table 6 summarizes indicators on health care resources and utilization.

Slovak health expenditure (as a percentage of GDP) is higher than in the other three countries in the Visegrád Group (Poland, Hungary and the Czech Republic), but significantly lower than in Austria and the EU15. The 7.7 % for Slovakia set out in Table 6 is a WHO estimation and is higher than the percentage defined in national reports; it should therefore be interpreted with caution (29). Comparing Slovakia's health expenditure (per capita) with the other three Visegrád Group countries, the Czech Republic spends more and Poland and Hungary less. Austria and the EU15 spend almost twice per capita than Slovakia.



**Table 6. Indicators on health care resources and utilization, 2009 (unless otherwise indicated)**

Indicator	Slovakia	Poland	Hungary	Czech Republic	Austria	EU15
Total health expenditure as % of GDP (WHO estimation)	8.5	7.1	7.3	7.6	11.0	10.5
Total health expenditure per capita (in PPP US\$)	1 897.7	1 358.6	1 440.7	1 924.4	4 242.3	3 630.9
Hospital beds (per 100 000 population)	650.5	665.3	714.4	711.1	766.1	531.6
Physicians (per 100 000 population)	300.1 (2007)	217.1	302.1	356.0	467.8	346.1
GPs (per 100 000 population)	41.4 (2007)	20.5	35.4	70.2	155.2	96.8
Nurses (per 100 000 population)	Not available	524.9	621.3	805.6	760.8	905.6 (2008)
Pharmacists (per 100 000 population)	46.6 (2007)	63.5	57.2	56.4	65.2	84.5
Dentists (per 100 000 population)	50.0 (2007)	31.9	49.1	67.6	55.2	68.7
Average length of stay (days)						
• all hospitals	8.3	5.8	9.36	10	7.8	8.4
• acute hospitals	6.7	Not available	5.8	7.1	6.7	6.6

Source: WHO (28).

Slovakia has fewer hospital beds than Hungary, the Czech Republic and Austria but more than Poland and the EU15 average. Numbers of physicians (per 100 000 population) is lower than in Austria, the Czech Republic and the EU15 average but higher than Poland and Hungary.

Data from the Health Policy Institute suggest that the health care workforce is ageing, with the proportion of physicians of 50 years and older increasing from 46.7% in 2006 to 47.4% in 2007. Most physicians are between 50 and 54 years (29).

Slovakia has experienced decreases in physician numbers relative to the population since 2001 and their distribution throughout the country is uneven: Bratislava Region has 1.5 to 2 times more on average than the other regions. The relative number of nurses in Slovakia is higher than Poland, almost equals that of Hungary and is lower than Austria, the Czech Republic and the EU15 average. Numbers of nurses per population have also been decreasing since 2001 through migration and restructuring of health care facilities. Slovakia had the lowest (relative) number of pharmacists in 2007 but numbers have now increased due to liberalization of ownership regulation, enabling nonpharmacists to own pharmacies (29).

Slovakia has more dentists than Poland and Hungary but fewer than the Czech Republic and significantly fewer than Austrian and EU15 averages. As with other health professions,

geographic distribution of dentists is uneven, with Bratislava Region having twice as many (29).

## **PC**

In addition to general practice, the ambulatory care sector includes out-of-hours first aid medical services, day surgery and specialist outpatient care (through independent providers or those working in departments associated with polyclinics). All ambulatory care services were privatized in 2007, and GPs have their own privately-run practices.

As has been explained above, there are two types of GPs: GPCs for children and young people up to 18 years (and students who may be older) and GPAs. Patients are free to choose their GP and can change up to twice per year.

A system introduced in 2008 required patients wishing to access a medical specialist to be referred by a GP (except in urgent cases) in an attempt to reduce unnecessary visits to specialists and ensure coordinated care, but it was not popular and GPs were frequently bypassed. The system was abolished in 2010 as part of measures aiming to promote patient choice. Any physician (GP or medical specialist) can make a referral for admission to hospital.

Information on patient contacts with GPs is lacking, but aggregate data on outpatient contacts suggest that the number is very high (29).

# 3. PC IN SLOVAKIA: NATIONAL SITUATION AND CONTEXT

This chapter addresses policies, regulation and structures relevant to PC in Slovakia. Policy developments, aspects of financing, workforce, education of providers, quality assurance and the role of patients are included.

The chapter is based primarily on Slovak experts' responses to questions in the national-level questionnaire. The description of results follows the structure of health systems functions and dimensions used in the Primary Care Evaluation Scheme, as set out in Chapter 1. The chapter serves as the context for the results of surveys among GPs and patients, described in chapters 4 and 5.

## 3.1 Stewardship/governance

### Past reform

Most health care legislation in Slovakia was revised between 2002 and 2006 with a new approach based on individual responsibility. Health insurance companies were transformed into joint stock companies, tight budget constraints were introduced and a new regulatory and institutional framework created. User fees were introduced to encourage cost consciousness among patients and managed competition became a central concept, though under strict regulation.

The government elected in 2006 replaced market principles with more direct state involvement. Health insurance companies were no longer allowed to make a profit, selective contracting was restricted and user fees abolished.

Then a new pro-market government was elected in 2010. Health insurance companies were allowed to make profits again, the transformation of hospitals into joint stock companies was resumed and a new diagnosis-related group payment system was proposed (27). Slovakia turned to the political left again in elections held in March 2012 and a new government was sworn in a month later.

### Governance bodies

This section is based substantially on the work of Szalay et al. (29).

#### Parliament

The Slovak Parliament has legislative power and may carry out parliamentary inspections.

#### Government

Governmental responsibilities for health care include adopting legislative measures and appointing chairpersons of the HCSA. The state owns major health care facilities and VŠZP, the largest health insurance company with a two-thirds market share.

The following government bodies are relevant to the health care system.

- The MoH is responsible for developing health policy and legislation, regulating service provision, managing national health programmes and registers and setting quality criteria. It has also been in charge of price regulation since 2003. The ministry is the central authority for PC and has chief specialists in departments such as general medicine and general care of children and adolescents.
- The Ministry of Labour, Social Affairs and Family organizes and funds social care but overlaps with health in relation to some services, such as long-term care.
- The Ministry of Education shares responsibility for management and supervision of medical education and health professional curricula with the MoH. It provides financing for these programmes while the MoH coordinates health research at universities and the Academy of Sciences.
- The Ministry of Finance strongly influences the development of the health budget.
- Interior, defence and transport ministries manage some health care facilities in their sectors, but play a marginal role.
- The National Centre for Health Information (NCHI) was established by the MoH to deal with e-health issues, standardization of health information systems, collection, processing and provision of health statistics and the development of a medical research and health library and information service. The NCHI holds a number of national health registers.
- The Public Health Authority (PHA), managed by the Chief Public Health Officer (chief hygienist) appointed by the Minister of Health, develops vaccination policies, controls radiation protection and issues permits for the sale of certain products. It carries out epidemiological and environmental monitoring through regional offices and controls the quality of drinking and bathing water.
- The State Institute for Drug Control (SIDC) monitors the quality and safety of medical products and devices. SIDC approves clinical trials, grants marketing authorization and controls pharmacies. It issues regular reports on adverse drug effects and medical device failures.

### **HCSA**

The HCSA is responsible for the supervision of health insurance and health care purchasing and provision. It grants health insurers access to the market and has the power to impose sanctions. HCSA also sets risk-adjustment mechanisms between health insurance companies and deals with patients' complaints that cannot be settled at a lower level (patients' complaints are also heard by the MoH, self-governing regions and health insurance companies; complaints related to ethical issues are dealt with by the Medical Chamber). HCSA's supervisory board is elected by parliament, but the government can veto the appointment of a chair.

### **Health insurance companies**

Three health insurance companies operate in Slovakia, including VŠZP. They collect funds and purchase services via contracts with providers. A risk-adjustment scheme is in place to reflect differences in the structure of their insured populations. Health care purchasing is based on selective contracting, which means that in principle, health insurance companies can have different contracts with different providers. In practice, however, this opportunity is not exploited to its maximum potential. Professional organizations take part in contract negotiations but do not operate with a mandate from their members and do not perform trade union activities. The framework agreement therefore acts as a recommendation, rather than being binding.

## Centralized and decentralized health governance

### PC within the MoH

Responsibility for PC within the MoH lies with the Health Section, consisting of four departments: Department of Health Care; Department of Pharmacy; Department of Health Education; and Department of Categorization, Pricing and Drug Policy. There is no separate section or department exclusively dealing with PC.

### Regional differences in PC

The state guarantees the availability of PC services through a minimum network of providers. Responsibility in the regions largely lies with the self-governing regions, who may develop strategic plans for health care in their area based on analyses of health care supply and population needs, taking demographic and epidemiological trends into account.

No evidence of regional differences in the provision of services has been produced, but considerable differences may exist between districts within regions. An analysis of the situation in the Banská Bystrica Region, for example, showed large variation in the number of patients per GP, suggesting a possible relative shortage of GPs. Availability of GP care may therefore be suboptimal in some districts even though aggregate national statistics do not reveal a shortage, while other districts may be “overserved”. Indeed, data on the distribution of providers and facilities show greater GP availability in the Bratislava Region than in some eastern parts of the country.

## 3.2 Policy development

PC-relevant policy documents and measures are briefly described below. They appear in chronological order, starting with 2004.

### 2004

- Act No. 576/2004 of Collegium on Health Care, Health Care-Related Services and on Alterations and Amendments to Certain Acts. This addresses: provision of certain health care services; rights and duties of physical persons and legal entities related to health care provision; death-related procedures; and state administrative procedures in the field of health care.
- Act No. 577/2004 of Collegium on the Scope of Health Care Paid Based on Public Health Insurance and on Payments for Services Related to Health Care Provision. This addresses: the scope of health care services paid by public health insurance; payments for certain health care services; and adoption of EU acts.
- Act No. 578/2004 of Collegium on Health Care Providers, Health Care Professionals, Professional Organizations in Health Care and on Alterations and Amendments to Certain Acts. It addresses: conditions for providing health care (-related) services by physical persons and legal entities; conditions for establishment of health care professions, including recognition of qualifications; education of health care professionals; establishment, position, bodies and competencies of professional organizations in health care; rights and duties of members of a chamber; duties of

health care providers and professionals; duties and related sanctions; and adoption of EU acts.

- Act No. 581/2004 of Collegium on Health Insurance Companies, Health Care Supervision and on Alterations and Amendments of Certain Acts. This addresses: the position of health insurance companies and conditions for their performance; activities, organization and management of health insurance companies; establishment, competencies, organization, management and activities of the HCSA; and HCSA's role in surveillance over health insurance companies, public health insurance and health care provision.

## 2005

- Decree MoH No. 366/2005 of Collegium on Evaluation Criteria and an Evaluation Method for Continuing Education of Health Care Professionals. This addresses the specification of evaluation criteria and methods for CME.
- Ordinance MoH stipulating model-based specialized educational programmes and model-based certification programmes addresses the model of specialist education programmes and the certification of curricula.

## 2006

- *Concept of state health policy (35)*, in relation to general health care of children and adolescents, addresses: the contents and main tasks of general medicine for children and adults, including characteristics of health care in this field; cooperation and relationships with other medical fields and professional and methodical health care management in this field; and development of general medicine for children and adults, including: development trends in this field, prevention, personal health care management, preparation of physicians for new tasks, a monitoring system for quality of care in this field, main issues and problems related to health care in this field, international cooperation, education of employees in this field, specialist studies, certification and CME.
- Governmental keynote speech, which stated: health, equal provision and availability of health care are fundamental rights of every citizen and conditions for a meaningful life; health maintenance and improvement are essential areas for investment for a strong economy and satisfied society; first-contact doctors have a key role in health care, so improving their working conditions, CME and their role in general outpatient care would be supported; support would be given to rezoning (reestablishing task domains) of paediatricians, GPs, gynaecologists and obstetricians and dentists, who are key elements in health care provision, with statutory health care zoning developed (in general and specialist domains); citizens would be supported to choose their health care provider; the focus on prevention and early diagnosis of disease would be strengthened by supporting the implementation of critical preventive programmes, with comprehensive health care programmes for children and senior citizens enforced; the availability and quality of health care to all citizens would be ensured while preventing uncontrollable and inefficient increases in health facilities;

and health facilities' restructuring would focus on the transfer of tasks such as day care to outpatient care to increase productivity while maintaining quality.

## 2008

- Ordinance of MoH No. 09812/2008-OL on Minimum Staff Requirements and Requirements of Materials and Technical Equipment for Individual Health Care Facilities as Amended. This addresses staff, material and technical requirements for health care facilities such as general practices for children and adults.

## 2010

- Regulation No. 296/2010 of Collegium on Professional Qualifications of Health Care Professions. This aims to specify methods of continuing education and training for health care workers and to define the system of fields of specialization and certified professional activities.
- The manifesto of the Government of Slovakia for 2010–2014 focuses on civic responsibility and cooperation. It includes a section on health care that promotes: the value of health and principles of health policy; public health and prevention; quality health care and patient safety; patient rights; service delivery and funding of the health care sector; and health insurance. A number of points are relevant to PC:
  - » strengthening health prevention practices through effective and evidence-based national programmes;
  - » providing a bonus for adults who do not use the full portion of public-insured services in a year;
  - » introducing accreditation and a quality measurement system, with publication of indicators;
  - » promoting e-health, such as electronic medical records;
  - » providing financial support for health research and development;
  - » introducing a payment system to reduce growth in drug expenditure, with an upper limit to copayment for drugs for certain groups of patients;
  - » improving home nursing care;
  - » removing the obligation of a GP referral to see a medical specialist;
  - » revising the minimum network of health care providers to establish more equal access;
  - » encouraging supplementary health insurance schemes to cover services outside the publicly funded package; and
  - » allowing health insurance companies – under certain conditions – to make a profit, but also emphasizing their role in maintaining quality of care.

## **Monitoring professionals and services**

### **Licensing and (re)accreditation**

Health care professionals need to meet the following formal requirements to work in PC. They must:

- be capable to enter into legal acts
- be physically and medically fit

- possess professional qualifications (such as those for a GPC or GPA)
- have integrity
- be registered by their profession.

Physicians, including GPs, must recertify every five years. To do so, they must meet established criteria and fulfil statutory CME requirements (in compliance with Act No. 578/2010 and Amendment Act No. 133/2010). GPs who do not meet CME requirements will be asked to do so; if they fail, the relevant chamber will annul their registration.

Nurses are subject to the same recertification procedure as physicians.

### Conditions for the care process

#### PC workforce norms

Norms defining the (maximum) number of children a GPC should care for or the number of adults on the list of a GPA do not exist.

#### Staff shortages in PC

Slovakia has a nationwide shortage of dentists, but no such shortages exist for other health professionals. Some regions lack GPs, gynaecologists and obstetricians and home care nurses (ADOS – Agentúry Domácej Ošetrovatel'skej Starostlivosti [Home Care and Nursing Agencies]), but no shortage was reported for PC nurses, pharmacists and physiotherapists (Table 7).

**Table 7. Shortages reported for PC professions**

PC professions	No shortage	Shortage in some regions	Shortage nationwide
GPs		■	
PC nurses	■		
Gynaecologists and obstetricians		■	
Dentists			■
Pharmacists	■		
Home care nurses (ADOS)		■	
Physiotherapists	■		

#### Mode of practice

Almost all GPCs and GPAs work in independent practice and have a contract with health insurance companies. It is unknown how many GPs work in partnerships or group practices, but the number appears very low. Sharing premises, often the building of the former polyclinic, with colleague GPs occurs frequently, with GPs renting their office space. They may also rent extra facilities from a municipality.



### **PC gatekeeping**

GPCs and GPAs held a gatekeeping role until 2010, when the need for a GP referral to access specialist care without charge was abolished.

### **Out-of-hours GP coverage**

Outpatient care outside regular office hours is mainly provided by Lekárske Služby Prvá Pomoc [First Aid Medical Services] (LSPP), in which GPs are usually not involved. GPs may also be available outside office hours in some rural areas.

## **Conditions for responsiveness**

### **Stakeholder organizations**

The particular roles of key stakeholders are presented below.

The Slovak Medical Chamber keeps the register of physicians in the country and issues certificates of registration and licensing. There were 22 460 medical doctors registered at the end of 2011. Each has to undergo inspection every five years to achieve relicensing. The chamber is also involved in CME and deals with complaints concerning professional and ethical issues, meting fines and other disciplinary measures. Two thirds of physicians are members and receive professional, legal and economic advice. The chamber cooperates with various state bodies, including the MoH and equivalent chambers for nurses and midwives, dentists, pharmacists and other health care professionals.

The Slovak Society of General Practice of the Slovak Medical Association is a representative body for GPs and has around 1350 members. Its main focus is professional development. The society aims to promote a comprehensive role for GPs and improve the quality of care they provide. It is a member of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians.

The Association of Private Physicians in Slovakia aims to promote private physicians' interests and ensure the conditions for their proper functioning. About one third of its 3500 members are GPs. It is involved in CME activities in cooperation with the Slovak Medical Chamber and hosts a relief fund for its members.

HCSA supervises overall functioning of the health care sector (as described above). It is also involved in quality management initiatives and settles patients' complaints, although it is not the only body dealing with them (see below).

Health insurance companies contract health care professionals and facilities for defined services and pay for their provision. They also perform inspections of contracted service providers.

Self-governing regions are responsible for health care services delivery in their territories. Their responsibilities include licensing of health care practices and facilities (including issuing permits to GPAs and GPCs for running a practice), defining health care provision zone (district) boundaries, approving working and opening hours, organizing LSPP services, supervising services and, if necessary, imposing fines.

## Patient organizations

The Association for Protection of Patients' Rights is a civil association that aims to protect patients and inform the public about health care and patients' rights and duties. Infopacient is an Internet-based umbrella structure for all the patient-oriented organizations in the country. HCSA plays a role in dealing with complaints and maintaining patient rights and safety, but is not specifically a patient organization.

## Patient rights

### *Patient information*

Patients have the right to be informed about their state of health and to see their health documentation. Health care providers must inform patients in advance if the provided health service is subject to cost sharing. Physicians have an obligation to inform patients about copayment of prescribed medication and to offer generic prescription products with no (or cheaper) copayment.

### *Legislation and regulation*

Patient rights concern the rights to access health care, choose a health care provider, have human rights and freedoms protected and uphold children's rights. These are stipulated within legislation:

- Constitution of the Slovak Republic No. 420/1998 of Collegium;
- Act No. 576/2004 of Collegium on Health Care and Health Care-Related Services;
- Act No. 578/2004 of Collegium on Health Care Providers, Health Care Professionals, Professional Organizations in Health Care; and
- alterations and amendments to other acts.

## Resource generation

### PC workforce

The average population per GPC is 1008 children (18 years or younger) and for GPA 2141 adults (19 years and older) (Table 8).

**Table 8. Professionals working in PC**

Active PC providers	Number	Population per worker	As % of all physicians, nurses, midwives
GPCs	1 050	1 008 children**	19.1%*
GPA	2 030	2 141 adults***	
Primary health care nurses (2006)	3 192	1 692	Not available
Primary health care midwives (2006)	1 727	3 127	Not available

\* Total number of active physicians 16 108 (2008). *Source:* (MoH, personal communication, 2012).

\*\*Population of 18 or younger (1.06 million in 2011).

\*\*\*Population of 19 years or older (4.35 million in 2011).

## Professional development and education

All five organizations listed in Table 9 are involved in professional development and education activities. Financial and material interests of the profession are defended

by the Association for General Physicians for Adults; the Society of General Practice; and the Association of Private Physicians. The Slovak Medical Chamber – described elsewhere – and the Slovak Association of Physicians do not have a trade union function but are involved in scientific work.

**Table 9. Professional organizations and their professional development and education activity**

Organization	Financial/ material interests	Professional development (such as guidelines)	Education	Scientific activities
The Slovak Association of General Physicians for Adults	■	■	■	
Slovak Society of General Practice	■	■	■	
The Slovak Medical Chamber		■	■	■
The Slovak Association of Physicians		■	■	■
Association of Private Physicians	■	■	■	

The following professional journals are available for GPAs and GPCs:

- *Pediatrica pre prax*, bimonthly
- *Via practica*, bimonthly
- *Praktický lekár [Practitioner]*, monthly
- *Detský lekár [Paediatrician]*, quarterly
- *Ošetrovatel'stvo a pôrodná asistancia [Nursing and Midwifery]*, bimonthly
- *Revue ošetrovatel'stva, sociálnej práce a laboratórných metodík [Review of Nursing, Social Work and Laboratory Methodologies]*, quarterly
- *Sestra a lekár v praxi [Nurse and Physician Practice]*, bimonthly
- *Slovenský lekár [Slovak Doctor]*, bimonthly.

No information about the number of subscribers is available.

### Medical education

The four medical faculties are in Martin, Košice and Bratislava (two). Each is part of a wider university. They offer specialist programmes in general medicine but only one in paediatrics. GP education is aligned with the EU Directive and is covered in 12 semesters. Postgraduate (specialist) study in general medicine takes 39 months. Graduates in paediatrics can immediately start working either as a GPC or in hospital, where they can further specialize through 60 months' postgraduate training (Table 10).

General medicine is not acknowledged as a scientific specialty in Slovakia, so it is not possible to confer the title of “professor of general medicine”. Around 10% of medical graduates in 2009 chose to enrol in a general medical specialty, but this proportion has reportedly been decreasing in recent years.

**Table 10. Institutes offering specialization in general medicine and paediatrics and duration of specialist programmes**

University	Faculty with field of specialization	Duration of specialist programmes (months)	Months spent in PC
Comenius University, Bratislava; Jessenius Medical Faculty, Martin	General medicine*	39	39
	Paediatrics	60	60
PJ Šafárik University, Košice, Medical Faculty	General medicine*	39	39
	Paediatrics	60	60
Slovak Health Care University Bratislava, Medical Faculty	General medicine*	39	39
	Paediatrics	60	60
Comenius University Bratislava, Medical Faculty	Paediatrics	60	60

\*Refers to GPA.

## Quality assurance

### General

Regulation of quality tends to focus on structure, processes and outcomes, with regulation on structure being best developed.

The MoH has set minimum criteria for technical equipment, qualifications and personal criteria that are necessary to open a practice. HCSA, professional chambers and self-governing regions hold monitoring and enforcement responsibilities.

Regulation of processes is very imprecise. The MoH requires providers to develop a written quality system to identify and minimize potential shortcomings, but enforcement is weak. As a consequence, effective quality systems are lacking.

Regulation of outcomes is limited to issuing quality indicators that serve as criteria for selective contracting. Quality indicators are developed and published by the MoH in cooperation with professional organizations, health insurance companies and HCSA. Allegations of malpractice are investigated by the HCSA, which can impose sanctions on individuals and institutions (29).

### Mechanisms to assess the quality of PC services

Commonly used mechanisms include internal control within practices and practice inspection by supervisors or health authorities. Obligatory periodic tests of physicians' and nurses' professional knowledge and skills and external clinical auditing (using medical records) are rarely used.

Other procedures reported for GPA/GPC include:

- index of prevention (insured adults/children up to 1 year, patients from 11 to 17 years);
- patient contacts in outpatient emergency departments for adults/children and adolescents;

- attendance at health care facilities by insured adults and children and adolescents;
- acute care management (adults/children and adolescents);
- chronic care management (adults only);
- public examination and treatment facilities;
- transport services;
- attendance at general outpatient care facilities; and
- prescription of drugs in general outpatient care.

Health insurance companies apply other quality and efficiency indicators.

### **Evidence-based medicine and clinical guidelines**

The MoH is responsible for the development and implementation of clinical guidelines, which are published in the *Journal of the Slovak Ministry of Health*. Chief specialists at the ministry and professional organizations prepare and update guidelines and relevant documents. No information on other ways of distribution or actions to implement guidelines was available.

The guidelines identified as most important to the daily work of GPs are those on:

- provision of specialist outpatient health care with or without GP recommendations
- early diagnosis of tooth decay for children and adolescents
- standard diagnostic procedures related to indications for antibiotic use by GPCs
- keeping health care records.

The following guidelines or protocols apply to nurses and midwives in PC:

- Decree No. 364/2005 of Collegium, defining the scope of practice provided by a nurse (or midwife) independently and in cooperation with a doctor as amended;
- Decree No. 306/2005 of Collegium, stipulating a list of diagnoses defined by nurses;
- MoH guideline on establishing, implementing and evaluating standards applicable to nurses and midwives; and
- concept of nursing as a specialty.

These documents have also been published in the *Journal of the Slovak Ministry of Health* and are available to the public on the MoH web site.

### **Financing aspects**

The health care benefit package is comprehensive and covers people's costs of visiting PC services. Costs of prescribed drugs are not fully covered, as copayments are applicable for drugs prescribed in PC.

#### **PC financing and expenditure**

PC accounted for approximately 4.4% of the total health budget in 2009. Providers are contracted to the health insurance companies.

#### **Payment mechanisms**

GPs have a mixed payment system of capitation and fee for service. The level of payment is not related to indicators of quality or performance. GPs are paid extra to perform preventive examinations and screening.

## Income

Data on average gross yearly incomes of independent physicians are derived from health insurance company figures and GPs' annual tax declarations. The average monthly salary for doctors in health care facilities run by the MoH, regional health authorities, cities or municipalities and funded from health insurance company resources was €1598.56 in 2009.

## Aspects of service delivery

The official contact rate with GPs is 4.9 per patient per year: about one in four (24.5%) ends with a referral to a medical specialist. GPs make 657 medicine prescriptions per 1000 patient contacts (Table 11).

**Table 11. Key indicators of utilization of PC services\***

Indicators	Rate
Number of patient contacts with GPs per 1 000 population per year	4.9
Number of referrals written by GPs to medical specialists per 1 000 patient contacts	245
Number of hospital admissions from GPs per 1 000 patient contacts	Not available
Number of drug prescriptions by GPs per 1 000 patient contacts	657

Source: (MoH, personal communication, 2012).

\*The survey among physicians also addressed contact frequencies and number of referrals: results are reported in Chapter 4.

## 3.3 Current issues and plans for PC

The future of PC and general practice is being discussed in Slovakia. The average age of GPs is very high, numbers are decreasing and the pace of decrease will grow as a result of large-scale retirement. The inflow of new GPs is low, due to the profession's perceived unattractiveness. PC and general practice are not clearly defined in people's minds and legal restrictions on the delivery of certain clinical activities are not widely understood.

Political debate is taking place about physicians' involvement in out-of-hours medical services offered by LSPP, with GPs involved on a rota basis. LSPP regulation seems to be insufficient: there is a need for clear and binding regulation that includes providers' duties, working relations between nurses and physicians, and financing and remuneration.

Prevention at PC level requires new initiatives and greater involvement of public health offices in self-governing regions. It is currently addressed through two national programmes.

The National Programme on Prevention of CVD focuses on adults and children. It aims to identify risk factors and detect CVD early, but also to raise awareness among the population. Health care providers need to be more knowledgeable and motivated to help the programme achieve its goals.

The National Programme on Children and Adolescents' Health Care 2008–2015 has seven priorities: health of the mother and newborn; diet and physical activity; prevention

and treatment of infectious diseases and addiction; injuries and violence; environment; age-related behaviours (such as risk-taking behaviour); and psychosocial development and mental health (including preparing for parenthood).

Education and training of health professionals is an issue, particularly in relation to payment of trainees during the three years of specialization to become a GPA. Hospital doctors' salaries during their specialist programme are usually paid by their host hospital, but as GPs are independent practitioners, employer payment is not an option. Lack of arrangements for payment during specialization continues to pose an obstacle to those wishing to become GPs.

More generally, it seems there is a need to reconsider professional qualifications to reflect changing demand and new tasks in PC. Medical education needs to better reflect the monitoring and treatment necessary for patients with chronic conditions, multidisciplinary working and active forms of prevention and health education. Some suggest that a new specialization should be developed for GPs, with a duration of at least 15 months and a defined level of university medical education as an entrance requirement.

## 4. GPs AND THEIR POSITION IN PC

This chapter presents results of the survey among GPs. The survey focused on: workload and use of time; access and availability of services to patients; quality of care; use of clinical information; coordination and cooperation; practice conditions; medical equipment; and dimensions of clinical task profiles.

### 4.1 Respondents' characteristics

Three hundred and fifty three GPs responded: 118 GPCs (33.4%) and 235 GPAs (66.6%). Most (53%) worked in rural practices (Table 12).

**Table 12. Numbers of urban and rural GPs**

GPs	Urban (N=163)		Rural (N=186)		Total (N=349*)	
	Total	%	Total	%	Total	%
GPC	55	47.0	62	53.0	117	100
GPA	108	46.6	124	53.4	232	100
TOTAL	163	46.7	186	53.3	349	100

\*Location of practice is unknown for four GPs.

Respondents were more commonly women: 71.6% were female and 28.4% male. The proportion of women was higher among GPCs (86.3%) than GPAs (64.1%) (Table 13).

**Table 13. Gender of urban and rural GPs**

GPs	Urban (N=163)		Rural (N=185)		Total (N=348*)	
	Total	%	Total	%	Total	%
GPC						
• male	7	12.7	9	14.5	16	13.7
• female	48	87.3	53	85.5	101	86.3
GPA						
• male	31	28.7	52	42.3	83	35.9
• female	77	71.3	71	57.7	148	64.1
TOTAL						
• male	38	23.3	61	33.0	99	28.4
• female	125	76.7	124	67.0	249	71.6

\*Gender was not revealed for five GPs.

Table 14 provides key profile data of the GPs and their practices. While 94% of the GPAs had completed or were in the process of completing specialist GP training, none of the GPCs were doing so.



As has been explained previously, one of the characteristics of the GP system in Slovakia is that primary medical services for children are provided by one GP and those for adults by another. However, 89% of the GPCs who responded to questions about patient ages also included patients between 18 and 28 years on their patient list, and 51% included patients above the age of 28. Only 5% of GPAs who did so included children/adolescents of 18 years or younger on their patient list.

Assuming that GPs who did not respond to questions about their patient list did not include those age categories, the figures are as follows:

- 73% of GPCs in the survey included patients between 18 and 28 on their patient list, and 29% also included patients above 28; and
- 3% of GPAs included children/adolescents of less than 18 years.

The average age of respondents was 53.9 years, with little difference between GPCs (53.7) and GPAs (53.9). On average, 27% were under the age of 50. A large majority (73.9%) were independent or self-employed, and average GP experience was 24 years (Table 14).

**Table 14. Summary of GP characteristics**

GPs	GPCs (N=118)			GPAs (N=235)			Total (N=353)		
	Total	%	Valid N	Total	%	Valid N	Total	%	Valid N
Male GPs	16	13.7	117	85	36.3	234	101	28.8	351
GPs with specialist GP training	-	-	-	212	94.2	225	212	94.2	225
GPs serving children/adolescents (under 18 years)	115	100	115	8	5.2	154	123	45.7	269
GPs serving patients between 18 and 28 years	86	88.7	97	138	82.6	167	224	84.8	246
GPs serving patients above the age of 28 years	34	50.7	67	231	99.6	232	265	88.6	299
GPs under age of 50 years	34	29.1	117	59	25.7	230	93	26.8	347
Independent/self-employed GPs	91	77.1	118	170	72.3	235	261	73.9	353
GPs average age (years)	<b>Urban</b> 53.36	<b>Rural*</b> 53.97		<b>Urban</b> 53.64	<b>Rural*</b> 54.20		<b>Urban</b> 53.54	<b>Rural*</b> 54.13	
Average years working	24.40	24.15		23.32	24.42		23.69	24.33	

\*Including small towns and rural areas.

## 4.2 Accessibility of care

### Workload and use of time

Table 15 provides an overview of various aspects of workload. Practice size, determined by the number of patients GPs reported being responsible for, varied by type of GP. GPA practices were for 1750 patients on average, while the average for GPC was 1154. GPA practices in the survey were smaller than the national average (see Chapter 3) and GPC were larger.

Overall, GPAs' workload was larger than that of GPCs, especially in relation to face-to-face patient consultations and home visits. Consultations by telephone and e-mail were on average the same for both groups. The number of hours spent per month on reading professional journals or accessing medical information, including through the Internet, was higher among GPCs (19.8 hours per month) than GPAs (16.8). GPAs nevertheless reported spending more time on training or in taking courses (13.4 and 9.6 hours per month respectively).

Around a quarter of GPAs and GPCs reported a GP shortage for six months or more. National norms for the size of practice populations do not exist, so this must be understood as subjective estimations of local situations. It may, however, highlight areas where doctors have not been replaced when they withdrew due to retirement or other reasons or suggest that some practices are exceptionally large. A slightly higher percentage reported a shortage of PC nurses.

**Table 15. GPs' workload and use of time, by type of GP**

Aspects of workload	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	Mean	Valid N	Mean	Valid N	Mean	Valid N
List size (number of patients)	1 154	117	1 750	228	1 548	345
Number of patient consultations per day	38.6	118	47.4	230	44.4	348
Number of patient consultations per day for repeat prescription	5.8	116	15.0	229	11.9	345
Number of patient consultations per day by telephone	8.0	118	7.1	227	7.4	345
Number of patient consultations per day by e-mail	5.4	116	5.0	226	5.1	342
Number of home visits per week	3.6	116	4.8	227	4.4	343
Number of working hours per week	37.5	115	41.2	231	40.0	346
Number of hours reading per month	19.8	118	16.8	230	17.8	348
Number of hours taking courses per month	9.6	116	13.4	230	12.1	346
	Total (%)	Valid N	Total (%)	Valid N	Total (%)	Valid N
Number reporting staff shortages:						
• shortage of GPs	28 (23.9)	117	61 (26.8)	228	89 (25.8)	345
• shortage of PC nurses	34 (29.1)	116	62 (27.2)	228	96 (27.9)	344

Table 16 shows the same overview of various aspects of workload but by setting (urban or rural). List size was more or less equal, but rural GPs had on average more patient consultations per day. The number of working hours per week was the same, although urban GPs spent more time reading professional journals or accessing medical information while rural were more involved in training and taking courses. The reported shortage of GPs was higher in rural areas, but urban areas reported slightly higher levels of PC nurse shortages.

**Table 16. Urban and rural GPs' workloads and use of time**

Aspects of workload	Urban (N=163)		Rural (N=186)		Total (N=349)	
	Mean	Valid N	Mean	Valid N	Mean	Valid N
List size (number of patients)	1 566	160	1 533	182	1 549	342
Number of patient consultations per day	43.8	161	44.7	183	44.3	344
Number of patient consultations per day for repeat prescription	11.3	160	12.2	181	11.8	341
Number of patient consultations per day by telephone	8.3	161	6.6	180	7.4	341
Number of patient consultations per day by e-mail	6.0	158	4.4	180	5.1	338
Number of home visits per week	3.4	160	5.3	179	4.4	339
Number of working hours per week	39.2	159	40.3	183	39.8	342
Number of hours reading per month	20.2	158	15.8	186	17.8	344
Number of hours taking courses per month	10.6	157	13.5	185	12.1	342
	Total (%)	Valid N	Total (%)	Valid N	Total (%)	Valid N
Number reporting staff shortages:						
• shortage of GPs	31 (19.3)	161	56 (31.1)	180	87 (25.5)	341
• shortage of PC nurses	39 (34.7)	185	55 (30.2)	182	94 (27.6)	340

### Access and availability of services to patients

Patients could generally see their GP on the same day (see Table 17), at least during office hours. Only 10% of GPCs and 4% of GPAs reported opening in the evening at least once per week. Opening at least once a month on a weekend day (normally a Saturday) was even less common (reported by 4% of GPCs and 1% of GPAs). It was nevertheless standard to provide a telephone number out of hours to patients (95% on average), with patients having access to the personal or private telephone number of 80% of GPCs and 50% of GPAs for consultations outside normal office hours. This offer ran parallel to services provided by LSPP.

Sessions or clinics for specific patient groups were not common, being reported by an average of only 12% of respondents. Most frequently mentioned were clinics for patients with diabetes or hypertension. Understandably, clinics for older people were only reported by GPAs.

The bottom line of Table 17 shows that on average, half of the GPs worked within five kilometres of a general hospital.

**Table 17. Indicators of access to the practice, by type of GP**

Aspects of patients' access	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Same day visits are possible	99.1	116	99.1	234	99.1	350
Evening opening at least once per week	10.3	116	4.3	232	6.3	348
Weekend day opening at least once per month	4.3	115	1.3	232	2.3	347
Phone number available for patients when practice is closed	95.7	116	94.0	234	94.6	350
Personal phone number available outside office hours (with additional payment)	79.5	112	54.1	231	62.4	343
Clinics or sessions in use for special patient groups:						
• diabetes patients	21.4	14	50.0	28	40.5	42
• hypertensive patients	21.4	14	46.4	28	38.1	42
• family planning information	14.3	14	7.4	27	9.8	41
• pregnant women	14.3	14	25.9	27	22.0	41
• older people	-	14	48.1	27	31.7	41
• other groups	57.1	14	14.8	27	29.3	41
No clinics or sessions for special patient groups	86.1	115	88.5	234	87.7	349
Practice situated at five or more kilometres distance from nearest general hospital	51.7	118	49.4	235	50.1	353

### Quality of care

Clinical guidelines, expert directives, patient satisfaction surveys and complaints procedures are tools designed to improve the quality of care. Table 18 shows the utilization of quality improvement methods. Clinical guidelines and expert directives tended to be used more frequently than complaints procedures and evaluative methods. There were few differences between GPCs and GPAs in use of guidelines and directives, but complaints procedures and evaluative methods were more common with GPAs.

## 4.3 Continuity of care

### Use of clinical information

Maintenance of medical records is an important indicator for quality and continuity of care and was routine for virtually all GPs (Table 19). Experiences gained by the health insurance company through monitoring, practice visits and inspections showed, however, that the quality of medical records left something to be desired. Patient records were sometimes absent because patients had taken them for appointments with medical specialists.

**Table 18. Use of clinical guidelines, complaints procedures and evaluation methods, by type of GP**

Quality improvement	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Applying clinical guidelines:						
• frequently	46.1	115	48.7	232	47.8	347
• occasionally or seldom/never	53.9	115	51.3	232	52.2	347
Using expert directives:						
• frequently	58.3	115	57.5	233	57.8	348
• occasionally or seldom/never	41.7	115	42.5	233	42.2	348
Having a procedure for dealing with complaints	17.2	116	22.5	231	20.7	347
Using evaluation methods:						
• investigation of patient satisfaction	20.2	114	28.3	223	25.5	337
• interviewing community representatives about satisfaction with the practice	21.1	114	28.2	220	25.7	334

Efficient approaches to active monitoring and prevention are enabled by identification of patient groups on the basis of shared diagnosis, health risk or age. GPC practice information systems seemed more capable of generating such lists.

Cooperation between primary and secondary care is enhanced when information from GPs accompanies patients when they are referred to medical specialists or are hospitalized. Eighty per cent of respondents indicated that they used referral letters for all patients, with GPCs more active in this regard.

**Table 19. Availability and use of clinical information and use of computers, by type of GP**

Quality improvement	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Keeping patients' medical records routinely for all contacts	98.3	118	98.3	233	98.3	351
Easy to generate a list of patients by diagnosis or health risk	60.2	118	52.8	233	55.3	351
Use referral letters for all referred patients	93.2	118	75.2	234	81.3	352
Use the computer for:						
• booking appointments	25.0	116	22.2	234	23.1	350
• writing bills/financial administration	40.5	116	41.5	234	41.1	350
• medicine prescriptions	82.9	117	93.2	234	89.7	351
• keeping patients' medical records	64.1	117	76.1	234	72.1	351
• writing referral letters	65.5	116	67.9	234	73.1	350
• searching medical information	68.4	117	72.6	234	71.2	351
• e-mail consultations	34.5	116	23.1	234	26.9	350
Not using a computer	0.9	116	1.7	234	1.4	360

A ministerial decree requires computer use among GPs, and only 5 of 350 respondents answering this question reported that they did not use a computer. Most common use was for medicine prescriptions and least common for booking appointments. GPCs used the computer more frequently for e-mail consultations and GPAs for prescriptions, medical records, referral letters and searching for medical information.

#### 4.4 Coordination of care

##### Coordination and cooperation

Fewer than one in four GPCs and one in five GPAs worked in a practice without other GPs. GPCs tended to work with three or more GPs in the same building (Table 20) and were more liable to work with medical specialists.

**Table 20. GPs working with others, by type of GP**

Working in the same building	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
One GP (solo)	12.8	117	23.3	232	19.8	349
Two GPs working in the same building	7.7	117	8.2	232	8.0	349
Three or more GPs working in the same building	9.4	117	5.2	232	6.6	349
GPs and other PC professionals working in the same building	23.1	117	23.3	232	23.2	349
GPs and medical specialists working in the same building	45.3	117	35.3	232	38.7	349
Other type of practice	1.7	117	4.7	232	3.7	349
TOTAL	100	117	100	232	100	349

Half of responding GPs shared facilities with other health care workers (Table 21).

**Table 21. GPs' use of joint facilities, by type of GP**

Joint facilities	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Not applicable	20.7	116	26.1	230	24.3	346
No joint facilities	25.9	116	28.3	230	27.5	346
Using joint facilities:	53.4	116	45.7	230	48.3	346
• diagnostic facilities	56.5	62	44.8	105	49.1	167
• administrative support	24.2	62	24.8	105	24.6	167
• cleaning and maintenance	87.1	62	89.5	105	88.6	167
• other services	9.7	62	7.8	103	8.5	165

GPs are obliged to work with a nurse, but only two thirds reported a practice nurse in the same building. Thirteen per cent worked with a home care nurse (ADOS). GPCs were slightly more likely to share the building with midwives, dentists or pharmacists. A variety of specialists, including physiotherapists, were also cited (Table 22).

**Table 22. Other disciplines in the team, by type of practice**

Other disciplines	GPC practice (N=118)		GPA practice (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Practice nurse	71.9	114	68.5	222	69.6	336
Home care nurse (ADOS)	14.2	113	13.1	222	13.4	335
Midwife	8.8	113	3.6	221	5.4	334
Dentist	50.0	114	46.6	221	47.8	335
Pharmacist	60.5	114	50.2	221	53.7	335
Other	18.4	114	25.3	221	23.0	335

Almost three quarters of GPs reported regular meetings (at least once per month) with other GPs and most met with pharmacists regularly, but only a small majority of GPCs reported regular meetings with practice nurses. GPAs were more likely to have regular meetings with home care nurses, while 7.5% of GPCs and 2.2% of GPAs had regular meetings with midwives (Table 23).

**Table 23. Face-to-face meetings with other PC workers, by type of GP**

Meeting face to face at least once per month with:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
other GPs	76.5	115	71.9	224	73.5	339
practice nurses	53.8	80	40.5	185	44.5	265
home care nurses	10.4	67	42.4	172	33.5	239
midwives	7.5	67	2.2	138	3.9	205
pharmacists	59.3	86	58.2	177	58.6	263

The level of contact with other medical specialists was generally high. At least 8 out of 10 GPs asked “frequently” or “sometimes” for medical advice from the following specialists: cardiologists, endocrinologists, gastroenterologists, surgeons, neurologists, dermatovenerologists, otorinolaryngologists and ophthalmologists. Contact was less frequent with paediatricians, internists (GPCs) and gynaecologists and obstetricians (Table 24).

**Table 24. Consultation with, and asking advice from, medical specialists, by type of GP**

"Frequently" or "sometimes" asking advice from:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
paediatrician	63.0	117	10.7	233	24.9	350
internist	50.8	118	93.6	235	79.3	353
cardiologist	83.1	118	90.2	235	87.8	353
endocrinologist	83.9	118	86.0	235	85.3	353
gastroenterologist	88.1	118	94.9	235	92.6	353
gynaecologist and obstetrician	56.8	118	65.4	234	62.5	352
surgeon	88.1	118	89.8	235	89.2	353
neurologist	88.1	118	94.0	235	92.1	353
dermatovenerologist	92.4	118	90.6	235	91.2	353
otorinolaryngologist	93.2	118	93.6	235	93.5	353
ophthalmologist	87.3	118	93.2	235	91.2	353

Referral rates to these and other specialists in the four weeks prior to completing the questionnaire varied moderately, with GPCs referring most to otorinolaryngologists and GPAs to internal medicine specialists. The lowest rates among GPCs were to gynaecologists and obstetricians and for GPAs to paediatricians. There were 62.2 referrals in the four-week period prior to the survey, which was 8.28% of all patient contacts (9.8% for GPCs and 7.5% for GPAs). Self referrals and other "bypasses" of PC are not included in these figures (Table 25).

Patients from rural areas were referred to specialists slightly more frequently, except to otorinolaryngologists and ophthalmologists, but the differences were small (68 in 4 weeks in urban areas and 57 in rural). Nine per cent of reported patient contacts in urban areas (in the office and in patients' homes) ended in referral and 7.6% in rural. Self referrals and other "bypasses" of PC are not included in these figures (Table 26).

GP connections with communities were not very strong. Fewer than a quarter of respondents reported regular meetings with local authorities, and 5.5% did not know whether such meetings took place. GPCs had a slightly higher frequency of meetings with community or social workers (4.5% overall did not know). Community representatives on practice boards was a rarity, with fewer than 6% of GPs indicating that they had community representatives on their boards; 12.4% of GPCs and 6.5% of GPAs revealed that they did not know (Table 27).



**Table 25. Patients referred by GPs to medical specialists during the previous four weeks, by type of GP**

Patients referred to:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	Mean (range)	Valid N	Mean (range)	Valid N	Mean (range)	Valid N
secondary-level paediatrician	2.1 (0–40)	109	0.5 (0–54)	190	1.0 (0–54)	299
internal medicine specialist	1.5 (0–15)	104	10.9 (0–98)	214	7.8 (0–98)	318
cardiologist	3.0 (0–10)	112	5.3 (0–46)	217	4.5 (0–46)	329
endocrinologist	2.1 (0–10)	110	3.3 (0–98)	213	2.9 (0–98)	323
gastroenterologist	3.0 (0–10)	112	5.4 (0–79)	217	4.6 (0–79)	329
gynaecologist and obstetrician	1.2 (0–10)	109	2.0 (0–30)	208	1.7 (0–30)	317
surgeon	6.5 (0–54)	112	7.3 (0–58)	216	7.0 (0–58)	328
neurologist	3.7 (0–52)	113	7.8 (0–45)	216	6.4 (0–52)	329
dermatovenerologist	6.3 (0–25)	114	5.5 (0–86)	216	5.8 (0–86)	330
otorinolaryngologist	9.1 (0–43)	114	5.3 (0–31)	216	6.6 (0–43)	330
ophthalmologist	5.4 (0–48)	114	5.3 (0–29)	216	5.3 (0–48)	330
Total referrals per four weeks	63.3 (8–953)		61.6 (4–552)		62.2 (4–953)	
Reported referrals as % of all office contacts and home visits	9.82%		7.46%		8.28%	

Note: these calculated referral rates provide indications only.

**Table 26. Number of patients referred by GPs to medical specialists during the previous four weeks, by setting (indicative overall referral rates)**

Patients referred to:	Urban (N=163)		Rural (N=186)		Total (N=349)	
	Mean (range)	Valid N	Mean (range)	Valid N	Mean (range)	Valid N
secondary-level paediatrician	0.89 (0–40)	140	1.2 (0–54)	156	1.0 (0–54)	296
internal medicine specialist	7.5 (0–40)	146	8.2 (0–98)	169	7.9 (0–98)	315
cardiologist	4.4 (0–30)	151	4.6 (0–46)	174	4.5 (0–46)	325
endocrinologist	2.5 (0–14)	149	3.3 (0–98)	170	2.9 (0–98)	319
gastroenterologist	4.6 (0–45)	151	4.5 (0–79)	174	4.6 (0–79)	325
gynaecologist and obstetrician	1.6 (0–15)	147	1.6 (0–20)	166	1.6 (0–20)	313
surgeon	6.1 (0–35)	150	7.6 (0–58)	174	6.9 (0–58)	324
neurologist	6.2 (0–52)	152	6.5 (0–45)	173	6.4 (0–52)	325
dermatovenerologist	5.6 (0–25)	152	5.9 (0–86)	174	5.8 (0–86)	326
otorinolaryngologist	7.3 (0–43)	152	5.9 (0–31)	174	6.5 (0–43)	326
ophthalmologist	5.9 (0–48)	152	4.8 (0–29)	174	5.3 (0–48)	326
Total referrals per four weeks	68.1 (15–953)		56.8 (4–552)		62.1 (4–953)	
Reported referrals as % of all office contacts and home visits	9.06		7.64		8.32	

Note: the totals in tables 25 and 26 are not equal due to missing values.

**Table 27. Connections with the community, by type of GP**

Kind of connections:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
regular meetings with local authorities	15.4	117	16.8	226	16.3	343
regular meetings with community/ social worker	23.9	109	19.3	223	20.8	332
community representative on the practice board	4.8	105	6.5	216	5.9	321

## 4.5 Comprehensiveness of care

### Practice conditions

Health education materials, such as leaflets or posters, were displayed and available in the waiting rooms of most practices, with 60% of GPs having some kind of materials available. Most provided patient information materials on CVD, healthy diet, smoking cessation, obesity, diabetes, vaccinations and self treatment of colds/coughs. Materials on social services and self treatment of colds were less commonly available from GPCs, and fewer than a third of GPAs had materials on contraception, sexually transmitted infections (STI) and social services (Table 28).

**Table 28. Health education materials for patients in the waiting room, by type of GP**

Subject of health education materials	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
CVD	56.9	120	99.1	230	86.1	332
Healthy diet	88.7	115	96.0	227	93.6	342
Smoking cessation	51.0	96	87.9	223	76.8	319
Obesity	76.9	104	88.8	223	85.0	327
Diabetes	52.6	95	84.8	224	75.2	319
STI	37.0	92	29.4	180	32.0	272
Vaccinations	97.4	117	95.4	218	96.1	335
Contraception	21.3	89	11.4	176	14.7	265
Self treatment of colds/coughing	91.9	111	68.6	194	77.0	305
Social services	28.6	98	30.0	180	29.5	278
Average material available		53.9		63.7		60.5

### Medical equipment

GPs were asked to indicate which items of medical equipment from a list of 30 they had at their disposal. Differences in availability were small, with 11 items being available to

more than 90% and 16 more to at least three quarters of GPCs (17 to GPAs) (Table 29). The relatively small differences may reflect similarity in GPs' diagnostic procedures.

**Table 29. Number of items of practice equipment available to GPs, by type of GP**

Number of items of equipment	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	Number	%	Number	%	Number	%
15 or fewer	13	11.0	44	18.7	57	16.1
16–20	79	66.9	120	51.1	199	56.4
21–25	24	20.3	70	29.8	94	26.6
26–30	2	1.7	1	0.4	3	0.8
TOTAL	118	100	235	100	353	100
Average number of items per GP (from list of 30)	18.25		18.59		18.48	

Larger differences (more than 20%) in availability were found for some items: aspirator, tuning fork, reflex hammer, ear syringe, electrocardiogram (ECG) equipment, equipment for blood sugar tests and infant scales. Fewer than a third had equipment for suturing wounds and under 10% had a peak flow meter at their disposal.

GP practices must conform to minimum requirements on staff and equipment defined in a ministerial decree, but some were found to be lacking items. Forty-three per cent of GPCs and 13% of GPAs reported that they did not have reflex hammers, and 16% GPCs and 20% GPAs did likewise for otoscopes. Only 22% of GPCs and 20% of GPAs reported having access to ophthalmoscopes, and 20% GPCs and 46% GPAs did not have an aspirator (Fig. 8).

GPAs were somewhat better equipped than GPCs. The average number of items of equipment per GP from the 30-item list was between 18 and 19: 78% of GPCs had no more than 20 items at their disposal, compared to 70% of GPAs. The worst-equipped GPs (two GPAs) indicated either that they had none of the equipment or did not know whether it was available. There were few systematic differences between GPs, but those in rural settings were slightly better equipped than urban (averages of 19 and 17.8 respectively) (Table 30).

Most GPs had access to laboratory facilities, although usually outside their own practice or building. Only a small minority indicated that laboratory facilities were not, or were insufficiently, available, as was the case for X-ray diagnostic facilities (Table 31).

GPs in urban practices had their own facilities more frequently than those in rural areas, where laboratory and X-ray facilities were more often insufficiently available (Table 32).

**Table 30. Number of items of practice equipment available to GPs, by setting**

Number of items of equipment	Urban (N=163)		Rural (N=186)		Total (N=349)	
	Total	%	Total	%	Total	%
15 or fewer	37	22.7	19	10.2	56	16.0
16–20	90	55.2	108	58.1	198	56.7
21–25	35	21.5	57	30.6	92	26.4
26–30	1	0.6	2	1.1	3	0.9
TOTAL	163	100	186	100	349	100
Average number of items per GP (from list of 30)	17.83		19.03		18.47	

**Table 31. GPs' access to X-ray and laboratory facilities, by type of GP**

Type of facility and mode of access	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	%	Valid N	%	Valid N	%	Valid N
Availability of laboratory:						
• fully available in practice or building	33.1	118	20.5	234	24.7	352
• fully available outside practice or building	62.7	118	76.9	234	72.2	352
• not or insufficiently available	4.2	118	2.6	234	3.1	352
Availability of X-ray:						
• fully available in practice or building	36.4	118	23.1	234	27.6	352
• fully available outside practice or building	58.5	118	73.1	234	68.2	352
• not or insufficiently available	5.1	118	3.8	234	4.3	352

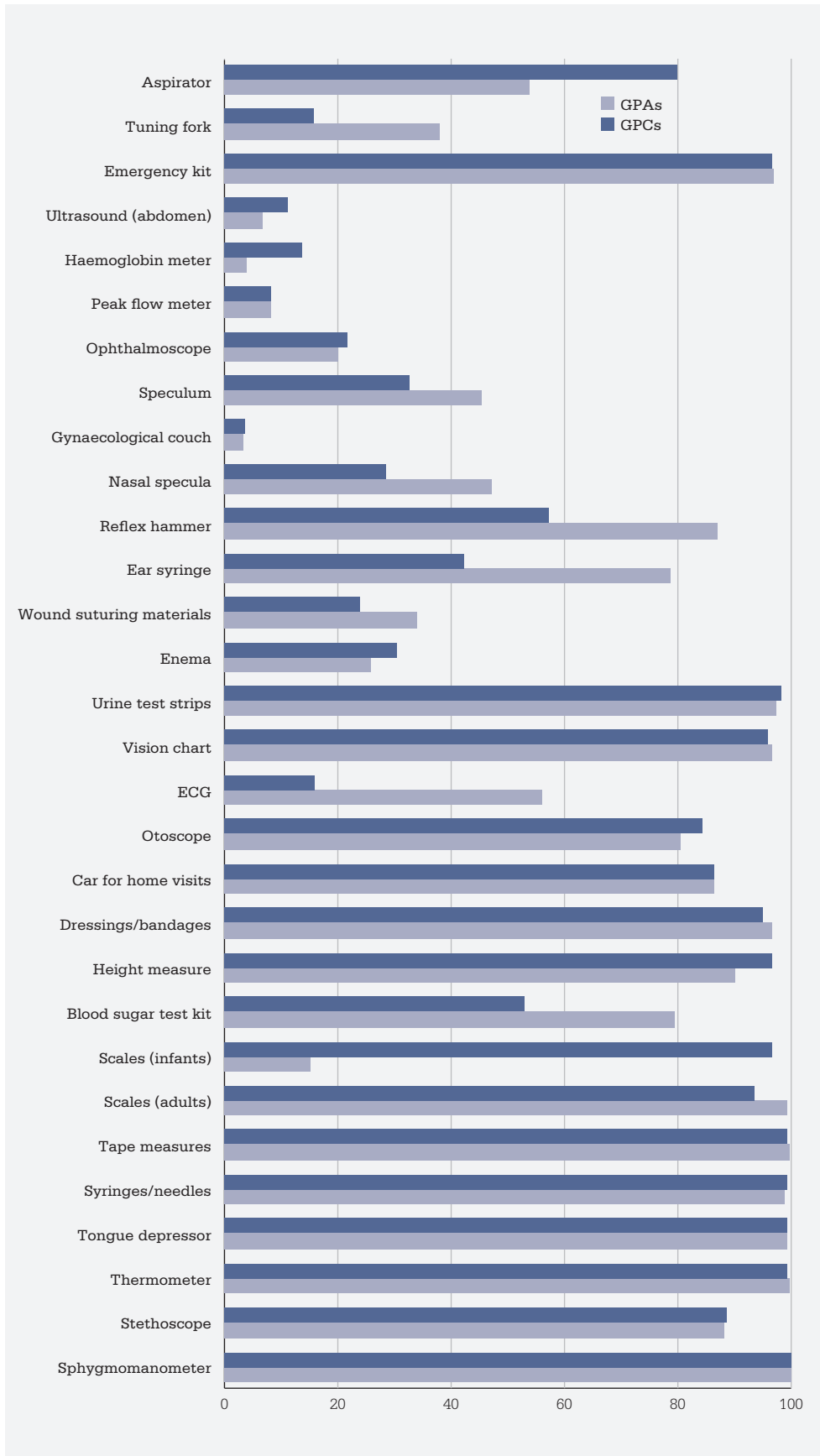
**Table 32. GPs' access to X-ray and laboratory facilities, by setting**

Type of facility and mode of access	Urban (N=163)		Rural (N=186)		Total (N=349)	
	%	Valid N	%	Valid N	%	Valid N
Availability of laboratory:						
• fully available in practice or building	30.2	162	19.9	186	24.7	348
• fully available outside practice or building	68.5	162	75.3	186	72.1	348
• not or insufficiently available	1.2	162	4.8	186	3.2	348
Availability of X-ray:						
• fully available in practice or building	35.2	162	21.0	186	27.6	348
• fully available outside practice or building	64.2	162	71.5	186	68.1	348
• not or insufficiently available	0.6	162	7.5	186	4.3	348

### Delivery of services – clinical task profiles

Three elements of GPs' clinical task profiles will be considered: GPs' role in first contact with patients; treatment and follow up of diseases; and provision of medical–technical procedures and preventive services. Each has been measured by means of lists of items which together indicate the degree of involvement of the GP (see methodology section

**Fig. 8. Availability of practice equipment (% of GPs)**

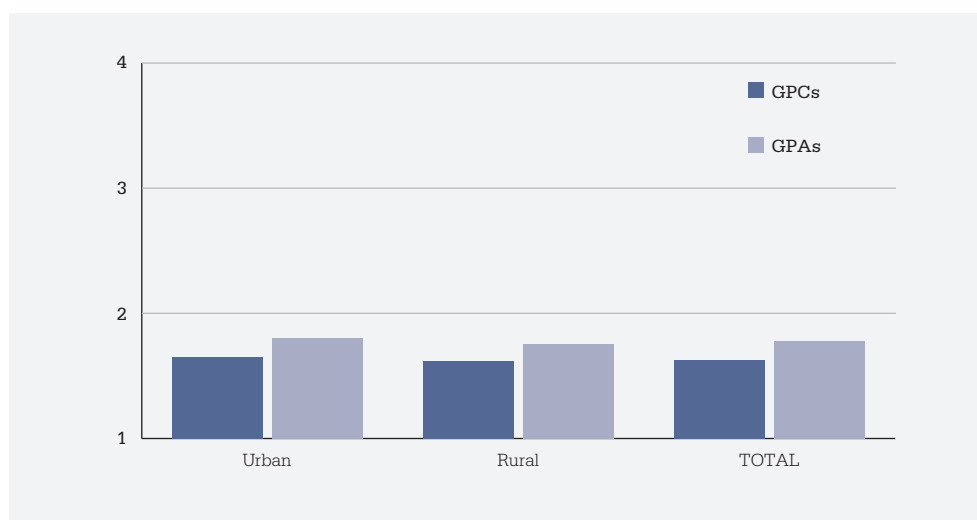


in Chapter 1). Aggregate scores are presented for each dimension, with detailed results given in Annex 1, tables A1–A6.

The first-contact role was measured against 18 items relating to a variety of men's, women's and children's problems. GPs could indicate whether their patients would present with these problems: "(almost) always"; "usually"; "occasionally"; "seldom/never"; or "do not know". Tables A1 and A2 (Annex 1) and Fig. 9 provide the results. Percentages refer to GPs who estimated that they would "always" or "usually" be the doctor of first contact; the percentage in brackets refers to those who ticked the answer "occasionally".

Fig. 9 and Table A1 show that there was only a small difference between GPCs and GPAs as doctor of first contact. GPCs were the obvious first contact for children with a rash or severe cough and slightly less so for enuresis or hearing problems, and GPAs seemed never to be the obvious first contact. The difference between GPs in urban or rural practices as doctor of first contact was very small (Fig. 9, Table A2).

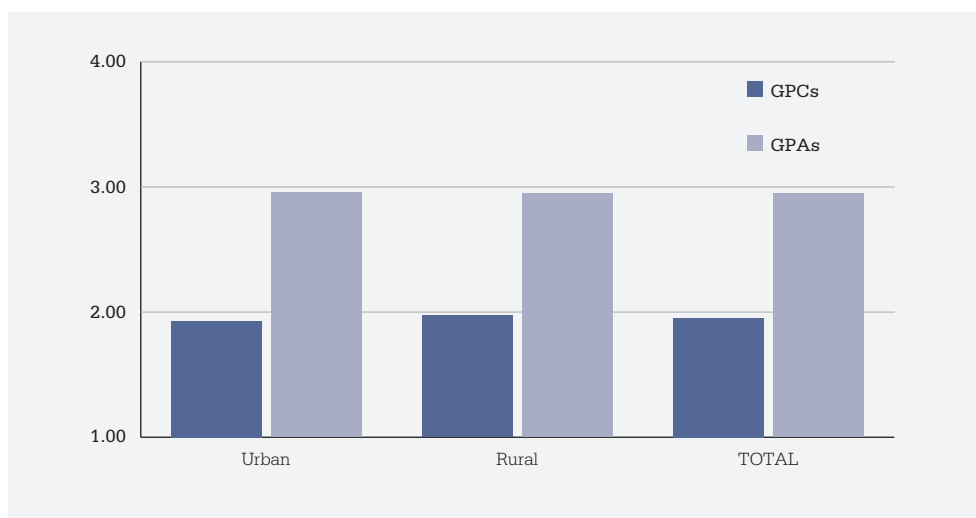
**Fig. 9. GPs' role as first contact for patients (score based on 18 items: maximum = 4)**



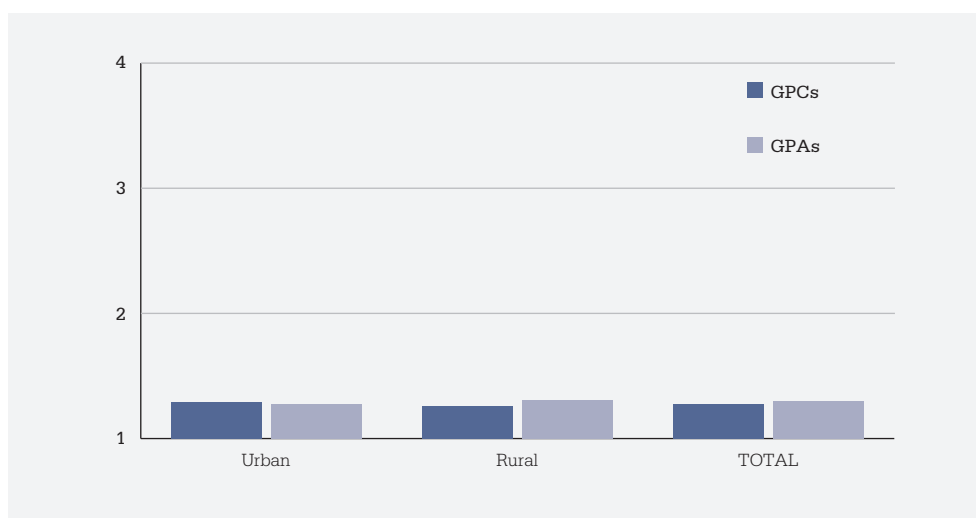
GPAs were more frequently involved in treating the 18 diseases summarized in Fig. 10 and specified in tables A3 and A4. No large differences were found between urban and rural GPs. GPAs were most involved with four conditions (those for which at least 80% answered that they were "always" or "usually" involved) and GPCs with one (Table A3). Fewer than half of GPs of both types claimed to be involved in treatment for three conditions: salpingitis, concussion and follow-up TB care. Again, there was no large difference between urban and rural areas (Fig. 10 and Table A4).

Fig. 11, with details in tables A5 and A6, shows that GPs of both types had very limited roles in performing medical–technical procedures and providing preventive services. Some tasks listed in tables A5 and A6 are apparently outside the PC domain and probably sit more appropriately with gynaecologists and obstetricians, ophthalmologists and otolaryngologists. The provision of medical–technical procedures is clearly related to

**Fig. 10. GPs' role in treatment and follow up of diseases (scores based on 18 items: maximum = 4)**



**Fig. 11. GPs' involvement in performing medical-technical procedures and providing preventive services (scores based on 16 items: maximum = 4)**



the availability of medical equipment, but cause and effect cannot be determined on the basis of the available information. Again, differences between urban and rural GPs were small.

Both groups of GPs claimed to be reasonably well involved in most activities for the patient groups/health risks cited in Table 33, with well over one third being engaged, but influenza vaccination and screening for HIV/AIDS are the only activities for which a majority of GPs reported involvement.

**Table 33. GPs' involvement in activities for specific groups/risks, by type of GP**

GP involved in:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	% Yes	Valid N	% Yes	Valid N	% Yes	Valid N
screening for STIs	17.8	118	29.8	235	25.8	353
screening for HIV/AIDS	35.6	118	58.7	235	51.0	353
TB screening	14.4	118	19.6	235	17.8	353
influenza vaccination for high-risk groups	88.1	118	94.5	235	92.4	353
rehabilitative care	19.5	118	34.0	235	29.2	353
providing services in a school setting (such as health education)	72.0	118	10.6	235	31.2	353
cervical cancer screening	2.5	118	3.0	235	2.8	353
breast cancer screening	5.1	118	23.4	235	17.3	353
TOTAL (range 0–100%)	31.9		34.2		33.4	

Twenty per cent of GPCs and approximately 64% of GPAs indicated that they were “(almost) always” or “usually” available to provide palliative care for patients with cancer (not included in Table 33).

Table 34 shows the extent to which GPs were involved in providing services to mothers and children. Mother and child care and reproductive health are not generally regarded as being appropriate for delivery by GPs, but GPCs clearly have a role in immunization and paediatric surveillance.

**Table 34. Services provided to all or most mothers and children, by type of GP**

GPs providing the following services to all or most:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	Number	%	Number	%	Number	%
family planning and contraception	16	14.3	7	3.2	23	6.9
routine antenatal care	31	27.4	10	4.6	41	12.3
normal immunizations for children up to 18 years	116	99.1	10	4.6	126	37.5
routine paediatric surveillance (up to 18 years)	114	97.4	10	4.6	124	37.0

There was very little difference in services provided by rural and urban GPs (Table 35).



**Table 35. Services provided to all or most mothers and children, by setting**

GPs providing the following services to all or most:	Urban (N=163)		Rural (N=186)		Total (N=349)	
	Number	%	Number	%	Number	%
family planning and contraception	10	6.5	13	7.5	23	7.0
routine antenatal care	17	11.0	23	13.2	40	12.2
normal immunizations for children up to 18 years	58	37.2	67	37.9	125	37.5
routine paediatric surveillance (up to 18 years)	59	37.8	64	36.4	123	37

## 5. PATIENTS' VIEWS OF PC

A number of patients in the practices of the GPs who participated in the physicians' survey were asked to complete a questionnaire focusing on their perspectives. The results described in this chapter are based on their responses to the questionnaire.

Fieldworkers visited 150 practices and, after interviewing the GP, systematically asked each attending patient to participate until the target of 15 completed questionnaires was achieved. The target was reached in 137 practices; 5 practices were 1 short, 5 were more than 1 short, and 3 achieved 16 responses. The approach is described in greater detail in Chapter 1.

Reference is made in this chapter to the health systems framework described in Chapter 1.

### 5.1 Respondents' characteristics

The total response was 2224: 863 GPC patients and 1361 GPA. Most (61.2%) were female. Accompanying adults were asked to complete questionnaires on behalf of child patients. Forty-nine per cent (N=1081) of respondents were in urban practices (Table 36).

**Table 36. Gender distribution of patients, by type of GP and setting\***

Characteristics		GPC (N=863)			GPA (N=1 361)			Total (N=2 224)		
		Urban	Rural*	Total	Urban	Rural*	Total	Urban	Rural*	Total
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Gender	Man/boy	178 (40.9)	142 (33.6)	320 (37.3)	249 (38.9)	271 (39.0)	526 (39.0)	427 (39.7)	413 (37.0)	840 (38.3)
	Woman/girl	257 (59.1)	281 (66.4)	538 (62.7)	391 (61.1)	423 (61.0)	823 (61.0)	648 (60.3)	704 (63.0)	1 353 (61.7)
Total		435 (100)	423 (100)	858 (100)	640 (100)	694 (100)	1 349 (100)	1 075 (100)	1 117 (100)	2 192 (100)

\*Rural includes small towns and rural areas.

Age distribution varied, as was expected, with 88% of GPC patients being under 30 years. The average age was 35.1 (17.5 for GPC and 46.3 for GPA). Forty-five per cent of GPC patients were in school and 44% of GPA patients were employed (only 7.7% across both groups were unemployed and 1.3% unable to work). On average across both types of GP patients, 14% were over 60 years and 15.5% were retired. More respondents from GPC practices claimed that their occupation was "looking after a family" and more from GPA lived with a spouse, but an equal proportion in both groups lived in a family with children (34–35%). Approximately one in five GPA patients lived alone, compared to 5% of GPC (Table 37).

**Table 37. Patients' age, occupation and living situation, by type of GP**

Patients' backgrounds	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
<b>Age:</b>						
• under 20 years	580	67.6	38	2.8	618	28.0
• 21–30	175	20.4	249	18.5	424	19.2
• 31–40	69	8.0	261	19.4	330	15.0
• 41–50	20	2.3	251	18.6	271	12.3
• 51–60	5	0.6	247	18.4	252	11.4
• over 60	9	1.0	300	22.3	309	14.0
Total	858	100	1 346	100	2 204	100
<b>Occupation:</b>						
• in school	386	44.8	75	5.5	461	20.8
• unemployed/looking for a job	40	4.6	130	9.6	170	7.7
• unable to work (disability)	6	0.7	23	1.7	29	1.3
• looking after family	80	9.3	51	3.8	131	5.9
• employee	243	28.2	594	43.7	837	37.7
• self-employed	57	6.6	133	9.8	190	8.6
• retired	9	1.0	334	24.6	343	15.5
• other	40	4.6	19	1.4	59	2.7
Total	861	100	1 359	100	2 220	100
<b>Living situation:</b>						
• alone	42	4.9	283	20.9	325	14.6
• with parents	405	47.0	164	12.1	569	25.6
• with husband/wife	58	6.7	354	26.1	412	18.6
• with family (including children)	303	35.2	463	34.1	766	34.5
• other	54	6.3	93	6.9	147	6.6
Total	862	100	1 357	100	2 219	100

## 5.2 Accessibility of care

### Financial access

Two of the PC services listed in Table 38 – a visit to the GP and a regular check up for a baby, young child or adolescent – appeared to be available free of charge to most patients. Fifty-seven per cent of GPC patients and 60% of GPA indicated that they had to pay for medicines or injections prescribed by their GP. Twenty-six per cent of GPA patients and 31% of GPC reported that they had to pay for a home visit from the GP; 21% of GPA patients and 18% of GPC also had to pay for a visit to a specialist following GP referral.

On average, fewer than 1 in 10 reported that private payments for medicines had made them decide in the past not to visit or to delay a visit to the GP (Table 39).

### Geographic access and responsiveness

Between 60% and 70% of all patients could reach their GP or preferred pharmacist within 20 minutes, and 49% could do likewise with their preferred dentist. Just over 41% could reach the nearest hospital within 20 minutes. GPA patients were more likely to have to travel more than 40 minutes to visit their GP, preferred dentist or nearest hospital (Table 40 and Fig. 12).

**Table 38. Services for which (co)payment from patients was required, by type of GP**

Type of service	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
Visit to your GP	38	4.4	104	7.6	142	6.4
Medicines or injections prescribed by your GP	490	56.8	820	60.2	1 310	58.9
A visit to a specialist after referral by your GP	156	18.1	280	20.6	436	19.6
Home visit by your GP	268	31.1	349	25.6	617	27.2
Regular check up of baby, young child or adolescent	51	5.9	89	6.5	140	6.3

**Table 39. Patients reporting obstacles to use of services related to copayment and availability of medicines, by type of GP**

Decision taken in past year	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
Not to visit or delay a visit because I could not pay for the medicines	65	7.6	120	9.1	185	8.5

**Fig. 12. Patients with travel time up to 20 minutes to health care facilities (%), by type of GP**

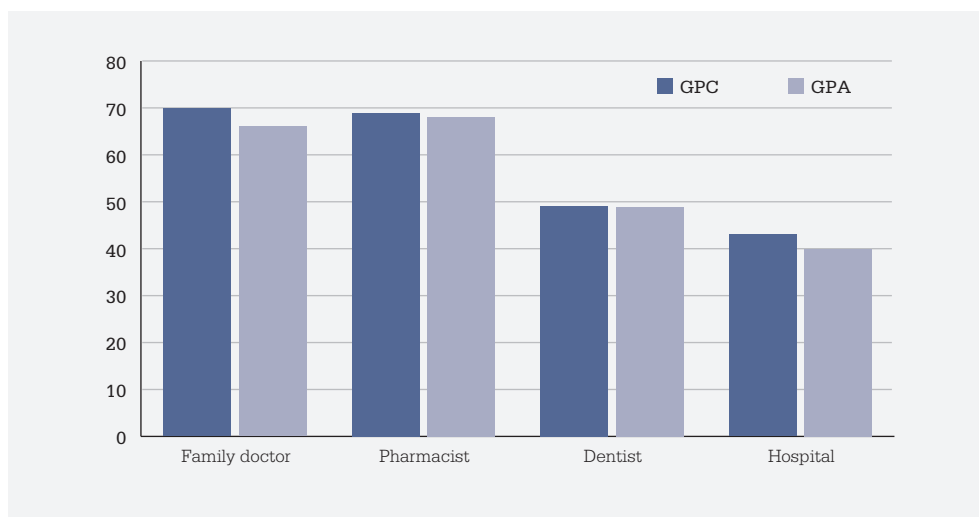


Table 41 provides the results of a list of 15 items which, taken together, reflect patients' experiences and opinions on service aspects of their GP practice, such as accessibility and convenience of the premises, treatment by practice staff, opening hours and availability of service providers. Possible answers were: "Yes, I agree", "I agree somewhat", "I do

**Table 40. Patients' travel time to PC providers**

Provider and distance	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
<b>Current GP:</b>						
• under 20 minutes	601	69.8	895	65.9	1 496	67.4
• 20–40 minutes	217	25.2	362	26.6	579	26.1
• 40–60 minutes	27	3.1	77	5.7	104	4.7
• more than 1 hour	8	0.9	21	1.5	29	1.3
• don't know	8	0.9	4	0.3	12	0.5
Total	861	100	1 359	100	2 220	100
<b>Preferred pharmacist:</b>						
• under 20 minutes	572	69.0	897	68.0	1 469	68.4
• 20–40 minutes	184	22.2	322	24.4	506	23.5
• 40–60 minutes	28	3.4	56	4.2	84	3.9
• more than 1 hour	13	1.6	22	1.7	35	1.6
• don't know	32	3.9	23	1.7	55	2.6
Total	829	100	1 320	100	2 149	100
<b>Preferred dentist:</b>						
• under 20 minutes	409	49.0	650	49.1	1 059	49.0
• 20–40 minutes	306	36.6	457	34.5	763	35.3
• 40–60 minutes	70	8.4	151	11.4	221	10.2
• more than 1 hour	23	2.8	50	3.8	73	3.4
• don't know	27	3.2	17	1.3	44	2.0
Total	835	100	1 325	100	2 160	100
<b>Nearest hospital:</b>						
• under 20 minutes	358	42.8	529	40.0	887	41.1
• 20–40 minutes	338	40.4	511	38.7	849	39.3
• 40–60 minutes	99	11.8	211	16.0	310	14.4
• more than 1 hour	29	3.5	61	4.6	90	4.2
• don't know	13	1.6	10	0.8	23	1.1
Total	837	100	1 322	100	2 159	100

not agree”, and “I don’t know”. Percentages in the table refer to those responding, “Yes, I agree”.

On average, two thirds indicated that they could easily reach the practice or centre by public transport (this is reflected in reported travel times, described in Table 40). Responses to questions about physical access to premises for people with disabilities or those using a wheelchair were less positive. Providing wheelchair access is a legal obligation, but only around half found their practice or centre was easily accessible.

GPA patients were more positive about waiting room quality, but almost half of all patients found waiting rooms “convenient”. More than two thirds in both groups did not know if their practice had a web site (not included in Table 41). Fewer than half were aware of a complaints mailbox in their practice or centre.

GPA patients reported positive impressions of opening hours and experiences of accessing doctors, either personally or by telephone, but the differences with GPC patients were small. Seventy-five per cent found a doctor was always available during opening hours and 66% were able to visit the same day if necessary, but only a minority in both groups had access to a telephone number they could use if they fell ill outside opening hours. Seeing a GP at weekends was very uncommon: only 4.4% of GPC patients and 5.1%

of GPA reported this as a possibility. Visiting a GP in the evening was almost as rare (reported by 5%). Despite these limitations, most patients were satisfied with current opening hours.

Sixty-six per cent of GPC patients and 62% of GPA agreed that staff at the reception desk were kind and helpful. Relatively small groups of respondents found making an appointment with their GP took too long, but more than 38% believed they had to spend too much time in the waiting room.

**Table 41. Perceptions and experiences of quality, by type of GP**

Patients AGREEING with the following statements	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
I can easily reach the practice by public transport	585	68.3	930	68.9	1 515	68.7
The practice/centre is accessible for disabled people and wheelchair users	449	52.2	696	51.9	1 145	52.0
The waiting room for patients is "convenient"	458	53.6	756	56.4	1 214	55.3
This practice/centre has a web site	128	14.9	164	12.2	292	13.3
There is a complaints mailbox in the practice or centre that I can use to submit a complaint if I am not satisfied	122	14.3	179	13.4	301	13.8
When the practice is open and I want to visit a GP urgently, it is possible to have the visit the same day	535	62.4	920	68.6	1 455	66.2
It is easy to get a doctor on the telephone for advice during opening hours	511	59.8	830	61.8	1 341	61.0
There is always at least one doctor available when I visit the practice	622	72.4	1 025	76.1	1 647	74.7
When the practice/centre is closed, there is a telephone number to call when I get sick	398	46.4	607	45.1	1 005	45.6
It is possible to visit a GP in the practice/centre on Saturdays or Sundays	38	4.4	68	5.1	106	4.8
It is possible to visit a GP in the practice/centre after 18.00 hours (at least once per week)	46	5.4	76	5.7	122	5.6
I am satisfied with the practice's current opening hours	489	57.1	809	60.2	1 298	59.0
Staff at the reception area are kind and helpful	565	66.3	818	61.6	1 383	63.4
Making an appointment with my GP takes too much time	95	11.1	190	14.2	285	13.0
I need to wait too long in the waiting room to see the GP	337	39.6	504	37.6	841	38.4

Table 42 shows the same results by setting. Differences are equally small, but more consistent. Respondents in urban areas agreed with the statements more frequently, with the exception of those on time spent in the waiting room and practice accessibility after 18.00 hours.

**Table 42. Perceptions and experiences of quality, by setting**

Patients AGREEING with the following statements	Urban (N=1 081)		Rural (N=1 128)		Total (N=2 209)	
	Number	%	Number	%	Number	%
I can easily reach the practice by public transport	779	72.5	724	64.7	1 503	68.5
The practice/centre is accessible for disabled people and wheelchair users	576	53.9	564	50.4	1 140	52.1
The waiting room for patients is "convenient"	614	57.5	592	53.1	1 206	55.2
This practice/centre has a web site	152	14.3	138	12.3	290	13.3
There is a complaints mailbox in the practice or centre that I can use to submit a complaint if I am not satisfied	147	13.9	152	13.7	299	13.8
When the practice is open and I want to visit a GP urgently, it is possible to have the visit the same day	723	67.7	723	64.7	1 446	66.2
It is easy to get a doctor on the telephone for advice during opening hours	673	63.2	658	58.8	1 331	60.9
There is always at least one doctor available when I visit the practice	847	79.1	793	70.7	1 640	74.8
When the practice/centre is closed, there is a telephone number to call when I get sick	516	48.2	480	42.9	996	45.5
It is possible to visit a GP in the practice/centre on Saturdays or Sundays	49	4.6	57	5.1	106	4.9
It is possible to visit a GP in the practice/centre after 18.00 hours (at least once per week)	58	5.5	64	5.7	122	5.6
I am satisfied with the practice's current opening hours	640	59.8	652	58.4	1 292	59.1
Staff at the reception area are kind and helpful	715	67.0	663	60.2	1 378	63.6
Making an appointment with my GP takes too much time	145	13.6	137	12.3	282	12.9
I need to wait too long in the waiting room to see the GP	401	37.7	431	38.7	832	38.2

## 5.3 Continuity of care

### Longitudinal and interpersonal continuity

Patients visited their GP more than five times a year, with visiting patterns for the two patient groups being largely identical. It was rare for a respondent to have not seen the doctor during the previous year. Fewer than 10% of GPC patients but more than 15% of GPA had visited their doctor 10 or more times in the previous year. Almost half of both groups had visited their doctor 1–3 times.

Patients visited a nurse on average twice in the past year, but most in both groups had not visited a nurse. Slightly more than a third had visited a nurse 1–3 times (Table 43).

**Table 43. Patients' frequency of visits to their GP and nurse during the previous 12 months**

Visiting frequency in past 12 months	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
<b>GP:</b>						
• no visits	37	4.3	74	5.5	111	5.0
• 1–3	421	48.8	631	46.7	1 052	47.5
• 4–6	256	29.7	333	24.6	589	26.6
• 7–9	72	8.3	86	6.4	158	7.1
• 10–12	52	6.0	138	10.2	190	8.6
• 13 or more	25	2.9	89	6.6	114	5.1
Total GP visits	863	100	1 351	100	2 214	100
Average annual visit frequency: GP	4.66		5.61		5.24	
<b>Nurse:</b>						
• no visits	446	52.0	594	44.1	1 040	47.2
• 1–3	322	37.5	493	36.6	815	37.0
• 4–6	55	6.4	130	9.7	185	8.4
• 7–9	13	1.5	33	2.4	46	2.1
• 10–12	12	1.4	58	4.3	70	3.2
• 13 or more	10	1.2	39	2.9	49	2.2
Total nurse visits	858	100	1 347	100	2 205	100
Average annual visit frequency: nurse	1.63		2.54		2.18	

The following section focuses on perceptions of GPs' functioning in personal relationships with patients. Important aspects in the evaluation are communication between the doctor and patient, patients' perceptions of the doctor's competence, and patients' trust and confidence in the doctor. The conditions for a relationship between doctor and patient, such as personal continuity and time available in consultations, are central components.

Conditions for a continuous doctor–patient relationship were good. Practice populations seemed to be relatively stable, with an average 70% of patients being with their doctor for more than three years. Only 7% had been with their doctor for less than a year. For a large majority, being registered with a GP meant seeing the same doctor every time: 80% found this was always the case. Consultation lengths were comparable for both groups, with an average of almost 16 minutes. Thirty-two per cent reported consultations



lasting between 6 and 15 minutes, and the same proportion stated that more than 15 minutes was normal. About half indicated they could visit their GP the same day after making an appointment, and waiting times of more than a day were unusual. Around 30% indicated it would be unlikely that their GP would make a home visit, but GPCs seemed more likely to do this. Opening hours of GP practices were clearly indicated for a large majority of patients (Table 44).

**Table 44. Patients' experiences with their GP**

Contact experiences	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
Length of time as a patient of this GP:						
• less than 1 year	65	7.6	85	6.3	150	6.8
• 1–3 years	159	18.5	185	13.6	344	15.5
• more than 3 years	574	66.8	998	73.6	1 572	71.0
• I don't know	61	7.1	88	6.5	149	6.7
If I visit a GP in this practice, I see the same doctor each visit	696	80.8	1 091	80.7	1 787	80.8
Estimated duration of a consultation:						
• less than 5 minutes	37	4.3	62	4.6	99	4.5
• 6–10 minutes	268	31.3	434	32.2	702	31.9
• 11–15 minutes	290	33.9	434	32.2	724	32.8
• more than 15 minutes	261	30.5	418	31.0	679	30.8
Average length of a consultation (in minutes)	15.5		15.6		15.6	
Estimated time between making an appointment and visiting the GP:						
• the visit is the same day	441	51.6	624	46.2	1 065	48.3
• I have to wait 1 day	77	9.0	136	10.1	213	9.7
• I have to wait 2–3 days	31	3.6	44	3.3	75	3.4
• I have to wait more than 3 days	19	2.2	18	1.3	37	1.7
• I never make appointments	202	23.6	420	31.1	622	28.2
• I don't know	85	9.9	108	8.0	193	8.8
Estimated time it will take for this GP to make a home visit:						
• likely the same day	372	44.9	466	37.0	838	40.2
• likely the next day	164	19.8	314	25.0	478	22.9
• after 2 or more days	26	3.1	94	7.5	120	5.8
• unlikely that this GP will make a home visit	266	32.1	384	30.5	650	31.2
Opening hours of the GP practice:						
• always clearly indicated	775	91.3	1 150	88.7	1 925	89.7
• sometimes difficult to know	61	7.2	120	9.3	181	8.4
• often difficult to know when the practice is open	13	1.5	26	2.0	39	1.8

Differences between urban and rural areas for these items were small, with a slightly longer estimated duration of consultations in rural areas and waiting times of more than one day occurring more frequently in urban settings (Table 45).

**Table 45. Patients' experiences with their GP, by setting**

Contact experiences	Urban (N=1 081)		Rural (N=1 128)		Total (N=2 209)	
	Number	%	Number	%	Number	%
Length of time as a patient of this GP:						
• less than 1 year	66	6.1	82	7.3	148	6.7
• 1–3 years	167	15.5	176	15.7	343	15.6
• more than 3 years	774	71.8	787	70.1	1 561	71.0
• I don't know	71	6.6	77	6.9	148	6.7
If I visit a GP in this practice, I see the same doctor each visit	828	77.0	946	84.2	1 774	80.7
Estimated duration of a consultation:						
• less than 5 minutes	38	3.5	60	5.4	98	4.5
• 6–10 minutes	336	31.4	362	32.3	698	31.9
• 11–15 minutes	353	33.0	369	32.9	722	33.0
• more than 15 minutes	344	32.1	329	29.4	673	30.7
Average length of a consultation (in minutes)	15.9		15.3		15.6	
Estimated time between making an appointment and visiting the GP:						
• the visit is the same day	516	48.1	537	48.0	1 053	48.0
• I have to wait 1 day	90	8.4	123	11.0	213	9.7
• I have to wait 2–3 days	33	3.1	42	3.8	75	3.4
• I have to wait more than 3 days	14	1.3	23	2.1	37	1.7
• I never make appointments	317	29.5	304	27.2	621	28.3
• I don't know	103	9.6	90	8.0	193	8.8
Estimated time it will take for this GP to make a home visit:						
• likely the same day	412	41.2	418	39.0	830	40.0
• likely the next day	208	20.8	269	25.1	477	23.0
• after 2 or more days	53	5.3	67	6.3	120	5.8
• unlikely that this GP will make a home visit	328	32.8	318	29.7	646	31.2
Opening hours of the GP practice:						
• always clearly indicated	942	90.6	970	88.8	1 912	89.7
• sometimes difficult to know	79	7.6	102	9.3	181	8.5
• often difficult to know when the practice is open	19	1.8	20	1.8	39	1.8

Tables 46 and 47 summarize patients' evaluations of their doctor. Almost half (46% of GPC patients and 44% GPA) were positive about their GP's knowledge of their personal situation. Seventy-six per cent from both groups assumed their doctor would know about their past problems and illnesses from their medical records. Communication skills, such as listening and providing explanations, were widely acknowledged.

Fewer than 40% believed their GP could help with personal problems and worries, but more than 75% agreed that their doctor would visit them at home if asked. The statement on "feeling able to cope better with health problems or illness after a visit to the GP" represents an overall judgement about the doctor's perceived quality. A small majority, 59% of GPC patients and 57% of GPA, agreed, although patients in rural areas were somewhat less positive than those in urban. Patients from urban settings had greater expectations of their doctor's knowledge of their personal situation and communication skills.

On average, 80% indicated they would go to their GP with a new health problem before seeking help from a medical specialist, but only half had no complaints about the equipment in their doctor's practice. There was a small difference in this respect between urban and rural practices, with urban being seen as better equipped. Patients' estimations of available equipment should be considered alongside physicians' perceptions. It is likely that the patients' view was based on more than just availability and took into account the state and quality of the equipment, while the physicians scored only on availability. It may be concluded that doctors and patients do not strongly disagree about available equipment.

**Table 46. Patients' statements about their GP**

Contact statements	GPs (N=863)		GPAs (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
This GP knows my personal situation (such as my work or home situation)	390	45.5	589	43.7	979	44.4
This GP knows the problems and illnesses I have had in the past (from my medical records)	652	75.9	1 030	76.4	1 682	76.2
This GP takes sufficient time to talk to me	647	75.5	960	71.4	1 607	73.0
This GP listens well to me	613	72.0	989	74.1	1 602	73.3
This GP deals not only with my medical problems, but can also help with personal problems and worries	336	39.3	528	39.3	864	39.3
This GP gives clear explanations about illnesses and prescribed medicines	623	72.8	997	74.1	1 620	73.6
This GP would visit me (or my child) at home if I asked for it	337	39.4	608	45.4	945	43.1
After a visit to this GP, I feel able to cope better with the health problem/illness	502	58.8	761	56.6	1 263	57.4
When I have (or my child has) a new health problem, I go to this GP before going to a medical specialist	660	77.1	1 069	79.5	1 729	78.6
This practice has sufficient medical equipment	410	48.1	651	48.7	1 061	48.4

Many patients reported that their doctor was involved in promoting healthy behaviour by talking with them about healthy eating (71%), taking physical exercise (60%) and alcohol (37%) and tobacco use (41%). GPAs offered advice on alcohol and tobacco use more frequently than GPs (Table 48).

**Table 47. Patients' statements about their GP, by setting**

Contact statements	Urban (N=1 081)		Rural (N=1 128)		Total (N=2 209)	
	Number	%	Number	%	Number	%
This GP knows my personal situation (such as my work or home situation)	514	48.0	459	40.9	973	44.4
This GP knows the problems and illnesses I have had in the past (from my medical records)	818	76.3	853	76.0	1 671	76.1
This GP takes sufficient time to talk to me	800	74.8	797	71.2	1 597	73.0
This GP listens well to me	810	76.3	783	70.5	1 593	73.3
This GP deals not only with my medical problems, but can also help with personal problems and worries	433	40.6	425	38.0	858	39.3
This GP gives clear explanations about illnesses and prescribed medicines	803	75.1	807	72.1	1 610	73.6
This GP would visit me (or my child) at home if I asked for it	456	42.9	484	43.3	940	43.1
After a visit to this GP, I feel able to cope better with the health problem/illness	619	58.1	635	56.7	1 254	57.4
When I have (or my child has) a new health problem, I go to this GP before going to a medical specialist	813	76.1	905	80.9	1 718	78.5
This practice has sufficient medical equipment	556	52.3	501	45.0	1 057	48.6

**Table 48. Patients' assessment of GPs' involvement in promoting healthy behaviour**

Topic	GPCs (N=863)		GPAs (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
Healthy eating	601	70.0	964	71.5	565	70.9
Taking physical exercise	504	59.6	793	60.3	1 297	60.0
Use of alcohol	234	28.2	551	42.4	785	36.9
Reduce or stop smoking	273	32.8	601	46.3	874	41.0

#### 5.4 Perceived coordination of care and choice of provider

Most patients had chosen their GP or had someone in the family choose for them (67%), but assignment to a GP was not uncommon. Only 2% reported they could not change GP, while 57% said they could change “at any time” and 15% “only at certain times” (once

a year or once every six months); 26% did not know. GPC patients were more likely to be able to change at any time (61% against 55% for GPA), less likely to be able only to change at certain times (11% against 17%) and less likely not to be able to change at all (2% against 3%) (Table 49).

**Table 49. Patients' freedom to choose and change their GP**

Option	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
Patients assigned to this GP	181	21.1	442	32.7	623	28.2
Patients cannot change to another GP	15	1.8	37	2.7	52	2.4

Patients generally did not have very positive views about the exchange of information between their GP and other treating physicians. Only 44% answered that the physician would have all the necessary information, and under half (48%) were confident that the referring GP would have informed the specialist. They were more positive about information transfer after being treated by a medical specialist, with 67% answering that their GP would be informed of results of the specialist consultation. Over three quarters of patients had to see their GP first to access a specialist.

A large majority agreed that the GP and nurse worked well together. Almost half found that the nurse sometimes offered independent consultations, making a visit to the GP unnecessary. GPA patients were generally more positive about information transfer and cooperation than GPC (Table 50).

**Table 50. Patients' experiences of information sharing and cooperation**

Statements	GPC (N=863)		GPA (N=1 361)		Total (N=2 224)	
	Number	%	Number	%	Number	%
If I visit another doctor, he/she has all the necessary information about me	346	42.7	614	45.4	978	44.4
When I am referred, my GP informs the medical specialist about the illness	399	46.6	666	49.3	1 065	48.3
The GP is informed of the results of the specialist consultation	529	61.9	960	70.8	1 489	67.4
I need to visit my GP first to be referred to a specialist	644	75.4	1 106	81.9	1 750	79.4
My GP and practice nurse work well together	661	77.2	1 074	79.3	1 753	78.5
Sometimes a nurse performs the consultation, making it unnecessary to see the GP	367	42.8	701	51.7	1 068	48.3

Results by practice setting are presented in Table 51. Differences were small. Patients in urban areas were more positive about the first two statements, but the largest difference related to the last statement: while 52% of urban patients answered that sometimes the nurse made independent consultations, only 45% of rural patients did so.

**Table 51. Patients' experiences of information sharing and cooperation, by setting**

Statements	Urban (N=1 081)		Rural (N=1 128)		Total (N=2 209)	
	Number	%	Number	%	Number	%
If I visit another doctor, he/she has all the necessary information about me	505	47.1	463	41.5	968	44.2
When I am referred, my GP informs the medical specialist about the illness	533	49.6	523	46.8	1 056	48.2
The GP is informed of the results of the specialist consultation	705	65.6	773	69.1	1 478	67.4
I need to visit my GP first to be referred to a specialist	857	79.8	881	78.9	1 738	79.3
My GP and practice nurse work well together	862	80.2	861	76.8	1 723	78.5
Sometimes a nurse performs the consultation, making it unnecessary to see the GP	558	51.9	503	44.9	1 061	48.3

## 6. STRUCTURED SUMMARY

Table 52 provides an overview of results by health system functions, selected dimensions and proxy indicators, as outlined in the Primary Care Evaluation Scheme (see Chapter 1).

**Table 52. Summary of findings from the PCET in Slovakia**

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
<b>Stewardship</b>				
Policy development	PC as priority area	<p>Specific legislation developed concerning PC: <b>yes</b>.</p> <p>One department at the MoH specifically dealing with PC: <b>no</b>.</p>	<p>The 2006 <i>Concept of state health policy (35)</i> and the government keynote speech in the same year are the most significant factors. All critical issues in PC were addressed in these.</p> <p>Minimum requirements on human/material resources for health care facilities (including PC) were set in 2008.</p> <p>The 2010 government manifesto included a vision for health (care) for 2010–2014.</p> <p>Implementation of ideas and plans has been limited.</p> <p>Four departments at the MoH are involved. General medicine for children and adults have separate chief specialists.</p>	National-level questionnaire
	Regional variation	PC services are guaranteed through the “minimum network of PC providers”. Officially, no large differences in the availability of PC exist between regions.	Evidence suggests considerable variation in PC supply between districts within self-governing regions.	National-level questionnaire
Conditions for the care process	Recent PC policy development	<p>The following items are PC issues or priorities:</p> <ul style="list-style-type: none"> <li>the future of PC; definition of task domain; ageing of GPs and low inflow; unattractiveness of the profession;</li> <li>involvement of GPs in out-of-hours medical service (LSPP); conditions and payment;</li> <li>prevention related to national programmes; involvement of public health offices in the self-governing regions; and</li> <li>qualifications and education and training of health professionals</li> </ul>	A new government took office in April 2012.	National-level questionnaire

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
Conditions for responsiveness	Involvement of professionals and patients in policy process	<p>Medical Chamber keeps a register of physicians, governs licensing, organizes continuing education, deals with complaints and maintains regular links with the MoH.</p> <p>The HCSA supervises health insurers and quality management and deals with complaints; its board is elected by parliament and government has a veto on the chair.</p> <p>Self-governing regions are responsible for PC in their territories and for planning, licensing and inspection.</p> <p>Several GP organizations hold annual discussions with health insurers about the framework contract; it is not clear to what extent they are involved in the policy process.</p> <p>It is not clear to what extent professional organizations for other PC workers (such as nurses and midwives) are involved in the policy process.</p> <p>Patient organization is weak.</p>		National-level questionnaire
		<p>The following patient rights are protected through the Slovak Constitution, the Act on Health Care and Health Care Related Services, and the Act on Health Care Providers, Health Care Professionals and Professional Organizations:</p> <ul style="list-style-type: none"> <li>• right to health care;</li> <li>• right to choose a provider;</li> <li>• right to protection of human rights and freedoms; and</li> <li>• children's rights.</li> </ul> <p>There is no obligation for GP practices to have a complaints procedure in place.</p>	There is no strong organization to take up the advocacy role for patient rights. The Association for Protection of Patients' Rights is a civil association aiming to protect rights of patients.	National-level questionnaire
<b>Financing</b>				
Incentives for providers		Seventy-seven per cent of GPCs and 72% of GPAs are self-employed.	GPs are paid a mix of capitation fees and fees for certain services. Payment is not related to performance indicators.	National-level questionnaire



Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
Financial access for patients		<p>Copayments apply to prescribed drugs:</p> <ul style="list-style-type: none"> <li>• 59% of patients reported copayments for drugs prescribed in PC;</li> <li>• 20% reported payments for a visit to a medical specialist; and</li> <li>• 8.5% reported having missed a medical appointment for financial reasons.</li> </ul>	The MoH benefit package of health services is comprehensive.	<p>National-level questionnaire</p> <p>Patient survey</p>
<b>Creating resources</b>				
Professional development	Workforce	<p>Nineteen per cent of all active physicians in Slovakia work in PC.</p> <p>The average list size for GPCs is 1 154 patients.</p> <p>The average list size for GPAs is 1 750 patients.</p>	<p>On average, there is 1 GPC per 1 008 population of 18 years or younger.</p> <p>On average, there is 1 GPA per 2 141 population of 19 years or older.</p> <p>No norms on population per GPC/GPA exist, and there is no maximum of patients per GPC/GPA.</p>	<p>National-level questionnaire</p> <p>GP survey</p>
	Shortages	<p>GPs reporting shortages of GPs:</p> <ul style="list-style-type: none"> <li>• 24% GPCs</li> <li>• 27% GPAs.</li> </ul> <p>GPs reporting shortage of PC nurses:</p> <ul style="list-style-type: none"> <li>• 29% GPCs</li> <li>• 27% GPAs.</li> </ul>	No nationwide shortage of GPs is reported, but a quarter of GPs perceived a shortage in their area. This indicates uneven distribution at district level.	<p>National-level questionnaire</p> <p>GP survey</p>
	Quality improvement	<p>Internal control within practices and practice inspection by supervisors or health authorities are generally used as routine quality maintenance mechanisms. Other indicators include:</p> <ul style="list-style-type: none"> <li>• index of prevention;</li> <li>• patient contacts in emergency departments;</li> <li>• attendance at health care facilities;</li> <li>• acute care management;</li> <li>• chronic care management; and</li> <li>• prescription of drugs.</li> </ul> <p>Clinical guidelines have been developed and implemented by the MoH.</p> <p>The number of hours per month that GPs spend on professional reading is 20 for GPCs and 17 for GPAs: for attending training/courses, the respective hours are 10 and 13.</p>	<p>Obligatory periodic tests of physicians' and nurses' professional knowledge and skills and external clinical auditing (using medical records) are used rarely or never.</p> <p>Chief specialists of the MoH and professional organizations are involved in the preparation and updating of the guidelines, which are published in the <i>Journal of the Slovak Ministry of Health</i>.</p>	<p>National-level questionnaire</p> <p>GP survey</p>

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
	Human resources planning	About 10% of medical graduates choose to enrol in a general medicine specialty.	<p>No norms on available health human resources exist, and there is no human resources planning in the health sector.</p> <p>Fifteen per cent of graduates take positions outside PC.</p> <p>The number of medical graduates in general medicine is decreasing.</p>	National-level questionnaire
	Professional organization/education	<p>General medicine (GPA) has been recognized as a medical speciality, but not as scientific specialization.</p> <p>The postgraduate programme in general medicine to become a GPA is 39 months and is offered at 3 universities (out of 4). The programme in paediatrics to become a GPC is 60 months and is offered at 4 universities.</p> <p>There are no professors in general practice/general medicine.</p>	The entirety of each postgraduate programme is spent in a PC practice.	National-level questionnaire
Medical equipment		<p>Computers are available in 99% of GP practices.</p> <p>Medical equipment available (from a list of 30 items):</p> <ul style="list-style-type: none"> <li>• GPC: 18 items</li> <li>• GPA: 19.</li> </ul> <p>Laboratory facilities available:</p> <ul style="list-style-type: none"> <li>• within practice: <ul style="list-style-type: none"> <li>GPC: 33%</li> <li>GPA: 21%;</li> </ul> </li> <li>• outside practice: <ul style="list-style-type: none"> <li>GPC: 63%</li> <li>GPA: 77%;</li> </ul> </li> <li>• none/insufficient <ul style="list-style-type: none"> <li>GPC: 4%</li> <li>GPA: 3%.</li> </ul> </li> </ul> <p>X-ray facilities available:</p> <ul style="list-style-type: none"> <li>• within practice: <ul style="list-style-type: none"> <li>GPC: 36%</li> <li>GPA: 23%;</li> </ul> </li> <li>• outside practice: <ul style="list-style-type: none"> <li>GPC: 57%</li> <li>GPA: 73%;</li> </ul> </li> <li>• none/insufficient <ul style="list-style-type: none"> <li>GPC: 5%</li> <li>GPA: 4%.</li> </ul> </li> </ul>	<p>Computer use is obligatory, but only 72% of GPs use a computer for maintaining medical records and 71% for searching medical information.</p> <p>A minority use applications such as appointments booking and financial administration.</p> <p>Not all obligatory items of equipment are available (absent items include reflex hammers and otoscopes). Ophthalmoscopes are rare and there is no aspirator in most GP practices.</p> <p>Only a few GPs have insufficient access to laboratory and X-ray facilities.</p>	<p>GP survey</p> <p>Patient survey</p>
		<p>Patients finding equipment sufficient:</p> <ul style="list-style-type: none"> <li>• GPC: 48%</li> <li>• GPA: 49%</li> </ul>	Patients are not satisfied with the GPs' medical equipment	Patient survey

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
<b>Service delivery</b>				
<b>Accessibility</b>				
Geographic access		Patients travelling up to 20 minutes to GP practice: <ul style="list-style-type: none"> <li>• GPC: 70%</li> <li>• GPA: 66%.</li> </ul>	Two thirds of patients live at a short distance from the GP practice and pharmacist. Hospitals and dentists are further away, but fewer than 20% have to travel more than 40 minutes.	Patient survey
Organizational access	Practice population	Reported number of patients per GP: <ul style="list-style-type: none"> <li>• GPC: 1 154</li> <li>• GPA: 1 750.</li> </ul>	The differences between urban and rural practices are small.	GP survey
	Workload	<b>Patient consultations</b> Face-to-face meetings in the office per day: <ul style="list-style-type: none"> <li>• GPC: 39</li> <li>• GPA: 47.</li> </ul> For repeat prescriptions per day: <ul style="list-style-type: none"> <li>• GPC: 6</li> <li>• GPA: 15.</li> </ul> By telephone per day: <ul style="list-style-type: none"> <li>• GPC: 8</li> <li>• GPA: 7</li> </ul> By e-mail per day: <ul style="list-style-type: none"> <li>• GPC: 5</li> <li>• GPA: 5.</li> </ul> Home visits per week: <ul style="list-style-type: none"> <li>• GPC: 4</li> <li>• GPA: 5.</li> </ul> Working hours per week: <ul style="list-style-type: none"> <li>• GPC: 38</li> <li>• GPA: 41.</li> </ul>	Urban GPs have more e-mail consultations and fewer home visits.  The number of working hours is almost equal for urban and rural GPs.	GP survey

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source			
	Patients' access and availability of services	Reported visiting frequency of patients to their GP: <ul style="list-style-type: none"> <li>• GPC: 4.7 visits</li> <li>• GPA: 5.6</li> </ul>	Patients are usually able to see their GP on the same day.	Patient survey			
		Reported average length of a patient consultation: <ul style="list-style-type: none"> <li>• GPC: 15.5 minutes</li> <li>• GPA: 15.6.</li> </ul>					
		Physicians offering same-day consultation: <ul style="list-style-type: none"> <li>• GPC: 99%</li> <li>• GPA: 99%.</li> </ul>					
		Patients reporting same-day consultations if requested: <ul style="list-style-type: none"> <li>• GPC: 68%</li> <li>• GPA: 65%.</li> </ul>					
		Physicians offering evening opening at least once per week: <ul style="list-style-type: none"> <li>• GPC: 10%</li> <li>• GPA: 4%.</li> </ul>					
		Patients reporting evening opening at least once per week: <ul style="list-style-type: none"> <li>• GPC: 6%</li> <li>• GPA: 6%.</li> </ul>			GP practices are rarely open at evenings or weekends, but two thirds of GPs (GPCs more often than GPAs) provide their personal telephone number to patients to make contact outside office hours.	GP survey	
		Physicians offering e-mail consultations: <ul style="list-style-type: none"> <li>• GPC: 35%</li> <li>• GPA: 23%.</li> </ul>					
		Physicians providing personal telephone number for out-of-hours contact: <ul style="list-style-type: none"> <li>• GPC: 80%</li> <li>• GPA: 54%.</li> </ul>					Sixty per cent of GPC patients and 58% of GPA are satisfied with current opening hours.
		Patients accessing a home visit with no more than 1 day waiting: <ul style="list-style-type: none"> <li>• GPC: 61%</li> <li>• GPA: 56%.</li> </ul>					
		Patients perceiving the practice as accessible for disabled people and wheelchair users: <ul style="list-style-type: none"> <li>• GPC: 54%</li> <li>• GPA: 50%.</li> </ul>					
	Patients finding the practice waiting room "convenient": <ul style="list-style-type: none"> <li>• GPC: 58%</li> <li>• GPA: 53%.</li> </ul>						

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
<b>Coordination</b>				
Cohesion	Practice management	GPs' type of practice: <ul style="list-style-type: none"> <li>• solo practice: <ul style="list-style-type: none"> <li>GPC: 13%</li> <li>GPA: 23%;</li> </ul> </li> <li>• with 2 or more PC physicians in the same building: <ul style="list-style-type: none"> <li>GPC: 17%</li> <li>GPA: 13%;</li> </ul> </li> <li>• with medical specialists in the same building: <ul style="list-style-type: none"> <li>GPC: 45%</li> <li>GPA: 35%.</li> </ul> </li> </ul>	The dominant type of GP practice is with medical specialists in the same building (which does not imply cooperation).	GP survey
		GPs working with a practice nurse: <ul style="list-style-type: none"> <li>• GPC: 72%</li> <li>• GPA: 69%.</li> </ul> <p>GPs using joint services in shared accommodation:</p> <ul style="list-style-type: none"> <li>• GPC: 53%</li> <li>• GPA: 46%.</li> </ul>	The obligation to work with a practice nurse is not observed by all GPs. This may be due to practice nurse shortages.	
	Collaboration	GPs reporting regular face-to-face meetings with: <ul style="list-style-type: none"> <li>• other GPs: <ul style="list-style-type: none"> <li>GPC: 77%</li> <li>GPA: 72%;</li> </ul> </li> <li>• practice nurse: <ul style="list-style-type: none"> <li>GPC: 54%</li> <li>GPA: 41%;</li> </ul> </li> <li>• home care nurse (ADOS): <ul style="list-style-type: none"> <li>GPC: 10%</li> <li>GPA: 42%;</li> </ul> </li> <li>• midwife: <ul style="list-style-type: none"> <li>GPC: 8%</li> <li>GPA: 2%;</li> </ul> </li> <li>• pharmacist: <ul style="list-style-type: none"> <li>GPC: 59%</li> <li>GPA: 58%.</li> </ul> </li> </ul>		GP survey
Coordination with other care levels	Referral system	A large majority of patients (77% of GPC and 80% of GPA) visit their GP with a new health problem before seeking specialist care.	Most patients visit their GP before seeking specialist care, but this is no longer obligatory – the referral system was abolished in 2010.	Patient survey
		Reported referral rate (% of all office and home care contacts): <ul style="list-style-type: none"> <li>• GPC: 9.8%</li> <li>• GPA: 7.5%</li> <li>• rural GPs: 9.0%</li> <li>• urban GPs: 7.6%.</li> </ul>	Most referrals among GPCs are to otorinolaryngologists, surgeons, dermatovenerologists and ophthalmologists. GPAs mostly refer to internists, neurologists and surgeons.	
			Referral rates are higher in urban areas.	GP survey

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
	Collaboration with secondary level	<p>Asking advice from secondary care specialists:</p> <ul style="list-style-type: none"> <li>• paediatricians: GPC: 63% GPA: 11%;</li> <li>• internists: GPC: 51% GPA: 94%;</li> <li>• cardiologists: GPC: 83% GPA: 91%;</li> <li>• endocrinologists: GPC: 84% GPA: 86%;</li> <li>• gastroenterologists: GPC: 88% GPA: 95%;</li> <li>• gynaecologists and obstetricians: GPC: 57% GPA: 65%;</li> <li>• surgeons: GPC: 88% GPA: 92%;</li> <li>• neurologists: GPC: 88% GPA: 94%;</li> <li>• dermatovenerologists: GPC: 92% GPA: 91%;</li> <li>• otorinolaryngologists: GPC: 93% GPA: 94%;</li> <li>• ophthalmologists: GPC: 87% GPA: 93%.</li> </ul>	Contacts to seek medical specialist advice are widespread.	GP survey
<b>Continuity</b>				
Information continuity		<p>GPs reporting keeping routine medical records of all patient contacts:</p> <ul style="list-style-type: none"> <li>• GPC: 98%</li> <li>• GPA: 98%.</li> </ul> <p>GPs being able to easily generate a list of patients by diagnosis or health risk:</p> <ul style="list-style-type: none"> <li>• GPC: 60%</li> <li>• GPA: 53%.</li> </ul> <p>GPs reporting routine use of referral letters:</p> <ul style="list-style-type: none"> <li>• GPC: 93%</li> <li>• GPA: 75%.</li> </ul>		GP survey
Longitudinal continuity		<p>Patients reporting having been with their GP for one year or longer: 94%.</p> <p>Patients reporting seeing the same doctor each visit: 81%.</p>	Conditions for a continued doctor–patient relationship are good, for both GPCs and GPAs.	Patient survey

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
Interpersonal continuity		<p>Patients having been with their GP for more than three years:</p> <ul style="list-style-type: none"> <li>• GPC: 67%</li> <li>• GPA: 74%.</li> </ul>	<p>Fewer than half of patients think their GP knows their personal situation, but three quarters believe the GP knows past problems and illnesses.</p> <p>Doctors' communication skills (such as listening skills and providing explanations) are acknowledged by about three quarters of patients, but only 39% indicate that their GP would deal with personal problems and worries.</p>	Patient survey
<b>Comprehensiveness</b>				
Practice conditions	Convenience	<p>Patients reporting that the practice is easily accessible for disabled people and wheelchair users:</p> <ul style="list-style-type: none"> <li>• GPC: 54%</li> <li>• GPA: 50%.</li> </ul> <p>Patients reporting the waiting room was "convenient":</p> <ul style="list-style-type: none"> <li>• GPC: 58%</li> <li>• GPA: 53%.</li> </ul>	<p>GPs are obliged to have their practice accessible for people using a wheelchair.</p> <p>Many patients are dissatisfied about the quality of waiting areas.</p>	Patient survey
	Information materials	<p>GPs reporting they have information materials in the waiting room on:</p> <p>CVD risks:</p> <ul style="list-style-type: none"> <li>• GPC: 57%</li> <li>• GPA: 99%;</li> </ul> <p>smoking cessation:</p> <ul style="list-style-type: none"> <li>• GPC: 51%</li> <li>• GPA: 88%;</li> </ul> <p>healthy diet:</p> <ul style="list-style-type: none"> <li>• GPC: 89%</li> <li>• GPA: 96%;</li> </ul> <p>social services:</p> <ul style="list-style-type: none"> <li>• GPC: 29%</li> <li>• GPA: 30%;</li> </ul> <p>self treatment of colds:</p> <ul style="list-style-type: none"> <li>• GPC: 92%</li> <li>• GPA: 69%;</li> </ul> <p>STIs:</p> <ul style="list-style-type: none"> <li>• GPC: 37%</li> <li>• GPA: 29%;</li> </ul> <p>contraception:</p> <ul style="list-style-type: none"> <li>• GPC: 22%</li> <li>• GPA: 11%.</li> </ul>	<p>Information on social services is often absent from waiting rooms.</p> <p>Materials on reproductive health and prevention of STIs are very scarce in GP waiting rooms.</p>	GP survey
Service delivery	Population groups served	<p>Consolidated scores for GP as doctor of first contact (based on 18 items; range of score is 1–4):</p> <ul style="list-style-type: none"> <li>• GPC: 1.63</li> <li>• GPA: 1.78.</li> </ul>	<p>GPs are not the first point of contact for social and sexual issues and relationship problems. Presumably the first contact for women is not a GP but a gynaecologist.</p>	GP survey

Selected dimension	Selected information items	Selected proxies/findings	Background to findings	Source
	GP involvement in treatment of disease	Consolidated scores for involvement of GP in the treatment of 19 diseases (based on 18 items; range of score is 1–4): <ul style="list-style-type: none"> <li>• GPC: 1.97</li> <li>• GPA: 2.95.</li> </ul>		GP survey
	Provision of preventive services and medical–technical procedures	Consolidated score for provision of medical procedures and prevention services (based on 16 items; range of score is 1–4): <ul style="list-style-type: none"> <li>• GPC: 1.27</li> <li>• GPA: 1.30.</li> </ul> <p>Coverage of public health activities (based on 8 items = 100%):</p> <ul style="list-style-type: none"> <li>• GPC: 32%</li> <li>• GPA: 34%.</li> </ul> <p>Patients' assessment of physician involvement in:</p> <p>promoting healthy eating:</p> <ul style="list-style-type: none"> <li>• GPC: 70%</li> <li>• GPA: 72%;</li> </ul> <p>reducing or stopping smoking:</p> <ul style="list-style-type: none"> <li>• GPC: 33%</li> <li>• GPA: 46%.</li> </ul>	<p>GPs' role in medical procedures is extremely limited: minor surgical and ophthalmological procedures are rarely done.</p> <p>GPCs are not involved in screening activities, but most are involved in school health services and influenza vaccination.</p> <p>GPA's are also strongly involved in influenza vaccination and a small majority in HIV/AIDS screening.</p> <p>Most patients report that their GP talks with them about healthy eating. Smoking cessation is much less frequently discussed.</p>	GP survey        Patient survey
	Mother/child and reproductive health care	<p>GPs providing routine antenatal care:</p> <ul style="list-style-type: none"> <li>• GPC: 27%</li> <li>• GPA: 5%.</li> </ul> <p>GPs providing family planning/contraception:</p> <ul style="list-style-type: none"> <li>• GPC: 14%</li> <li>• GPA: 3%.</li> </ul>	<p>GPCs provide antenatal care, but this is not universal.</p> <p>Some GPCs are involved in family planning and contraception, but this is outside the domain of GPA's.</p>	GP survey
Community orientation		GPs reporting regular meetings with local authorities: <ul style="list-style-type: none"> <li>• GPC: 24%</li> <li>• GPA: 19%.</li> </ul>	Up to 24% of GPs maintain connections with local authorities.	GP survey



# REFERENCES

1. 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/\\_\\_data/assets/pdf\\_file/0010/88093/RC55\\_eres08.pdf](http://www.euro.who.int/__data/assets/pdf_file/0010/88093/RC55_eres08.pdf), accessed 12 July 2012).
2. Smith PC, Mossialos E, Papanicolas I. *Performance measurement for health system improvement: experiences, challenges and prospects. Background document to the WHO European Ministerial Conference on Health Systems, "Health Systems, Health and Wealth"*. Copenhagen, WHO Regional Office for Europe, 2008 (<http://www.euro.who.int/en/what-we-do/data-and-evidence/health-evidence-network-hen/publications/2008/performance-measurement-for-health-system-improvement-experiences,-challenges-and-prospects-summary>, accessed 12 July 2012).
3. *The world health report 2000. Health systems: improving performance*. Geneva, World Health Organization, 2000 ([http://www.who.int/whr/2000/en/whr00\\_en.pdf](http://www.who.int/whr/2000/en/whr00_en.pdf), accessed 12 July 2012).
4. Murray C, Frenk J. World Health Report 2000: a step towards evidence-based health policy. *Lancet*, 2001, 357:1698–1700.
5. Atun RA et al. Introducing a complex health innovation – primary health care reforms in Estonia (multimethods evaluation). *Health Policy*, 2006, 79:79–91 ([http://jabraza.es/who1\\_old/pdfs/Publications/phc\\_reforms\\_estonia.pdf](http://jabraza.es/who1_old/pdfs/Publications/phc_reforms_estonia.pdf), accessed 12 July 2012).
6. 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 12 July 2012).
7. 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://aphcri.anu.edu.au/>, accessed 12 July 2012).
8. 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.
9. 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).

10. Starfield B. *Primary care. Balancing health needs, services and technology*. New York, Oxford University Press, 1998.
11. Thornicroft G, Tansella M. *What are the arguments for community-based mental health care?* Copenhagen, WHO Regional Office for Europe, 2003:Annex 2 (Health Evidence Network report; <http://www.euro.who.int/document/E82976.pdf>, accessed 12 July 2012).
12. Starfield B et al. Continuity and coordination in primary care: their achievement and utility. *Medical Care*, 1976, 14:625–636.
13. 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 12 July 2012).
14. 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/Migrated/PDF/ResearchReports/CommissionedResearch/cr\\_contcare\\_e.pdf](http://www.chsrf.ca/Migrated/PDF/ResearchReports/CommissionedResearch/cr_contcare_e.pdf), accessed 12 July 2012).
15. Boerma WGW. Coordination and integration in European primary care. In: Saltman RB, Rico A, Boerma WGW, eds. *Primary care in the driver's seat? Organizational reform in European primary care*. Maidenhead, Open University Press, 2006:3–21 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/98421/E87932.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/98421/E87932.pdf), accessed 12 July 2012).
16. Starfield B. Primary care and health. A cross-national comparison. *Journal of the American Medical Association*, 1991, 266:2268–2271.
17. 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 12 July 2012).
18. Kringos DS et al. *Evaluation of the organizational model of primary care in Turkey: a survey-based pilot project in two provinces of Turkey*. Copenhagen, WHO Regional Office for Europe, 2009 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/53863/E92219.pdf](http://www.euro.who.int/__data/assets/pdf_file/0007/53863/E92219.pdf), accessed 12 July 2012).
19. Kringos DS et al. *Evaluation of the organizational model of primary care in the Russian Federation: a survey-based pilot project in two districts in the Moscow Region*. Copenhagen, WHO Regional Office for Europe, 2009 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0008/100250/E92468.pdf](http://www.euro.who.int/__data/assets/pdf_file/0008/100250/E92468.pdf), accessed 12 July 2012).
20. WHO Regional Office for Europe [web site]. Copenhagen, WHO Regional Office for Europe, 2012 (<http://www.euro.who.int>, accessed 30 September 2012).

21. United Nations Cartographic Section. Map of Slovakia, May 2004, No. 3803 Rev. 2 [web site]. New York, United Nations, 2012 (<http://www.unhcr.org/refworld/docid/460a67142.html>, accessed 30 September 2012).
22. Horvath R, Rusna M. *How important are foreign shocks in small open economy? The case of Slovakia*. Prague, Institute of Economic Studies, Faculty of Social Sciences, Charles University, 2008 (IES Working Paper 21/2008; <http://ies.fsv.cuni.cz>., accessed 12 July 2012).
23. Ginter E, Hulanská K. Social determinants of health in Slovakia. *Bratisl Lek Listy [Bratislav Physician Letters]*, 2007, 108(10/11):477–479 (in Slovak).
24. Eurobarometer. *Eurobarometer 66. Public opinion in the European Union. First results*. Brussels, European Commission, 2006 ([http://ec.europa.eu/public\\_opinion/archives/eb/eb66/eb66\\_highlights\\_en.pdf](http://ec.europa.eu/public_opinion/archives/eb/eb66/eb66_highlights_en.pdf), accessed 12 July 2012).
25. Eurobarometer. *Eurobarometer 73. Public opinion in the European Union. First results*. Brussels, European Commission, 2010 ([http://ec.europa.eu/public\\_opinion/archives/eb/eb73/eb73\\_first\\_en.pdf](http://ec.europa.eu/public_opinion/archives/eb/eb73/eb73_first_en.pdf), accessed 12 July 2012).
26. The world factbook. Europe: Slovakia [web site]. Washington DC, Central Intelligence Agency, 2012 (<https://www.cia.gov/library/publications/the-world-factbook/geos/lo.html>, accessed 30 September 2012).
27. Gross domestic product in the 2nd quarter of 2012 [web site]. Bratislava, Statistical Office of the Slovak Republic, 2012 (<http://portal.statistics.sk/showdoc.do?docid=52804>, accessed 12 July 2012).
28. European health for all database [online database]. Copenhagen, WHO Regional Office for Europe, 2011 (<http://data.euro.who.int/hfad>, accessed 12 July 2012).
29. Szalay T et al. Slovakia: health system review. *Health Systems in Transition*, 2011, 13(2):1–200.
30. The largest cities in Slovakia [web site]. Bratislava, Slovensko.com, 1998–2012 (<http://www.slovensko.com/about/slovakia-cities>, accessed 12 July 2012).
31. Ginter E et al. Health status of the Slovakia population at its entry to the European Union. *Bratisl Lek Listy [Bratislav Physician Letters]*, 2005, 106(2):45–54 (in Slovak).
32. Ginter E. Health-status of the Slovak Republic population in comparison with countries of central Europe and European Union. *Bratisl Lek Listy [Bratislav Physician Letters]*, 2000, 101(11):589–593 (in Slovak).
33. Arnaudova A. *10 health questions about the 10*. Copenhagen, WHO Regional Office for Europe, 2004 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/97414/E82865.pdf](http://www.euro.who.int/__data/assets/pdf_file/0007/97414/E82865.pdf), accessed 12 July 2012).

34. Rosicova K et al. Socioeconomic indicators and ethnicity as determinants of regional mortality rates in Slovakia. *International Journal of Public Health*, 2009, 54(4):274–282.
35. *Koncepcia štátnej politiky zdravia [Concept of state health policy]*. Bratislava, Government of Slovakia, 2006 ([http://www.uvzsr.sk/docs/kspz/koncepcia\\_SP\\_zdravia\\_SR.pdf](http://www.uvzsr.sk/docs/kspz/koncepcia_SP_zdravia_SR.pdf), accessed 12 July 2012).

## OTHER SOURCES

- 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>, acc. 12 July 2012).
- Boerma WGW, Fleming DM. *The role of general practice in primary health care.* Copenhagen, WHO Regional Office for Europe, 1998.
- Boerma WGW et al. *Primary care quality management in Slovenia.* Copenhagen, WHO Regional Office for Europe, 2008 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0008/98810/E91926.pdf](http://www.euro.who.int/__data/assets/pdf_file/0008/98810/E91926.pdf), accessed 12 July 2012).
- Boerma WGW et al. *Primary care quality management in Uzbekistan.* Copenhagen, WHO Regional Office for Europe, 2007 (<http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/primary-health-care/publications/pre-2009/primary-care-quality-management-in-uzbekistan,-who-europe-2007>, accessed 12 July 2012).
- Boerma WGW et al. *Evaluation of the organization and provision of primary care in Belarus. A survey-based project in the regions of Minsk and Vitebsk.* Copenhagen, WHO Regional Office for Europe, 2009 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/91609/E92661.pdf](http://www.euro.who.int/__data/assets/pdf_file/0007/91609/E92661.pdf), accessed 12 July 2012).
- Boerma WGW, Pellny M, Kringos DS. *Evaluation of the structure and provision of primary care in Serbia. A survey-based project in the regions of Vojvodina, Central Serbia and Belgrade.* Copenhagen, WHO Regional Office for Europe, 2010 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/128849/e94554.pdf](http://www.euro.who.int/__data/assets/pdf_file/0005/128849/e94554.pdf), accessed 12 July 2012).
- Boerma WGW et al. *Evaluation of the organization and provision of primary care in Kazakhstan. A survey-based project in the regions of Almaty and Zhambyl.* Copenhagen, WHO Regional Office for Europe, 2011 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/137058/e94900.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/137058/e94900.pdf), accessed 12 July 2012).
- Boerma WGW et al. *Evaluation of the organization and provision of primary care in Romania. A survey-based project.* Copenhagen, WHO Regional Office for Europe, 2012 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/167576/Evaluation-of-structure-and-provision-of-primary-care-in-Romania.pdf](http://www.euro.who.int/__data/assets/pdf_file/0005/167576/Evaluation-of-structure-and-provision-of-primary-care-in-Romania.pdf), accessed 12 July 2012).
- Meads G. *Primary care in the twenty-first century – an international perspective.* Oxford, Radcliffe Publishing, 2006.
- Primary health care: report of the International Conference on Primary Health Care, Alma-Ata, USSR, September 6–12 1978.* Geneva, World Health Organization, 1978 (<http://whqlibdoc.who.int/publications/9241800011.pdf>, accessed 12 July 2012).

Saltman RB, Rico A, Boerma WGW, eds. *Primary care in the driver's seat? Organizational reform in European primary care*. Maidenhead, Open University Press, 2006 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/98421/E87932.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/98421/E87932.pdf), accessed 12 July 2012).

# ANNEX I

## Tables A1–A6

Tables A1–A6 provide detailed results for three major dimensions of the service profile of GPs, as presented in Chapter 4: GPs' role in first contact with patients (tables A1 and A2); treatment and follow up of diseases (tables A3 and A4); and performing medical–technical procedures and providing preventive services (tables A5 and A6).

**Table A1. GPs' role as first contact for patients, by type of GP**

GPs estimated to be the first contact in case of:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
child with rash	89.7 (10.3)	117	2.7 (7.0)	187	36.2 (8.2)	304
child with severe cough	98.3 (0.9)	117	3.3 (4.9)	183	40.3 (3.3)	300
child aged 7 with enuresis	72.6 (13.7)	117	1.1 (1.6)	182	29.1 (6.4)	299
child aged 8 with hearing problem	66.4 (13.8)	116	1.6 (1.6)	182	26.8 (6.4)	298
woman aged 18 asking for oral contraception	7.3 (12.8)	109	1.1 (4.8)	189	3.4 (7.7)	298
woman aged 20 for confirmation of pregnancy	1.9 (12.4)	105	5.6 (11.1)	198	4.3 (11.6)	303
woman aged 35 with irregular menstruation	2.1 (1.1)	94	7.1 (33.8)	198	5.5 (23.3)	292
woman aged 50 with lump in the breast	0.0 (1.1)	94	31.1 (47.0)	219	21.7 (33.2)	313
woman aged 60 with polyuria	0.0 (1.1)	94	58.4 (28.5)	221	41.0 (20.3)	315
man aged 45 with anxiety	2.2 (0.0)	93	68.0 (22.7)	225	48.7 (16.0)	318
man aged 28 with a first convulsion	6.3 (10.4)	96	48.0 (26.0)	227	35.6 (21.4)	323
physically abused child	34.2 (27.0)	111	5.7 (5.7)	192	16.2 (13.5)	303
couple with relationship problems	5.2 (12.4)	97	16.5 (35.4)	206	12.9 (28.1)	303
man with suicidal inclination	2.1 (5.3)	95	19.2 (35.2)	219	14.0 (26.1)	314
woman aged 35 with psychosocial problems related to work	2.2 (1.1)	93	52.9 (38.5)	221	37.9 (27.4)	314
man aged 32 with sexual problems	1.1 (1.1)	94	30.5 (51.1)	223	21.8 (36.3)	317
man aged 52 with alcohol addiction problems	1.1 (1.1)	94	45.8 (43.6)	227	32.7 (31.2)	321
man with symptoms of TB	1.0 (1.0)	96	32.3 (25.6)	223	22.9 (18.2)	319
<b>TOTAL SCORES**</b>	<b>1.63</b>		<b>1.78</b>		<b>1.73</b>	

\*Percentages reflect the answers “(almost) always” and “usually”; percentages in brackets reflect the answer “occasionally”.

\*\* Scores are based on weighted answers, as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

**Table A2. GPs' role as first contact for patients, by setting**

GPs estimated to be the first contact in case of:	Urban (N=163)		Rural (N=186)		Total (N=349)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
child with rash	37.4 (5.8)	139	35.8 (9.9)	162	36.5 (8.0)	301
child with severe cough	40.1 (2.2)	137	40.6 (4.4)	160	40.4 (3.4)	297
child aged 7 with enuresis	32.1 (5.1)	137	27.0 (7.5)	159	29.4 (6.4)	296
child aged 8 with hearing problem	31.4 (5.1)	137	23.4 (7.6)	158	27.1 (6.4)	295
woman aged 18 asking for oral contraception	2.2 (9.6)	135	4.4 (6.3)	160	3.4 (7.8)	295
woman aged 20 for confirmation of pregnancy	2.9 (13.1)	137	5.5 (10.4)	163	4.3 (11.7)	300
woman aged 35 with irregular menstruation	6.2 (23.1)	130	5.0 (23.1)	160	5.5 (23.1)	290
woman aged 50 with lump in the breast	23.0 (36.7)	139	21.1 (30.4)	171	21.9 (33.2)	310
woman aged 60 with polyuria	41.4 (26.4)	140	41.3 (15.1)	172	41.3 (20.2)	312
man aged 45 with anxiety	52.1 (16.7)	144	46.2 (15.2)	171	48.9 (15.9)	315
man aged 28 with a first convulsion	36.1 (22.4)	147	35.3 (20.2)	173	35.6 (21.3)	320
physically abused child	17.4 (10.1)	138	15.5 (16.8)	161	16.4 (13.7)	299
couple with relationship problems	11.9 (26.1)	134	13.8 (29.3)	167	13.0 (27.9)	301
man with suicidal inclination	14.9 (27.0)	141	13.5 (25.7)	171	14.1 (26.3)	312
woman aged 35 with psychosocial problems related to work	40.1 (27.5)	142	36.1 (27.2)	169	37.9 (27.3)	311
man aged 32 with sexual problems	23.1 (37.1)	143	20.5 (35.7)	171	21.7 (36.3)	314
man aged 52 with alcohol addiction problems	29.9 (36.1)	144	35.6 (27.6)	174	33.0 (31.4)	318
man with symptoms of TB	22.1 (17.9)	145	23.8 (18.6)	172	23.0 (18.3)	317
<b>TOTAL SCORES **</b>	<b>1.75</b>		<b>1.71</b>		<b>1.73</b>	

\*Percentages reflect the answers "(almost) always" and "usually"; percentages in brackets reflect the answer "occasionally".

\*\* Scores are based on weighted answers, as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.



**Table A3. GPs' involvement in treatment and follow up of diseases, by type of GP**

GPs' involvement in treatment of:	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
hyperthyroidism	47.4 (29.8)	114	62.3 (27.7)	231	57.4 (28.4)	345
chronic bronchitis	73.9 (14.8)	115	89.7 (9.0)	233	84.5 (10.9)	348
hordeolum (stye)	62.1 (30.2)	116	68.2 (19.7)	233	66.2 (23.2)	349
peptic ulcer	34.2 (31.6)	117	85.3 (13.4)	231	68.1 (19.5)	348
herniated disc lesion	23.9 (31.9)	113	88.8 (7.7)	233	67.6 (15.6)	346
acute cerebrovascular accident	1.9 (9.4)	106	67.7 (21.1)	232	47.0 (17.5)	338
congestive heart failure	1.9 (7.7)	104	73.0 (21.0)	233	51.0 (16.9)	337
pneumonia	83.5 (10.4)	115	90.6 (9.4)	233	88.2 (9.8)	348
peritonsillar abscess	60.0 (29.6)	115	73.7 (15.9)	232	69.2 (20.5)	347
ulcerative colitis	27.5 (28.4)	109	57.6 (28.6)	231	47.9 (28.5)	340
salpingitis	9.1 (22.7)	110	18.7 (32.0)	219	15.5 (28.9)	329
concussion	49.6 (25.7)	113	44.5 (37.1)	229	46.2 (33.3)	342
Parkinson's disease	5.8 (3.9)	103	57.6 (27.9)	229	41.6 (20.5)	332
uncomplicated diabetes (type II)	25.9 (20.4)	108	73.3 (20.3)	232	58.2 (20.3)	340
rheumatoid arthritis	35.1 (34.2)	111	65.4 (29.9)	231	55.6 (31.3)	342
depression	18.2 (37.3)	110	76.3 (19.8)	232	57.6 (25.4)	342
myocardial infarction	1.9 (6.7)	105	64.8 (27.5)	233	45.3 (21.0)	338
follow-up TB care	9.4 (12.3)	106	44.3 (24.1)	228	33.2 (20.4)	334
<b>TOTAL SCORES**</b>	<b>1.97</b>		<b>2.95</b>		<b>2.66</b>	

\*Percentages reflect the answers "(almost) always" and "usually"; percentages in brackets reflect the answer "occasionally".

\*\* Scores are based on weighted answers, as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

**Table A4. GPs' involvement in treatment and follow up of diseases, by setting**

GPs' involvement in treatment of:	Urban (N=163)		Rural (N=186)		Total (N=349)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
hyperthyroidism	58.8 (25.6)	160	56.4 (30.9)	181	57.5 (28.4)	341
chronic bronchitis	81.8 (13.2)	159	87.6 (8.6)	185	84.9 (10.8)	344
hordeolum (stye)	73.9 (18.6)	161	60.3 (26.6)	184	66.7 (22.9)	345
peptic ulcer	71.9 (15.6)	160	65.2 (23.4)	184	68.3 (19.8)	344
herniated disc lesion	67.9 (15.1)	159	67.8 (15.8)	183	67.8 (15.5)	342
acute cerebrovascular accident	45.8 (17.4)	155	47.8 (17.8)	180	46.9 (17.6)	335
congestive heart failure	53.9 (13.6)	154	48.3 (20.0)	180	50.9 (17.1)	334
pneumonia	91.1 (6.3)	160	85.9 (12.0)	184	88.7 (9.3)	344
peritonsillar abscess	74.8 (15.1)	159	64.7 (24.5)	184	69.4 (20.1)	343
ulcerative colitis	49.7 (25.8)	155	46.2 (30.8)	182	47.8 (28.5)	337
salpingitis	15.9 (27.8)	151	14.9 (29.1)	175	15.3 (28.5)	326
concussion	49.7 (31.2)	157	42.9 (35.2)	182	46.0 (33.3)	339
Parkinson's disease	41.7 (19.9)	151	41.6 (20.8)	178	41.6 (20.4)	329
uncomplicated diabetes (type II)	61.3 (17.4)	155	55.5 (23.1)	182	58.2 (20.5)	337
rheumatoid arthritis	57.3 (31.2)	157	53.8 (31.9)	182	55.5 (31.6)	339
depression	59.5 (23.4)	158	55.8 (27.1)	181	57.5 (25.4)	339
myocardial infarction	50.3 (16.1)	155	40.6 (25.0)	180	45.1 (20.9)	335
follow-up TB care	31.4 (22.9)	153	34.8 (18.5)	178	33.2 (20.5)	331
<b>TOTAL SCORES**</b>	<b>2.67</b>		<b>2.66</b>		<b>2.66</b>	

\*Percentages reflect the answers "(almost) always" and "usually"; percentages in brackets reflect the answer "occasionally".

\*\* Scores are based on weighted answers, as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

**Table A5. GPs' involvement in performing medical–technical procedures and providing preventive services, by type of GP**

Procedure usually provided by GP or practice staff	GPCs (N=118)		GPAs (N=235)		Total (N=353)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
Wedge resection of ingrown toenail	0.9 (99.1)	115	4.3 (95.7)	232	3.2 (96.8)	347
Removal of sebaceous cyst from hairy scalp	2.6 (97.4)	115	4.3 (95.7)	232	3.7 (96.3)	347
Wound suturing	0.9 (99.1)	116	5.2 (94.8)	233	3.7 (96.3)	349
Excision of warts	2.6 (97.4)	116	3.9 (96.1)	232	3.4 (96.6)	348
Intrauterine device insertion	0.9 (99.1)	112	2.2 (97.8)	230	1.8 (98.2)	342
Removal of rusty spot from cornea	0.9 (99.1)	113	1.7 (98.3)	230	1.5 (98.5)	343
Fundoscopy	0.9 (99.1)	113	2.6 (97.4)	230	2.0 (98.0)	343
Joint injection	1.8 (98.2)	114	4.7 (95.3)	232	3.8 (96.2)	346
Maxillary (sinus) puncture	0.9 (99.1)	113	1.3 (98.7)	232	1.2 (98.8)	345
Myringotomy of eardrum (paracentesis)	0.9 (99.1)	113	1.7 (98.3)	232	1.4 (98.6)	345
Applying plaster cast	3.6 (96.4)	112	6.6 (93.4)	229	5.6 (94.4)	341
Strapping an ankle	51.8 (48.2)	114	64.3 (35.7)	230	60.2 (39.8)	344
Cryotherapy (warts)	7.1 (92.9)	112	8.3 (91.7)	229	7.9 (92.1)	341
Setting up an intravenous infusion	60.0 (40.0)	110	77.0 (23.0)	230	71.5 (28.5)	340
Immunizations for 'flu or tetanus	97.4 (2.6)	116	97.9 (2.1)	233	97.7 (2.3)	349
Allergy vaccinations	41.6 (58.4)	113	47.8 (57.2)	229	42.4 (57.6)	342
<b>TOTAL SCORES**</b>	<b>1.27</b>		<b>1.30</b>		<b>1.29</b>	

\*Percentages reflect the answers “usually done by myself” and “usually done by practice staff”; percentages in brackets reflect the answer “usually done elsewhere (for instance, by a medical specialist)”.

\*\*Scores are based on weighted answers as follows: usually done by medical specialist = 1; usually done by practice staff = 2; usually done by myself = 3. The range of scores is 1–3.

**Table A6. GPs' involvement in performing medical–technical procedures and providing preventive services, by setting**

Procedure usually provided by GP or practice staff	Urban (N=163)		Rural (N=186)		Total (N=349)	
	% GP*	Valid N	% GP*	Valid N	% GP*	Valid N
Wedge resection of ingrown toenail	2.5 (97.5)	159	3.3 (96.7)	184	2.9 (97.1)	343
Removal of sebaceous cyst from hairy scalp	1.9 (98.1)	159	4.9 (95.1)	184	3.5 (96.5)	343
Wound suturing	2.5 (97.5)	159	4.3 (95.7)	186	3.5 (96.5)	345
Excision of warts	3.8 (96.2)	159	2.7 (97.3)	185	3.2 (96.8)	344
Intrauterine device insertion	1.3 (98.7)	157	1.7 (98.3)	181	1.5 (98.5)	338
Removal of rusty spot from cornea	1.3 (98.7)	159	1.1 (98.9)	180	1.2 (98.8)	339
Fundoscopy	1.3 (98.7)	158	2.2 (97.8)	181	1.8 (98.2)	339
Joint injection	1.3 (98.7)	159	5.5 (94.5)	183	3.5 (96.5)	342
Maxillary (sinus) puncture	1.3 (98.7)	159	0.5 (99.5)	182	0.9 (99.1)	341
Myringotomy of eardrum (paracentesis)	1.9 (98.1)	159	0.5 (99.5)	183	1.2 (98.8)	342
Applying plaster cast	5.1 (94.9)	158	5.6 (94.4)	180	5.3 (94.7)	338
Strapping an ankle	61.8 (38.2)	157	58.2 (41.8)	184	59.8 (40.2)	341
Cryotherapy (warts)	8.3 (91.7)	157	7.2 (92.8)	181	7.7 (92.3)	338
Setting up an intravenous infusion	64.3 (35.7)	157	77.8 (22.2)	180	71.5 (28.5)	337
Immunizations for 'flu or tetanus	98.7 (1.3)	159	96.8 (3.2)	186	97.7 (2.3)	345
Allergy vaccinations	39.1 (60.9)	156	45.1 (54.9)	182	42.3 (57.7)	338
<b>TOTAL SCORES**</b>	<b>1.28</b>		<b>1.29</b>		<b>1.29</b>	

\*Scores are based on weighted answers: usually done by medical specialist = 1; usually done by practice staff = 2; usually done by myself = 3. The range of scores is 1–3.

\*\*Scores have not been calculated because of a very low number of observations.

# ANNEX 2

## Glossary of terms relevant to primary care

**Accessibility:** patients' ability to receive care where and when it is needed, given possible physical, financial or psychological barriers (1).

**Comprehensiveness:** the extent to which services provided comprise curative, rehabilitative and supportive care as well as health promotion and disease prevention (2,3).

**Confidentiality:** the right to determine who has access to one's personal health information (4).

**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 comprise an uninterrupted series of contacts over the long term (longitudinal continuity) (1).

**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 links between staff members and agencies over a longer period of treatment (1).

**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 (5).

**Family medicine teams:** family medicine teams can vary from country to country and in size. The core team usually encompasses the general practitioner (GP) and a nurse, but can consist of a multidisciplinary team of up to 30 professionals, including community nurses, midwives, feldshers [medical attendants], dentists, physiotherapists, social workers, psychiatrists, speech therapists, dietitians/diabetologists, pharmacists, administrative staff and managers (6). WHO describes a PC team as: "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" (7). By definition, family medicine teams are patient centred and their composition and organizational model cannot but change over time: "family medicine" is a flexible construct.

**General practice:** general practice is a term often used loosely to cover the GP and other personnel and is therefore synonymous with primary care (PC) and family medicine. Originally, it was meant to describe the concept and model around the most significant single player in PC, the GP or PC physician, while family medicine encompassed the notion of a more team-focused approach. The distinction should be made whenever the notion of solo practitioner (general practice) versus team-based approach (family medicine) is relevant. According to Atun (8), the specificity of the GP 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".

**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 (9) with its principles of equity, participation, intersectoral action and appropriate technology and the central place of the health system (10).

**Primary care:** PC is more than just the level of care or the gatekeeping function– it is a key process in the health system. It provides the first contact to accessible, ongoing, comprehensive and coordinated care. First-contact care is accessible at the time of need, while ongoing care focuses on long-term health rather than the short duration of a specific disease. Comprehensive care is provided through a range of services appropriate to the common problems in the respective population and coordination is the mechanism through which PC acts to involve other specialists the patient may need to access. PC is a subset of primary health care.

**Performance:** (or composite goal performance) is defined as a relative concept: it is the extent to which the health system involves goal attainment in what could be achieved in the given context of the country (4).

**Resource generation:** the provision of essential inputs to the health system, including human capital, physical capital and consumables (4).

**Responsiveness:** the 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 nonpersonal services: it is not a measure of how the system responds to health needs, which reveals itself through health outcomes. Enhancing responsiveness to the expectations of the population includes: respect for persons (including dignity, confidentiality (of information) and autonomy of individuals and families to decide about their own health); and client orientation (prompt attention, access to social support networks during care, provision of basic amenities and choice of provider) (4).

**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 overseeing and guiding the development and implementation 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) (4, 11).

1. 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/\\_\\_data/assets/pdf\\_file/0019/74710/E82976.pdf](http://www.euro.who.int/__data/assets/pdf_file/0019/74710/E82976.pdf), accessed 12 July 2012).

2. 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 12 July 2012).

3. Horvath R, Rusna M. *How important are foreign shocks in small open economy? The case of Slovakia.* Prague, Institute of Economic Studies, Faculty of Social Sciences, Charles University, 2008 (IES Working Paper 21/2008; <http://ies.fsv.cuni.cz>, accessed 12 July 2012).

4. *The world health report 2000. Health systems: improving performance*. Geneva, World Health Organization, 2000 ([http://www.who.int/whr/2000/en/whr00\\_en.pdf](http://www.who.int/whr/2000/en/whr00_en.pdf), accessed 12 July 2012).
5. 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).
6. Ginter E, Hulanská K. Social determinants of health in Slovakia. *Bratisl Lek Listy [Bratislav Physician Letters]*, 2007, 108(10/11):477–479 (in Slovak).
7. Szalay T et al. Slovakia: health system review. *Health Systems in Transition*, 2011, 13(2):1–200.
8. Atun RA et al. Introducing a complex health innovation – primary health care reforms in Estonia (multimethods evaluation). *Health Policy*, 2006, 79:79–91 ([http://jabraza.es/who1\\_old/pdfs/Publications/phc\\_reforms\\_estonia.pdf](http://jabraza.es/who1_old/pdfs/Publications/phc_reforms_estonia.pdf), accessed 12 July 2012).
9. *Declaration of Alma-Ata*. Geneva, World Health Organization, 1998 ([http://www.searo.who.int/LinkFiles/Health\\_Systems\\_declaration\\_almaata.pdf](http://www.searo.who.int/LinkFiles/Health_Systems_declaration_almaata.pdf), accessed 12 July 2012).
10. Ginter E et al. Health status of the Slovakia population at its entry to the European Union. *Bratisl Lek Listy [Bratislav Physician Letters]*, 2005, 106(2):45–54 (in Slovak).
11. 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.

# SUMMARY

Strengthening primary care services is a priority for many countries in the WHO European Region, but the nature of reforms varies from west to east. Primary care in western European countries contributes to addressing rising costs and changing demands resulting from demographic and epidemiological changes. In the central and eastern part of the Region, however, countries are struggling to improve the performance and cost-effectiveness of their entire health systems. These countries are now developing primary care, which had functioned poorly in the past if it existed at all, to improve overall health system efficiency and bring adequate, responsive health services closer to populations.

Health care reforms are part of the profound and comprehensive changes in essential societal functions and values occurring in many of these countries. Reforms have not always been based on evidence, with changes often being driven by political or professional interests rather than sound assessments. That situation is now changing: health care stakeholders are increasingly holding decision-makers to account and are demanding evidence of progress.

This report evaluates primary care developments in Slovakia using a methodology that characterizes a good primary care system as one that is comprehensive, accessible, coordinated and continuous. The methodology assesses whether primary care service delivery is supported by an adequate legal and normative framework, financing mechanisms, human resource strategies, supply of appropriate facilities, equipment and medicines, and effective leadership. The report therefore offers a structured overview of the strengths and weaknesses of the country's organization and provision of primary care services – built on the perceptions of professionals and patients – for policy-makers and stakeholders.