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EVALUATION OF THE STRUCTURE AND PROVISION OF PRIMARY CARE IN THE REPUBLIC OF MOLDOVA

A survey-based project

Primary care in the WHO European Region

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ABSTRACT

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

The project was launched and implemented in the Republic of Moldova in 2011 as part of the framework of the Biennial Collaborative Agreements (BCA) 2010–11 and 2012–13 between the WHO Regional Office for Europe and the Ministry of Health (MoH) of the Republic of Moldova. These agreements lay out the main areas of work for collaboration between the parties. Additional partners included the Netherlands Institute for Health Services Research (NIVEL) (a WHO Collaborating Centre for Primary Care), the National Centre of Health Management and other stakeholders in the health system of the Republic of Moldova, such as national policy experts, managers, medical educators, PC nurses, family doctors (FDs) and their patients.

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ACRONYMS

BCA	Biennial collaborative agreement between the WHO Regional Office for Europe and Member States
CFD	Family doctor centre
CHPS	Centre for Health Services and Policies
CIS	Commonwealth of Independent States
CME	Continuing medical education
EU15	Countries belonging to the European Union before May 2004
FD	Family doctor
FM	Family Medicine
FMC	Family Medicine Centre
GDP	Gross domestic product
HIV/AIDS	Human immunodeficiency virus/Acquired immunodeficiency syndrome
MoH	Ministry of Health
MSIPHC	Medical and Sanitary Institutions of Primary Health Care (throughout the report referred to as PHC centre)
NCHM	National Centre of Health Management
NGO	Non-governmental organization
NIVEL	Netherlands Institute for Health Services Research
PC	Primary care
PCET	Primary Care Evaluation Tool
PHC	Primary health care
PMSI	Public Health Institution (in the districts)
RH	Reproductive health
SDR	Age-standardised death rate
SHI	Social Health Insurance
STI	Sexually transmitted infection
TB	Tuberculosis
TMA	Territorial Medical Associations (in Chișinău)
WHO	World Health Organisation

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FOREWORD

PHC 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, especially for the most disadvantaged populations, in the World Health Report 2008, which urges countries to strengthen PHC as the most efficient, fair and cost-effective way to organize a health system. The title of this report underscores the urgency of its message: 'Primary health care – Now more than ever'.

The European Region has a particularly strong legacy - starting with the Declaration of Alma-Ata in 1978 - in strategies for health that are based on scientifically sound and socially acceptable interventions, and that promote solidarity, equity and active involvement of various sectors as well as civil society. Over the past 30 years, health in the 53 WHO European Region Member States has improved considerably overall, despite significant changes in the patterns and trends of disease occurrence, demographic profiles and exposure to major risks and hazards in a rapidly evolving socioeconomic environment. In addition, the Region has seen trends towards more integrated models of care and greater pluralism in the financing and organization of health systems. Governments are continuing to rethink their roles and responsibilities in population health and the organization and delivery of health care, and the new WHO European policy for health – Health 2020 – is an example of such reflection. It offers practical pathways for addressing current and emerging health challenges in the Region, and reiterates that PHC stands out as one of the pre-eminent instruments for integrating prevention into the wider health system.

This report evaluates PHC developments in the Republic of Moldova, using a methodology that characterizes a good PHC system as one that is comprehensive, accessible, coordinated, and ensures continuity. The methodology further assesses whether PHC service delivery is supported by an adequate legal and normative framework, financing mechanisms, human resource strategies, supply of appropriate facilities, equipment and drugs, and effective leadership. The report thus offers a structured overview of the strengths and weaknesses of a country's organization and provision of PHC services – including the voices of the professionals and patients concerned – to interested policymakers and stakeholders. We, at the WHO Regional Office for Europe, hope that this report will inform the further PHC reform in the Republic of Moldova, which will bring health care closer to people's needs and expectations.

We thank the many collaborators who have generously contributed to this project with their ideas and insights. We would also like to gratefully acknowledge the financial assistance of the Netherlands Ministry of Health, Welfare and Sport in the framework of the Partnership Programme between the WHO Regional Office for Europe and the Netherlands. The study has been carried out with financial assistance from the European Union under the technical assistance to the health sector within the direct budgetary support to the Republic of Moldova, channelled through WHO.

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EXECUTIVE SUMMARY

This report presents the results of the WHO PCET, which was launched and implemented nationwide in the Republic of Moldova in 2011. This activity has taken place in the framework of a Biennial Collaborative Agreement (BCA) between the WHO Regional Office for Europe and the MoH of the Republic of Moldova, an agreement that lays out the main areas of work for collaboration between the parties. Additional partners were the Netherlands Institute for Health Services Research (NIVEL) – a WHO Collaborating Centre for PHC; the National Centre of Health Management and stakeholders in the health system of the Republic of Moldova, such as national policy experts, institutes for medical education, regional authorities, PHC nurses, FDs and their patients.

The PCET addresses both supply and demand aspects of PHC. It is intended to help ministries of health and other stakeholders to monitor the progress of PHC related policies and reforms and provides evidence for setting new priorities aiming to strengthen PHC.

Methods

The underlying methodology for the design of the PCET was derived from the WHO 2000 Health Systems Framework *(1),* which states that the performance of a health system is determined by the way its functions are organized. These functions are stewardship, resource generation, financing and service provision. The PCET addresses these four functions, together with the key characteristics of PHC services, including accessibility of services, continuity of care, coordination of care and comprehensiveness. For each of these functions and characteristics, the PCET has identified key dimensions and subthemes, which it has then translated into indicators or appropriate proxies.

To evaluate the complexity of PHC systems, the Tool gathers information from different levels, and from both the demand and the supply side. The PCET accordingly consists of three instruments: a questionnaire addressing the status, structure and context of PHC at the national level, a questionnaire for PHC physicians, and a questionnaire for patients. For the Republic of Moldova an additional questionnaire for PHC nurses was developed. Together, these questionnaires cover the key PHC functions, dimensions and subthemes derived from the Framework. The questionnaires for PHC physicians, PHC nurses and patients are pre-structured, with pre-coded answers. The national questionnaire contains both pre-structured and open-ended questions, with room for statistical data.

The project team implemented the Tool nationwide in the Republic of Moldova throughout 2011 and the beginning of 2012. Physicians were randomly selected and approached throughout the country. The questionnaires were completed by, respectively, national policy experts and other health system stakeholders; PHC nurses; FDs; and patients who visited these FDs. The project team processed and analysed data in March and April 2012. The draft report was discussed at a validation meeting in Chișinău on 24 May 2012. The final report was completed in June 2012. The survey approach means that the results rely on respondents' self-reported behaviour and experiences. Reports of involvement of physicians and nurses in certain services to their patients do not im-

ply a measure of quality. The applied methodology implies that results are estimations of the real situation. Given the size of the samples in this study, confidence intervals should be taken into account; for the physicians' survey being ± 4.5% and for the patients' survey ± 2.5%.

Results

The results from the surveys are based on a response of 250 FDs and 2102 patients visiting both types of GPs. The survey among nurses working in PHC centres without permanent availability of FDs had 25 participants. The achieved response was in line with the previously set target numbers.

National results

(based on answers from the national questionnaire and interviews with policy experts and health professionals)

Context

The population in the Republic of Moldova is young but has a relatively poor life expectancy, especially for the male population. As both communicable diseases and non-communicable diseases have increased since independence, it may be concluded that the country faces a double epidemiological burden. The main causes of death are diseases of the circulatory system. Major health threats are from poverty, tobacco use and harmful use of alcohol. As the national income is relatively low, the total health expenditure per capita is low. However, proportional to the gross domestic product, the Republic of Moldova spends a very high proportion on health. A large proportion (almost half) of this expenditure, however, is not public but paid out-of-pocket. The number of Moldovan PHC physicians (FDs) is relatively low. In the late 1990s, the specialty of a FD and PHC nurse were formally acknowledged and the population was given the right of free choice of doctor and health care facility. The package of services provided in PHC has been defined by law and is provided under a mandatory social health insurance (SHI) in a well-developed network of PHC centres. (Formally these are called "Medical and sanitary institutions of primary health care". They include family medicine (FM) centres, health centres and FD's offices. Throughout this report, the term PHC centre will be used.)

Stewardship / governance

In 2004, a major step in the health sector reforms was the implementation of a new mandatory health insurance system. Both primary and secondary care services have been decentralised and have become responsibilities of district authorities and, in Chișinău, the municipality. At the MoH there is no department exclusively dealing with PHC. Since 2008, PHC facilities in the country, with FDs as its core, have gained autonomy and are operating independently from hospitals. Under the responsibility of district authorities, they are contracted by the National Health Insurance Company. In Chișinău, the PHC structure is represented by the Territorial Medical Associations.

Policy development for PHC

Policy for PHC has been developed since the mid-1990s, but there has been some intensification during the last five years. A wide range of issues have been dealt with, focusing on strengthening PHC, including:

- the implementation of a compulsory health insurance system;
- free choice of doctor for the population and promotion of citizens registered with the doctor of their choice;
- establishing autonomy of PHC centres and implementation of direct contracting with them;
- putting more emphasis on health promotion and disease prevention in PHC;
- continuity of care and integration of services across levels of care;
- stimulating rural PHC centres in order to reduce disparities in health care delivery between urban and rural areas;
- improving the access to services and the quality of services provided at the primary level;
- strengthening the management and administration in PHC facilities;
- training FDs and nurses, including programmes for continuing education;
- setting norms and criteria for contracts and using payment mechanisms to improve the performance in PHC; and
- monitoring care provided under the mandatory health insurance scheme by means of performance indicators.

Financing

Approximately one third of the total mandatory health insurance budget is spent on PHC. Financing of PHC centres and practices has been decentralised. New payment schemes have been introduced to take not just seniority and qualification level into account but also efficiency and performance. Payment schemes aim to stimulate the choice for PHC and, in particular, the choice for rural practice. FDs with comparable seniority and professional experience earn more than medical specialists; FDs in rural practices earn more than colleagues in urban PHC centres.

Human resources and education

To be licensed, FDs must have completed a three-year residency programme. For the five-yearly recertification, an exam must have been passed and requirements for CME fulfilled. Only 17% of all physicians in the country are working as a FD in PHC. Official norms state that one FD should be available per 1500 inhabitants, but in reality this number is close to 1900 as a result of the shortage of FDs. Shortages also exists among other health professions. The distribution of FDs and PHC nurses in the country is very skew. It turns out that in all regions outside the capital, the official norm is strongly exceeded. FDs hold a gatekeeping role but for specified conditions, patients may seek care directly from medical specialists.

A three-year residency programme in FM is offered at the State University of Medicine and Pharmacy "Nicolae Testemitanu". This is the only institution in the country offering higher medical education. The number of graduates has decreased strongly from 66 to 30 per year since 2009. Almost all FDs are organized in an Association of FDs; however, no professional journal exists specifically for FDs.

Patients' rights

By law, a range of patients' rights have been specified and protected. The free choice of doctor can be exercised once a year when patients can switch to another FD. Procedures for submitting complaints by patients and the way complaints must be dealt with are detailed in the regulations. Each PHC centre is obliged to have a complaint procedure in place.

Quality management

The quality of PHC services is monitored by various mechanisms, such as internal controls, inspections and tests. Institutions such as the National Evaluation and Accreditation Council and the National Health Insurance Company conduct periodic evaluations of institutions, including aspects of service quality. In general, however, quality assurance is still marginal. In addition, the Ministry is nowadays using performance indicators with a focus on accessibility, efficiency and patient satisfaction. Other efforts to improve the quality of services are on guideline development. With donor aid, a large series of protocols and clinical guidelines have been and will be developed, implemented and distributed.

Service provision

A comprehensive set of curative, rehabilitative and preventive services and health promotions are intended to be provided at the primary level. Official statistics show that Moldovan citizens see their FD almost three times a year on average. Of all patient visits, 1.6% ends up with a hospitalisation. No data were available about referrals to medical specialists and medicine prescriptions. Survey-based data on service provision are explained below.

Results concerning FDs, patients and nurses in PHC

(from the FD and patient and PHC nurse survey questionnaires)

The results in this section are based on three surveys, with the following respective numbers of respondents: 250 FDs, 2102 patients and 25 independent PHC nurses.

Accessibility of care

Patients seem to meet financial barriers when trying to use PHC services. Co-payments are the general practice in pharmacies for drugs prescribed in outpatient care as the list of drugs compensated from the Mandatory Health Insurance Fund is limited. The study also revealed that payments for a home visit or a consultation with a medical specialist after referral by a FD are not exceptional. Some patients even indicate that they pay for a regular visit to the FD. For almost one third of the patients, private payment for medicine has been the reason not to visit or to delay visiting their FD.

On average, FDs work for more patients than the official norm. In particular, rural practices are much larger. The average working week of FDs is 44 hours, while nurses work 42 hours. Nurses have fewer patient visits in the PHC centre than FDs but they see more of them at home. A shortage of FDs is frequently reported. Urban PHC centres frequently offer evening openings but this is much less usual in rural practices. Nevertheless, most patients are satisfied with the current opening hours in their practice. Most patients appreciate the attitude of staff at the reception desk. There is some criticism, however, such as: poor access to the practice for people with wheelchairs; inconvenient waiting

rooms; long waiting times and time taken to make appointments. Practice web sites, or rather the absence of web sites, is not an issue. Overall, the access to FDs is good as most patients experience that during opening hours a FD is always available and that it is possible, if necessary, to visit a FD the same day.

Coordination of care

Urban practices are typically more interdisciplinary and with more staff than rural practices, where one-third of FDs are working single-handedly. Apart from these differences, most FDs have regular meetings not only with various other PHC and social workers but also with medical specialists. Connections with community representatives are widespread. The number of referrals made by FDs to medical specialists is extremely high. One fourth of all patients seen in the PHC centre or at home are referred. As usual, urban FDs refer more than rural colleagues do. Many FDs believe they could make fewer referrals if they were better trained.

Continuity of care

As practice populations are relatively stable, conditions for continuity of care are good. Being registered with a specific FD normally means that patients see this doctor at every visit to the practice. Consultation time for the patients is 20 minutes and this seems to be sufficient (three quarters of the patients think so). FDs in most practices reported that they use computers but not for keeping patients' clinical records. In general, there seems to be room for improvement among FDs in consistently keeping patients' clinical records and also in the consistent use of letters to inform medical specialists about a referred patient. In nurse practices, computers are less available and are not used for medical records of patients. Information between nurses and FDs and medical specialists about referred patients seems to occur frequently. Communication between nurses and FDs occurs via regular meetings and shared patient records. Also contacts with medical specialists are generally frequent.

Comprehensiveness of care

Quantitatively speaking, Moldovan FDs (as well as nurses) seem to be well equipped, in urban and rural practice equally. However, some of the items of equipment are never or rarely used. Most FDs have sufficient access to laboratory facilities, but the situation with X-ray diagnostics is worrisome in rural practices because almost all rural FDs have no or insufficient access and patients therefore need to be referred for X-ray examinations. The patients' perception of the medical equipment in the FD's practice contradicts what the FDs report about it. Three quarters of patients in rural areas and almost half of them in urban practices believe that the equipment is sufficient. The clinical task profile of FDs has both strong and weak areas. FDs are relatively strong as the entry point of the health care system for patients' health problems, and they are also well involved in the treatment of diseases. Furthermore, most FDs are involved in screening activities for certain risks and rehabilitation care. In contrast, a lot can be gained in the provision of medical technical procedures (such as minor surgery), in which FDs are only marginally involved. In all task domains, differences between urban and rural FDs are minor. Measured by 13 service items, nurses were broadly involved in most of them.

Quality assurance

Clinical guidelines seem to be well used by FDs and procedures for patient complaints are generally applied. Evaluations, in particular investigations of patients' satisfaction,

are frequently undertaken in FD practices, although more often in urban than in rural practices. Among nurses, the use of clinical guidelines and evaluations of services are areas for improvement.

Selected indicators

Table 1 provides an overview of findings by a set of indicators from the GP survey and the patient survey.

Table 1. Selected PHC indicators in the Republic of Moldova *)

Functions	Selected proxy indicators	Findings FDs (N=250) PHC nurses (N=25) Patients (N=2102)
Stewardship/ Governance	Department in MoH specifically dealing with PHC	No
	Reporting to have patient complaint procedure in the practice	FDs: 99% Nurses: 100%:
Financing	FDs being self-employed (based on survey)	1%
	Patients reporting co-payments for drugs prescribed by FD	95%
Resource generation	Proportion of active physicians in the Republic of Moldova working in PHC	17%
	Average population per FD (nationwide)	1896
	FDs having completed specialization study (3 years)	21%
	Average age of FDs	49 years
	FDs and nurses time reported spent on professional reading (per month)	FDs: 23 hrs. Nurses: 20 hrs.
	Medical Faculties at universities with a specialization in FM	1
	Number of professors in FM	n.a.
	Medical equipment available to FDs (from a list of 30 items) Nurses (from a list of 20 items)	FDs: 25 Nurses:16
	FDs reporting no or insufficient access to laboratory facility	6%
	FDs reporting no or insufficient access to X-ray facility **)	Urban: 1% Rural: 95%
	Availability of a computer in the practice	FDs: 81% Nurses: 20%
	Using the computer for keeping patients' records	FDs: 8% Nurses: 0%
Service delivery		
Access to services	Proportion of patients living within 20 minutes travel from FD practice	48%
	Average number of registered patients per FD	1800
	Average number of patient consultations per day	FDs: 27 Nurses: 17
	Average number of home visits per week	FDs: 12 Nurses:
	Average working hours per week	FDs: 44 hrs. Nurses: 42 hrs.

Functions	Selected proxy indicators	Findings FDs (N=250) PHC nurses (N=25) Patients (N=2102)
	Average length of patient consultations (minutes)	19 minutes
	Number of visits with FD reported by visiting patients per year	8 visits
	Offering evening opening at least once per week	FDs: 55% Nurses: 0%
	Patients reporting same day consultations possible if requested	65%
	Patients who disagreed that the waiting room was convenient	34%
	Patients who disagreed that practice was accessible for disabled people or people in wheelchairs	28%
	FD referral rate to secondary level specialists (as a proportion of all office and home care visits) ***)	24%
	FD referral rate to the secondary level specialists by urban and rural location *)	Urban: 27% Rural: 20%
Coordination	FDs sharing premises with other FD(s), PC workers or medical specialists	Urban: 99% Rural: 63%
	FDs reporting to have regular meetings with practice nurses	95%
	FDs reporting to have regular meetings with pharmacists	70%
Continuity	FDs reporting to keep full medical records routinely	64%
	Patients reporting their FD is unlikely to make a home visit	25%
	Patients reporting to be with this FD for at least 1 year	97%
Comprehen-siveness	FDs' role in first contact care (with18 selected health problems) (range of score 1 (never) – 4 (always))	Urban: 2.9 Rural: 3.0
	FDs' involvement in treatment of diseases (selection of 19 dis-eases; range of score 1 (never)– 4 (always))	Urban: 3.1 Rural: 3.1
	FDs' involvement in the provision of 16 medical-technical and preventive procedures (range of score 1 (never) – 4 (always))	Urban: 1.2 Rural: 1.3
	FDs' coverage of public health activities (based on 8 items = 100%)	100%
	FDs performing cervical cancer screening	100%
	FDs providing family planning / contraception services	100%
	FDs providing routine antenatal care	100%
	FDs performing TB screening	100%
	FDs having regular meetings with local authorities	78%
Quality assurance	Available number of clinical guidelines developed with inputs from FDs	n.a. (many)
	Reporting to frequently use clinical guidelines	FDs: 84% Nurses: 28%
	Reporting investigation of satisfaction of patients	FDs: 84% Nurses:52%
	FDs reporting CME topics fit well with learning needs	58%

*) Findings are based on surveys among 250 FDs, 2102 patients and 25 PHC nurses.
**) According to a MoH Order from 2010 X-ray equipment is not part of the minimal equipment for rural PHC centres.
***) Calculation based on reported visits and referrals made by FDs. Self-referrals are not included.

RECOMMENDED POLICY ACTION[1]

Governance and regulation

Referrals by FDs

- Attempts should be made to reduce the extremely high referral rates of FDs to medical specialists and to reduce the high hospitalisation rates of FDs.

  Referrals and hospital admissions are actions that have major consequences in terms of health care cost. It is important to avoid unnecessary referrals and hospitalisation. As FDs themselves have indicated, the high referral rates of FDs point to a lack in their knowledge and skills. Furthermore, rules set in the 'Unified programme of mandatory health insurance' may unnecessarily involve medical specialists in services that can be provided by FDs. A study of referrals and hospital admissions can show what the problem exactly is and what remedy can be tried. It would be helpful if, on the instigation of the MoH, the National Health Insurance Company would provide FDs with feedback on their referral pattern. Finally, incentives should be developed to encourage FDs to critically consider their referral pattern.

Human resources for PHC

- A human resource planning strategy should be developed for family practice in the Republic of Moldova, not just aiming to stop the diminishing inflow of new FDs but also to solve the problem of uneven regional distribution of health care personnel.

  Due to the lack of FDs, the national practice norm of one FD per 1500 citizens is not feasible. In certain regions this norm has severely been exceeded. The State Medical University that offers a residency programme in FM is producing fewer and fewer residents. This trend should be stopped and curbed as soon as possible, also because the average age of FDs shows that many will retire in the near future. As only 17% of all active physicians are working in PHC, it may be an option to try to identify possible oversupply of physicians in other parts of the health sector. The current Framework Strategy for the Development of Human Resources in the Health System can be the starting point for a more intensive way to tackle this problem.

Computerised medical records

- The use of computers for keeping patients' medical records and exchange of information with other health care workers should be promoted.

  Most FDs have computers but, due to the lack of available information systems, they are only for very limited use. Most nurses have no computer at all at their disposal. The computer can be a powerful tool for both practice management and for the clinical work of FDs. Continuity of care and systematic prevention, both high priorities in PHC, cannot be fully implemented without the support of a practice information

1 The recommendations are based on data from the surveys among FDs, PHC nurses and patients, as well as information gathered among experts at the national level and observations made by the researchers at site visits.

system. Computers are also indispensable for communication between health care workers and shared patient data.

Education and professional development

Recognition and development of FM as a speciality

- FM should be recognised as a medical speciality by including it in the nomenclature of scientific specialities in the Republic of Moldova.

  The position of FDs has been acknowledged and strengthened in the health care system. However, as a medical speciality FM is still weak and poorly visible. It has not been recognised as a medical speciality; it has no tradition of research and lacks a platform for professional reflection and publication. Experiences from other countries show that strong FDs need strong academic roots, including clinical research, practice based teaching and structures to develop and expand the knowledge base and professional development.

Use of clinical guidelines

- Joint efforts should encourage FDs and nurses to adopt and incorporate available clinical guidelines in their daily routines.

  Important achievements have been made to promote quality assurance by means of clinical guidelines. However, it seems FDs and nurses are not sufficiently using them. FDs and nurses indicate that there is room for improvement, in particular among the nurses. Clinical guidelines can be among the tools to try to reduce the referrals. Adoption of guidelines should be a joint effort between CME and the management of PHC facilities. Clinical guidelines can be used to identify performance indicators for FDs and nurses. Guidelines should be used in continuing education courses and be the framework for testing knowledge and skills of health care workers when they are re-licenced.

Financing and incentives

Financial access to services

- It should be investigated whether widespread private payments in health care are an obstacle to service utilization and result in unmet health needs.

  Overall, almost half of the health expenditures in the Republic of Moldova consist of private payments. In the survey, patients indicated that they pay not only for prescribed medicines but also for visits to medical specialists on referral by a FD and for certain services provided by their FD. Out-of-pocket payments have made patients decide not to seek medical care or to delay a visit. It is likely that those deprived from care are those who need it most.

Payment mechanisms in PHC

- It is advised to further develop and implement payment schemes with a focus on specific services to improve quality and performance.

  First steps have been made towards payment systems that reward performance in PHC. However, results have shown very high referral rates and clear gaps in the provision of services at the PHC level.

Service delivery

Comprehensiveness of FD services

- The scope of services provided by FDs should be expanded in the area of minor surgery and other technical procedures.

  It seems the problem of poor FD involvement in these services is not in the equipment; equipment is sufficiently available, but probably not well used due to lack of skills or incentives. Whatever the reason, it should be tackled.

Access to facilities

- Obstacles to access of health care facilities for people with a wheelchair or stroller should be removed; health care facilities with inconvenient waiting areas should be refurbished according to standards.

  In general, patients were not dissatisfied with personnel and services in PHC. However, accessibility for disabled people and the quality of the waiting area were insufficient in a number of practices.

Practice equipment

- Full access to X-ray facilities should be guaranteed for all FDs. The disparity between the availability of medical equipment (as reported by the FDs) and the opinion of many patients about it should be investigated.

  Many items of medical equipment are reported to be available by FDs, but still most patients (especially those visiting rural practices) believe that the practice does not have sufficient equipment. This may point to equipment not being operational or not used for other reasons. It should be investigated, for instance by comparing utilization rates between urban and rural PHC centres, whether rural populations have sufficient access to X-ray diagnostics. X-ray equipment does not belong to the standard equipment of rural PHC centres and patients need to be referred to rayon centres.

1. EVALUATING PHC: BACKGROUND AND APPLICATION

1.1 The theoretical framework of the PCET

Why evaluate PC?

Careful monitoring is called for in any reform process. This is especially true for large-scale, fundamental change, such as health care reform in eastern European countries in economic and political transition. Although strengthening PC services is a priority in many of the countries in the WHO European Region, the nature of such reforms varies greatly from west to east. In Western Europe, PC is expected to help address rising costs and changing demands that result from demographic and epidemiological trends. In the central and eastern part of the Region, however, countries once part of or closely allied with the Soviet Union are struggling to drastically improve the performance and cost-effectiveness of their entire health systems. These countries are now developing PC, which used to function poorly there if it existed at all, to improve overall health system efficiency and bring adequate, responsive health services closer to their populations. In many of these countries, health care reforms have been part of profound, comprehensive changes in essential societal functions and values *(2)*.

Performance evaluations and measurements play an increasing role in health care reforms. Stakeholders need the information to decide how best to steer the health system towards better outcomes *(3)*. In the past, reforms were not always based on evidence, and changes were often driven by political arguments or professional interests rather than sound assessments. That situation is changing. Health care stakeholders are holding decision-makers increasingly accountable for their choices, demanding evidence from them on, for instance, the progress of reforms.

In addition, demographic and epidemiological changes require that health systems adapt to new population demands. Effective adaptation requires that the systems evaluate the responsiveness of health services from the patient perspective. Such evaluations can provide information about how accessible and convenient services are, how health workers treat patients, how patients receive communications that may affect their behaviour and well-being and how health care is managed, both at the PC level and beyond.

However, health system evaluations and performance assessments should be contextualized appropriately before they inform policy-making and regulation. Not only do governments use such material directly, but in exercising their stewardship role they should also generate an appropriate flow of information, make it available to other health system stakeholders and ensure that the relevant analytical capacity is in place *(3)*.

Finally, system evaluations and performance assessments should be based on a proper framework. Deriving indicators from an accepted framework helps ensure that the indicators are relevant and that they cover key topics sufficiently. The following sections describe the framework used to develop the PCET.

PC evaluation and the health systems framework

A health system can be defined as a structured set of resources, actors and institutions related to the financing, regulation and provision of health actions to 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 optimise the health status of an entire population throughout the human life-cycle, including cases of both premature mortality and disability *(3)*.

Health systems aim to achieve three fundamental objectives *(1, 4)*:

- *improved health* (e.g. 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); client orientation (including prompt attention, access to services, basic amenities and choice of provider); and
- *guaranteed financial fairness* (including fairness in household contributions to national health expenditures and protection from financial risks resulting from health care).

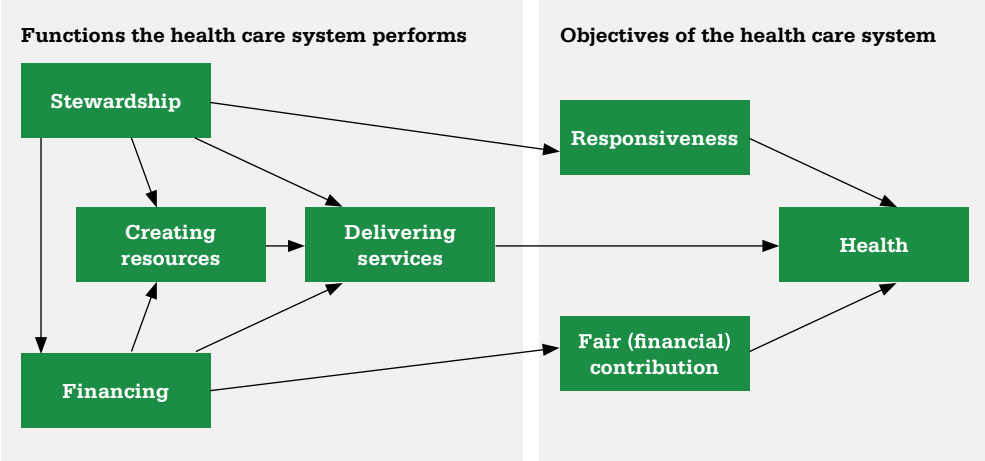
A health system's overall performance is reflected in how successfully it attains these goals. However, as health conditions and health systems both vary among countries, the country context needs to be addressed when comparing the performance of health systems. Thus, the measurement of performance should cover both goal attainment and available resources and processes.

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

- stewardship
- resource generation
- financing
- service provision.

Although the international literature presents other approaches to performance measurement *(5–8)*, they all employ similar insights or related concepts. The four functions can be applied to the whole health system of a country or, for example, to PC only, with specific subcharacteristics for PC service provision.

Fig. 1. WHO health system functions and objectives



What does each health system function encompass?

Stewardship

Stewardship is an overriding function, overseeing all basic health system functions but more broadly than regulation. It affects health system outcomes both directly and indirectly *(1)*. Stewardship encompasses the tasks of defining the vision and direction of health policy, exerting influence through regulation and advocacy, and collecting and using information. It has three main aspects: i) setting, implementing and monitoring the rules for the health system; ii) assuring a level playing field for purchasers, providers and patients; and iii) defining strategic directions for the health system as a whole. Stewardship can also be subdivided into the subfunctions of overall system design, performance assessment, priority setting, regulation, intersectoral advocacy and consumer protection *(4)*. In short, stewardship involves governing, disseminating information about, coordinating and regulating the health system at various levels.

Resource generation

Not only does every level of a health system need a balanced variety of resources to function properly, but they also have to be further developed to sustain health services over time and across various levels and geographical areas. The resources needed include facilities, equipment, consumable supplies, human resources, knowledge and information.

It is especially crucial that the quantity and quality of human resources adequately matches the demand for services across the various levels of health care, and that they are equitably distributed across the country. Naturally, to ensure quality of care, the skills and knowledge of health providers need to be up to date and compatible with developments in technology and evidence-based medicine. Policy development that concerns human and physical resource planning falls under the stewardship function, as do regulatory frameworks for assuring high-quality service provision and consumer protection. However, actual workforce volume, distribution and professional development (including training, CME and research) are usually measured as part of resource generation.

Financing

In general, financing deals with the mobilization, accumulation and allocation of funds to cover the health needs of the people, individually and collectively, in the health system *(9)*. The financing function in health systems is defined by Murray & Frenk *(4)* as "the process by which revenues are collected from primary and secondary sources, accumulated in fund pools and allocated to provider activities". Three subfunctions can be distinguished: revenue collection, fund pooling and purchasing. Revenue collection means the mobilization of funds from primary sources (such as households and firms) and secondary sources (such as governments and donor agencies). There are a number of mechanisms through which funds can be mobilized, varying with context, e.g. out-of pocket payments, voluntary insurance rated by income, voluntary insurance rated by risk, compulsory insurance, general taxes, earmarked taxes, donations from nongovernmental organizations (NGOs) and donor agency transfers. Fund pooling uses various forms of health insurance to share and reduce health risks. Purchasing is the allocation of funds to cover the costs (e.g. for staffing, durable goods and operations) of health providers, whether institutional or individual, for specific interventions *(4)*. The way these subfunctions are organized and executed affects the accessibility of health services.

Service delivery

Service provision involves the mix of inputs needed to deliver health interventions within a specific organizational setting *(4)*. It includes preventive, curative and rehabilitative services delivered to both individual patients and larger populations (e.g. through health education and promotion) in public or private institutions. Providing services is what the health system does – not what the health system is.

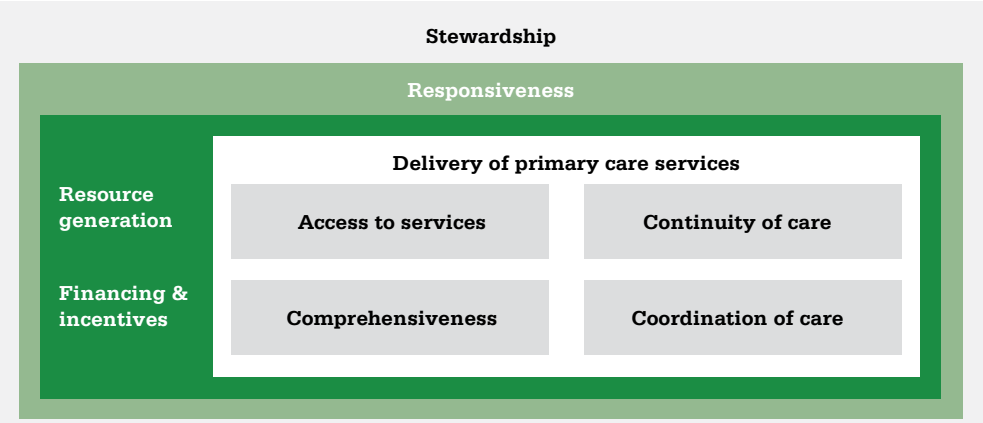
The Primary Care Evaluation Framework

The characteristics of PC vary from country to country, and different definitions of what constitutes PC exist (see Annex 2). However, a comprehensive or well-developed PC system should have the following characteristics:

> *Primary (health) 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 (see Fig. 2), from which the PCET has been developed, encompasses the four health care system functions (as described above) combined with the four key characteristics of primary (health) care services that are part of service delivery.

Fig. 2. Primary Care Evaluation Framework



What do the four key characteristics of a good PC system involve?

Access to services

In general, access to health services can be defined as the ease with which health care is obtained *(6)*. Alternatively, it can be defined as "the patients' ability to receive care where and when it is needed" *(11)*. There are various physical, psychological, sociocultural, informational and financial barriers that restrict accessibility. For instance, the Primary Care Evaluation Scheme addresses geographical 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, out-of-pocket payments).

Continuity of services

Health care interventions should be geared to patient needs over an extended period and cover subsequent episodes of care and treatment. A general definition of service continuity is "follow-up from one visit to the next" *(12)*. WHO provides 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 visits over the long term (longitudinal continuity)" *(11)*.

Several levels of continuity have been distinguished *(13)*. First, 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. Second, longitudinal continuity points to an accessible, familiar environment where a patient customarily receives health care from a provider or team of providers. Third, interpersonal continuity is an ongoing personal relationship between patient and provider, characterized by personal trust and respect *(13)*. Reid et al. also add management continuity, the provision of timely, complementary services as part of a shared management plan *(14)*. The Primary Care Evaluation Scheme includes informational, longitudinal and interpersonal continuity of care.

Coordination of delivery

Particularly because PC is the most common entry point to health care and often provides a gatekeeping function to other levels of care, the coordination of services at PC level is a key determinant of the responsiveness of health service provision and the health system as a whole. The potential for problems in coordination are particularly evident at the interfaces between primary and secondary care, and between curative care and public health services in the field of health promotion *(15)*. A general definition of coordination is "a technique of social interaction where various processes are considered simultaneously and their evolution arranged for the optimum benefit of the whole" *(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).*

In the Primary Care Evaluation Scheme, the dimensions of coordination include collaboration within the same PC practice, collaboration between PC providers (e.g. GPs, home care nurses, physiotherapists, etc.) and collaboration between primary and other levels of care through consultation and referral.

Comprehensiveness

Comprehensiveness can be defined as the extent to which a health care provider directly offers a full range of services or other provider or specifically arranges for their provision elsewhere *(16)*. In the PC setting, comprehensiveness refers to the fact that services can encompass curative, rehabilitative and supportive care, as well as health promotion and disease prevention *(15, 17)*. It also refers to the ability to consider several conditions at a time in one patient, particularly chronic conditions. The comprehensiveness of services refers not only to the range of services provided but also to practice conditions, facilities, equipment and the professional skills of the primary service provider. PC workers' linkages to community services and the community also play a role. All these dimensions are incorporated in the Primary Care Evaluation Scheme.

The Primary Care Evaluation Scheme

Taking the Primary Care Evaluation Framework *(1)* as its basis, the Primary Care Evaluation Scheme provides further details by focusing on specific measurable topics and items relating to essential features and national priorities for change in primary (health) care and the facilitating conditions. The Primary Care Evaluation Scheme, which forms the basis of the PCET, includes a number of key dimensions that have been identified for every PC system function. Each dimension has in turn been translated into one or more information items or proxy indicators for the dimension (see Table 2).

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

FUNCTION	SUBFUNCTION	DIMENSION	SELECTED ITEMS/PROXIES
STEWARDSHIP		Policy development	PC policy priorities
		Professional development	(Re-) accreditation system for PC
			Quality assurance mechanisms for PC
		Conditions for the care process	Laws and regulations
			Human resources planning
		Conditions for responsiveness	Involvement of professionals and patients in policy process Patient rights; complaint procedures
RESOURCE GENERATION		Workforce volume	Numbers and density
		Professional development	Role and organization of professionals
			Education in PC
			Scientific development and quality of care
		Professional morale	Job satisfaction
		Facilities and equipment	Medical equipment
			Other equipment
FINANCING and INCENTIVES		Health care/PC financing	PC funding
		Health care expenditures	Expenditures on PC
		Incentives for professionals	Entrepreneurship
			Mode of remuneration
		Financial access for patients	Cost sharing / out-of-pocket payment for PC
DELIVERY OF CARE	ACCESS to Services	Geographical access	Distance to PC practice
			Distribution of PC physicians
		Organizational access	List size
			PC provider workload
			PC outside office hours
			Home visits in PC
			Electronic access
			Planning of non-acute consultations
		Responsiveness	Timeliness of care
			Service aspects
			Clinics for specific patient groups

FUNCTION	SUBFUNCTION	DIMENSION	SELECTED ITEMS/PROXIES
	CONTINUITY	Informational continuity	Computerization of the practice
			Medical records
		Longitudinal continuity	Patient lists
			Patient habits with first contact visits/ referrals
			Endurance of patient-provider relation-ship
		Interpersonal continuity	Patient-provider relationship
	COORDINATION	Cohesion within PC	PC practice management
			Collaboration among general practitio-ners/FDs
			Collaboration of PC physician with other PC workers
		Coordination with other care levels	Referral system/gatekeeping
			Shared care arrangements
	COMPREHEN-SIVENESS	Practice conditions	Premises, equipment
		Service delivery	Medical procedures
			preventive, rehabilitative, educational activities
			Disease management
		Community orientation	Practice policy
			Monitoring and evaluation
			Community links
		Professional skills	Technical skills

To evaluate the complexity of a PC system properly, the PCET gathers information from different administrative levels and from both supply and demand sides, i.e. from health providers and patients. The PCET accordingly consists of three separate questionnaires:

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

Together, these questionnaires cover the PC functions, dimensions and information items identified in the Scheme. The physician and patient questionnaires are pre-structured. The national questionnaire contains both pre-structured and open-ended questions, and it lists the statistical data to submit.

1.2 PCET development and pilot testing

Development of the PCET 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 for the tool has been described in more detail elsewhere *(18, 19)*.

Literature review

As a first step, researchers at NIVEL conducted a directed literature study, based on the WHO performance framework *(1),* to gather information on possible ways to measure the key PC system functions. They paid particular attention to PC indicators and existing PC performance measurement and evaluation tools and questionnaires. They produced a preliminary listing of dimensions and items for the tool.

First consultation with experts from the European Region

A meeting of international experts was convened in March 2007 to discuss the outcomes of the literature study. Primary objectives for the meeting were to discuss and reach consensus on key concepts and definitions; to discuss and endorse the provisional set of dimensions, proxy indicators and information items for the PCET; and to improve the initial version of the Primary Care Evaluation Scheme (see Table 2) in order to develop questions for the questionnaires. Participants also took the first steps towards a pilot implementation of the provisional tool.

Drafting, validating and translating the questionnaires

Draft versions of the questionnaires were developed on the basis of the information and feedback from the expert meeting. Comments from the experts on these versions were incorporated in new versions of the three questionnaires. These versions were subsequently tailored to the situation in each country where the tool would be piloted: the Russian Federation and Turkey. The terminology was adapted for the national situations and, at the request of health authorities in the two Member States, some additional questions were included on topics related to national PC priorities. The final versions were translated into Russian and Turkish with input from a PC expert, then back-translated into English and compared to the original version.

Two pilot implementations

The provisional tool was piloted in two provinces of Turkey and two districts of Moscow Oblast, Russian Federation. Under the supervision of the Regional Office and the respective health ministries in the pilot countries, local partners worked together with the technical leader from NIVEL to organize the details of the fieldwork, including sampling procedures, fieldworker training, and the logistics of data collection and entry. In both countries, meetings were organized with experts to discuss and validate the answers to the national PC questionnaires. The data were analysed, the conclusions and policy recommendations formulated and a report was produced for each pilot implementation, including a section on lessons learned *(18, 19)*.

Copenhagen consultation meeting

A review meeting with international experts discussed the draft report at the Regional Office in Copenhagen on 14 and 15 April 2008. The meeting revised the three questionnaires, making a variety of major changes. Specifically, it:

- rewrote questions to encourage factual responses instead of soliciting opinions;
- reordered the sequence of topics and questions;
- changed the national PC questionnaire into a questionnaire and a template for a more comprehensive background document to be prepared by a small team of local experts (materials that a focus group directed by WHO and NIVEL would subsequently discuss and approve);
- reduced the size of the physician and patient questionnaires;
- made terminology and wording more consistent throughout the questionnaires;
- decided to complement 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;
- determined 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
- decided that the final report would contain a set of proxy indicators.

After revision, the PCET was made available to the countries of the European Region. To inform implementers in each Member State, an implementation scheme was prepared, describing the steps involved in utilizing the PCET.

1.3 Implementing the PCET in the Republic of Moldova

The BCA context

The 2010–2011 BCA between the MoH of the Republic of Moldova and the WHO Regional Office for Europe specified implementing the PCET as an activity. The first preparations for implementing the Tool were made during a visit to the Republic of Moldova by the WHO Regional Office for Europe representative in March 2011. A national working group was established to guide the project through different stages and to comment on the draft report.

The WHO Regional Office for Europe's project partners were the MoH, the National Centre of Health Management and, in its capacity as WHO collaborating centre, NIVEL (the Netherlands Institute for Health Services Research). Preparations for the technical implementation effectively started in June 2011.

Country visits for information and planning

At different stages of implementation in the Republic of Moldova, experts from the WHO Regional Office for Europe and NIVEL paid three visits to the country. As mentioned, the first one took place in March 2011 and included a preparatory mission to introduce the Tool to the WHO Country Office and the MoH and to inform and build commitment.

On 12–13 May 2011, a Policy Dialogue on PHC in the Republic of Moldova was held in Chișinău. This Policy Dialogue, jointly organized by the MoH, the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies, aimed to:

- develop a shared understanding of the goals of PHC in the modern world;

- identify the steps required to implement the PHC policy successfully, including its organization, the interaction with other services and referral mechanisms and improving the quality of services; and
- learn from foreign experiences on successful policy implementation.

On 16–17 May 2011, another project mission took place that aimed to:

- further inform national counterparts and MoH on PCET implementation;
- conduct some more field visits to PHC practices;
- conduct a workshop with the national working group to:
  - » adapt the questionnaires of the PCET to local circumstances;
  - » discuss next steps in the process of the implementation of PCET in the Republic of Moldova;
- draft terms of reference for the national counterpart for project implementation.

It was decided that a limited sample of PHC nurses would be included in the PCET study. Therefore, a nurse questionnaire was also developed.

The visit by the experts from 7 to 9 November 2011 focused on:

- exchanging information with the National Centre for Health Management as the local counterpart in PCET;
- discussing and establishing the final version of the nurses' questionnaire;
- discussing and establishing the sampling procedure for doctors, nurses and patients;
- discussing and agreeing on the fieldwork (implementing the three surveys). Each fieldwork team consisted of four interviewers: one for the FDs and three for the patients;
- discussing the organization of the data entry for the three surveys (using the data entry programmes provided by NIVEL);
- training fieldworkers;
- organizing/progress on the answering of the national level questionnaire;
- logistics and planning of future activities. As self-administered questionnaires would not work in the Republic of Moldova, it was decided that all questionnaires would be administered by the fieldworkers by means of interviews.

Adaptation and extension of the PCET

The questionnaires have been adapted for use in the Moldovan context and some new questions have been inserted.

In the FD questionnaire, the changes and additions concerned the following:

- various questions and terminology were accommodated; some answering categories adapted or removed if not applicable;
- answers to the questions on employment status were adapted;
- for urbanization of the practice location, categories were changed;
- the distance from the practice to nearest ambulatory specialist care facility was added;
- the distance to the most remote district served was added;
- a question on whether the CME topics offered met the needs of doctors was added:
- the time needed after a consultation to fill in documentation was added;
- face-to-face meetings with social assistants and nurses for palliative care was added;

- the expectation of whether referrals could diminish if FDs were better trained was added;
- whether difficulties were experienced with the hospitalisation of patients was added.

In the patient questionnaire, the changes and additions concerned the following:

- as in the doctors questionnaire, questions and terminology were accommodated and some answering categories adapted or removed if not applicable;
- a question about delaying or abstaining from a visit because of problems with paying for medicine was added;
- a question about poor communication with the doctor because of lack of privacy in the consultation room was added;
- a question about patients' perception of the FD being well trained and capable was added.

In the questionnaire for (independently working) nurses, the terminology was adapted and one question was added about the distance to the PHC centre.

For the national level questionnaire, no additional topics were suggested.

Target populations, sampling procedure and survey approach

The target populations for the physicians' survey were FDs. For the patient survey, the target population was visitors to the FDs participating in the survey. In the case of children accompanied by an adult during their visit to the PHC centre, the adult was asked to answer the questionnaire. The survey had a nationwide coverage. Official lists of FDs and nurses were used as the sampling frame.

The overall target response was 250 FDs and at least 2000 patients. For the patients' response, no exact number was established because in rural practices the target of ten patients per practice was unlikely to be feasible. The target in rural practices was 7–10 patients. For the sampling of doctors, existing statistical data on the number and regional distribution of FDs and the urbanization characteristics of the practice locations were used. The sampling of patients was from the practice of the selected FDs: the target was ten in urban practices and at least seven in rural ones. Approximately 25% of all FDs are working in the capital Chișinău and 75% in the regions.

- From Chișinău the target decided was 70 FDs and 700 patients. The FDs were randomly selected from the Family Doctor Centres (CFD) of the public health institutions (PMSI) in the following five city districts: Centru, Botanica, Buiucani, Riscani and Ciocana. In each district, 14 FDs and 140 patients were selected.

- In the town of Balti (where a slightly different system is in place), 12 FDs were randomly selected in the PMSI CFD Balti and 120 of their patients.

- From rural PHC centres, the target was 168 FDs and at least 1260 patients. Equal numbers of FDs were randomly sampled from the three regions of the country as follows: South - 56 FDs and approximately 400 patients; Central - 56 FDs and approximately 400 patients; North - 56 FDs and approximately 420 patients.

In the *Southern* region, 14 FDs and around 100 patients were recruited in each of the following four rayons: Stefan Voda; Causeni; Cimislia; and Comrat.

In the *Central* region, 14 FDs and around 100 patients were recruited in each of the following four rayons: Anenii Noi; Orhei; Hincesti; and Calarasi.

In the *Northern* region 14 FDs and around 100 patients were recruited in each of the following four rayons: Falesti; Floresti; Donduseni; and Ocnita.

The selection of FDs from the PHC centres at rayon level was randomly done, based on the existing lists of the PMSI CFD in the rayon.

Response and analysis of response

Via the district health management, fieldworkers made an appointment with the FDs to visit their practice. No mention was made of FDs who refused to participate. During the visit, the FD and visiting patients were interviewed. Among the FDs, the target of 250 respondents was achieved. In urban practices, ten patients were interviewed per practice, while in rural practices this was between seven and ten, depending on the amount of visiting patients at the time fieldworkers attended the practice. The total response of interviewed patients was 2102, which is in line with the target. No information was kept about the number of patients that refused to be interviewed.

Role of fieldworkers

The teams of fieldworkers had a crucial role in the data collection among FDs as well as patients. One of the fieldworkers interviewed the FD, while the other three members of the team recruited and informed the patients and held the interview with those who consented. Fieldworkers were recruited by the National Centre of Health Management and trained by NIVEL for this task. This training addressed the following topics:

- an explanation of the context and objectives of the survey;
- the basic principles and structure of the Tool and the type of questions used;
- the specific topics of the questionnaires;
- how to approach and assist respondents and to establish a good rapport by clear explanation and stressing confidentiality;
- creating a suitable environment for patients to fill in the questionnaire;
- checking readability and completeness of answers; and
- logistics, such as allocation to the locations, planning and transport.

Information gathering at the national level

A team of experts from the MoH contributed to answering the questionnaire/checklist about the national situation of PHC. This information and the provided statistical data were forwarded to NIVEL where the information and answers were considered and any additional need for information was identified. The information provided forms the basis for the description of the national situation of PHC in Chapter 3 of this report.

Data processing, analysis and reporting

Data entry was carried out by the National Centre of Health Management using a data-entry program provided by NIVEL. Raw data files were sent to the NIVEL research team for processing and analysis. A draft report with results and preliminary recommendations

was discussed in a meeting with Moldovan and WHO experts in Chişinău on 24 May 2012. Details on the application of the PCET in the Republic of Moldova are summarized in Table 3.

Table 3. Key data on the application of the PCET in the Republic of Moldova

ELEMENTS OF THE IMPLEMENTATION	EXPLANATION
Target groups	FDs in urban and rural practices Patients visiting FDs Health care experts (for information at national level)
Locations	All regions of the Republic of Moldova
Type of data collection	FD survey using pre-structured questionnaires (personally administered via interviews taken by fieldworkers) Patients: survey using pre-structured questionnaires (personally administered via interviews taken by fieldworkers) Health care experts: mixed approach involving a questionnaire and meeting for validation and feedback Observations during practice visits and interviews with FDs
Method of recruitment / inclusion	FDs: random samples in Chişinău and regions Patients: 10 subsequent patients attending the practice of FDs included in the survey (in rural practices at least 7) Health care experts identified and recruited by MoH
Planned sample sizes	FDs: 250 Patients: at least 2000 (in 250 FD practices)
Response	GPs: 250 Patients: 2102
Instructions	To the local coordinator about sampling method and recruitment, identification of study populations, lists of FDs, and logistics of surveys To fieldworkers about the explanation of questions, how to approach and interview respondents, quality aspects To respondents included an introduction and explanation to the questionnaires by fieldworkers
Coordination of fieldwork	Local coordinator: overall responsibility Fieldworkers: information to (candidate) respondents; correct administration of data collection in their facilities NIVEL: general supervision
Data entry	Organized by National Centre of Health Management, under auspices of NIVEL.
Analysis & draft reporting	NIVEL (Utrecht, Netherlands)
Validation and final report	NIVEL; WHO Regional Office for Europe; and the MoH of the Republic of Moldova

INTRODUCTION TO THE REPUBLIC OF MOLDOVA

2.1 The country

The Republic of Moldova is situated in Eastern Europe, landlocked between the neighbouring countries of Romania and Ukraine and has a surface area of 33 843 m^2. The Capital of the Republic of Moldova is Chișinău, which is also the largest city of the country. The first Moldovan state was declared in 1359. Due to the central location within Eastern Europe however, it has a history of being influenced by several foreign powers over the centuries. The territory of the present Republic of Moldova has been invaded by Greeks, Huns, Bulgars, Mongalians, Turks and Romans. After having been part of Romania between World War I and World War II, it became part of the Soviet Union. When the former Union of Soviet Socialist Republics (USSR) dissolved in August 1991, the Republic of Moldova became independent. The constitution of the Republic of Moldova was adopted on July 29, 1994 *(20, 21)*.

Fig. 3. Map of the Republic of Moldova

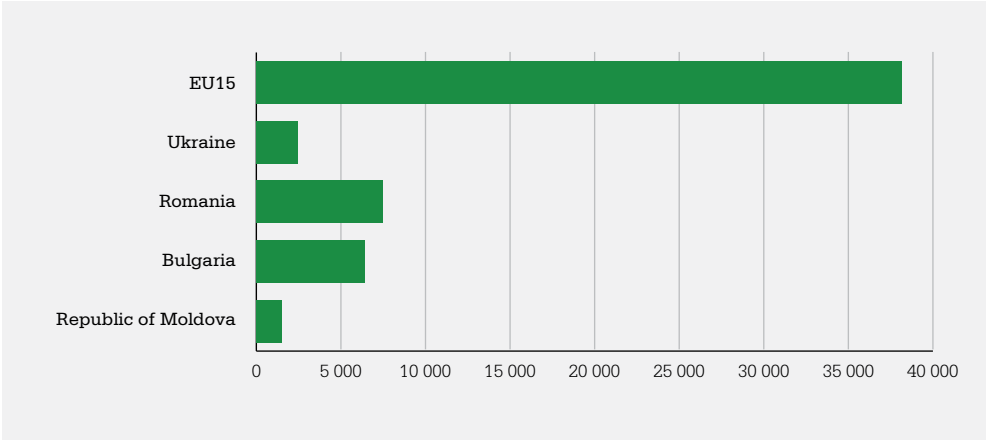
Source: United Nations Cartographic Section. Map of Republic of Moldova, September 2008, Map No. 3759, Rev. 4

The administrative and territorial organization of the Republic of Moldova and the legal framework for the villages (communities), sectors and cities and administrative-territorial units are regulated in the Republic of Moldova Constitution. Administratively, the Republic of Moldova is divided into 32 counties (districts), 3 municipalities (Chișinău, Bălți, Bender), and 2 autonomous territorial units (Gagauzia and Transnistria). The executive power is in the hands of the national government. The Parliament elects a president for a four-year term who shares executive power with the Cabinet of Ministers. The President, as the head of state, designates a candidate for the function of Prime Minister, who requires a vote of confidence by the Parliament. The executive, legislative and judicial powers are separated and cooperate according to the supreme law of the Constitution of the Republic of Moldova *(20, 22)*.

The country maintains firm relationships with the European Union, which are currently formulated under the European Neighbourhood Policy *(23)*. The Republic of Moldova is a member of the Commonwealth of Independent States (CIS) *(20, 24)*.

After the independence in 1991, the Republic of Moldova needed to shift towards a market economy. This resulted in a significant economic recession and falls in the standard of living. Between 1991 and 1999, gross domestic product (GDP) fell by 60% *(10, 11)*. In 2000, two thirds of the population (67.8%) was living below the absolute poverty line of US$1 per day, but by 2010 the situation was much improved as less than a quarter (21.9%) lived below this poverty line *(20)*. After a decade of economic crisis, recovery started from 2000 onwards, with GDP rates almost doubling between 2002 and 2010 (89% increase). Currently, the Republic of Moldova is approaching a middle income status. Despite this economic growth, it remains one of the poorest countries within the WHO European Region, as shown in Fig.4.

Fig. 4. Gross domestic product per capita in US dollars in 2009 *(25)*

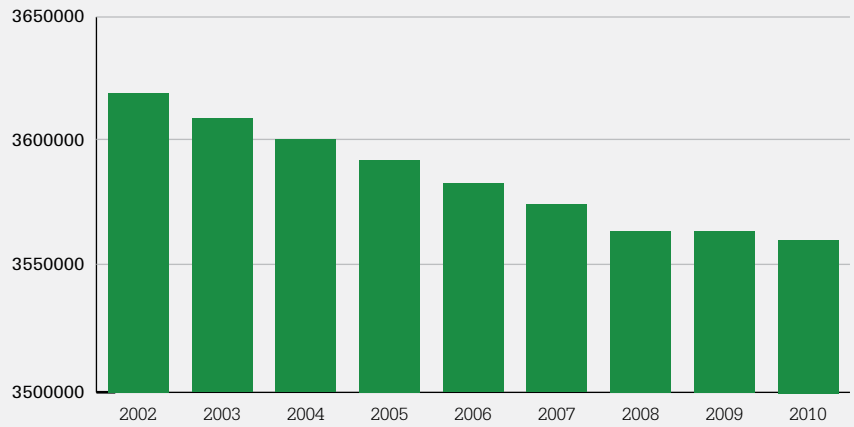


The Republic of Moldova relies almost completely on imported energy supplies as it has no natural energy resources of its own. The most important sources of income are from agriculture *(25)*.

2.2 Population and health

The latest available data shows that the population of the Republic of Moldova was 3.56 million by 1 January 2011, with an expected growth rate of -1.014%. The male to female ratio is 48% versus 52% respectively. Since 2002, the population of the Republic of Moldova has been steadily decreasing, as can be seen in Fig. 5. This trend is comparable to other countries in the region and is largely attributable to emigration.

Fig. 5. Population of the Republic of Moldova from 2002 to 2010

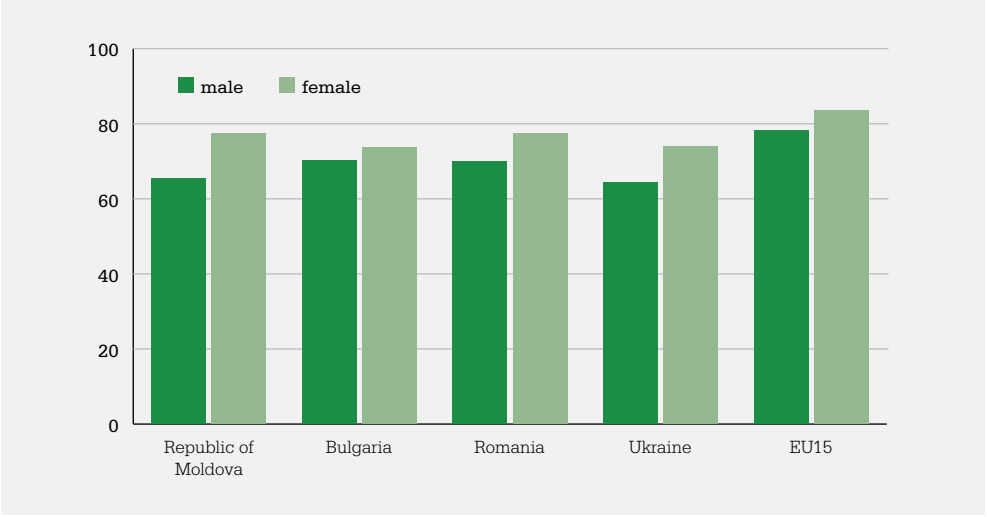


Just over half of the Moldovans live in urban areas (50.9%), with 664 700 people living in the capital city of Chișinău *(5, 11)*. The Moldovan population is multiethnic, with Moldovans constituting the largest group (78.2%). Other ethnicities are Ukrainian (8.4%), Russian (5.8%), (Gagauz 4.4%), Bulgarian (1.9%) and many others, the latter jointly representing 1.3% of the population (2004 Population Census results) *(24)*.

The average life expectancy at birth for Moldovans is 69.4 years, which is comparable to other countries in the region, as shown in Fig. 6. Compared to the countries belonging to the EU before May 2004 (EU15)[2], however, Moldovan men and women have a considerably shorter life expectancy (minus 12.9 years and 6.2 years respectively). The Moldovan population is relatively young. The proportion of the population younger than 15 exceeds that of the proportion of the population older than 64 (16.6% versus 10.1% respectively). This phenomenon is also seen in Romania, whereas in other countries in the region the elder population is largest (see Table 4).

2 The 15 countries that were members of the EU before the enlargement on 1 May 2004: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom

Fig. 6. Male and female life expectancy in years at birth, 2009 *(22)*



The death rate in the Republic of Moldova is comparable to the one in Romania, whereas Ukraine and Bulgaria have higher death rates. However, as can be seen in Table 4, it is considerably higher compared to the mean death rate of the EU15 countries. The Republic of Moldova has a double epidemiological burden as both communicable and noncommunicable diseases have increased since independence. Morbidity due to infectious and parasitic diseases is around twice as high compared to EU15 countries and Bulgaria and Romania. Mortality rates in the Ukraine, however, are twice as high as in the Republic of Moldova. Tuberculosis (TB) in particular remains an increasing public health threat in the country, with an increase in incidence of 22% from 2002 until 2010, and almost triple the rate of 1990. The incidence rate in 2010 is estimated to be 182 per 100 000 inhabitants. TB specialists, however, estimate that the actual incidence is likely to be 50% higher than the officially documented cases. Throughout the Republic of Moldova, TB rates in prisons are much higher than in the general population, estimates of incidence rates of 6000 cases per 100 000 have been made in 2009 *(22)*.

The main causes of death in the Republic of Moldova are diseases of the circulatory system. As shown in Table 4, the rate is similar to that of the Ukraine, but over four times higher than the average for countries of the EU15. Malignant neoplasm's, or cancers, are also responsible for large numbers of deaths; however, this is comparable to regions and countries of the EU15. Poverty, tobacco use and harmful use of alcohol are major health threats in the Republic of Moldova and have a significant impact on society. In particular, harmful use of alcohol has a serious impact on the lives of Moldovans. In the global status report on alcohol and health (WHO, 2011) the Republic of Moldova was ranked as the country with the highest alcohol consumption in the world, with an average consumption of almost 21 litres of pure alcohol per person per year *(26)*.The effects of this high alcohol use are also reflected in the high prevalence of chronic liver disease and cirrhosis, which is ten times higher in the Republic of Moldova than it is in countries of the EU15 and also much higher than countries in the region. The high levels of externally caused injury and poison contribute much more to mortality rates than in the countries of the EU15. This is not unusual for countries in this region *(26)*.

The Republic of Moldova has a relatively high birth rate, while the total number of children per woman is relatively low compared to the other countries presented in Table 4. Women in the EU15 countries have on average 1.6 children, compared to 1.3 for Moldovan women. Maternal mortality is very high compared to countries in the region and eight times higher than in EU15 countries. Although differences are smaller, infant mortality rates are also high. Abortion rates are high and have been historically. In the absence of available high quality contraceptives, poor family planning and inadequate training for health care professionals, abortion has been applied as a tool for birth control. Since independence, however, contraceptive use has increased significantly and with that a dramatic decline in abortions can be seen *(27, 28, 29)*.

Table 4. Selected demographic, health and lifestyle indicators (30, 31)

Indicator	Republic of Moldova	Bulgaria	Romania	Ukraine	EU15
Population 0–14 years (%)	16.6	13.7	15.1	14.2	15.7*
Population 65+ years (%)	10.1	17.6	14.9	15.5	17.9*
Life expectancy at birth (years) Total	69.1	73.8	73.6	69.7	81.0*
Crude death rate (per 1000)	12.2	14.6	12.1	15.3	9.3*
Live birth rate (per 1000)	11.4	10.0	9.9	10.9	10.8
Total fertility rate (children per woman)	1.3	1.5	1.3	1.47*	1.6*
Maternal deaths (per 100 000 live births)	44.5	8.0	24.0	23.3	5.5
Infant mortality (per 1000 live births)	11.8	9.4	9.8	9.1	3.7*
Abortions (per 1000 live births)	365.3	417.8	480.3	248.8*	222.4*
Infectious and parasitic disease SDR	18.8	6.6	10.4	30.4	9.2*
Diseases of circulatory system SDR	731.1	621.7	539.8	732.7	174.6*
Malignant neoplasm's SDR	165.3	156.4	180.1	158.2	163.7*
Chronic liver disease and cirrhosis SDR	102.8	15.5	46.6	36.0****	10.2*
External cause injury and poison SDR	103.1	35.0	53.3	88.4	31.9*
Regular daily smokers 15+ (%)	27.1****	32.7****	20.2**	22.5**	25.6*
Pure alcohol consumption (litres per capita)	20.6**	10.0*	12.7*	9.8***	10.6***

(2010, unless otherwise stated) (SDR = standardized death rates,*=2009 data, **=2008 data, ***=2007 data, ****=data before 2007)

2.3 The health care system

After the Second World War, the Soviets introduced a health care system based on the Semashko model. This model emphasizes a curative focus with an extensive health infrastructure with large numbers of health professionals at work. The economic transition after the collapse of the Soviet Union was responsible for socioeconomic changes resulting in a fall in the population's standards of living and health status. The state budget allocation towards the health care sector decreased dramatically. Inequalities in access grew and the high levels of out-of-pocket payments increased health care

cost considerably. Additionally, the health care that was provided became increasingly ineffective due to limited resources and out-dated practices *(32)*.

In 1998 a law on compulsory SHI was adopted but, because of the financial crisis, implementation was delayed. In 2003, a pilot was started in the rayon of Hincesti and in 2004 the SHI was implemented countrywide. The introduction of SHI has significantly reduced barriers and improved the care for insured people. Service utilization has increased considerably. Nevertheless, financial barriers still exist for the uninsured, which are population groups who tend to have worse health and thus a higher health care need *(28)*.

The MoH is responsible for the population's health; the functions of the MoH include policy development, quality control and overall stewardship of the health care system and the health reform programme. The total health expenditure per capita is low, as shown in Table 5, even compared to the region, but especially when compared to the average health expenditure of the EU15. However, as a proportion of the GDP it is very high. The total health expenditure was 11.9% of the GDP in 2009, which is considerably higher than its neighbouring countries and higher than the countries of the EU15. The cost of health care, however, largely remains with the population. The out-of-pocket payments consist of 45.3% of total health expenditure. Ukraine has similar out-of-pocket payment levels, while in other countries, especially in the EU15, out-of pocket payments are much lower.

Table 5. Selected health care expenditure indicators (2009) *(22)*

Indicator	Republic of Moldova	Bulgaria	Romania	Ukraine	EU15
Health expenditure (per capita)	341.1	985.5	773.0	445.2	3630.9
Total health expenditure (% of GDP)	11.9	7.4	5.4	7	10.5
Private households' out-of-pocket payment on health (% of total health expenditure)	45.3	35.3	17.0	42.1	13.9

Information on health care resources and utilization is provided in Table 6. Compared to surrounding countries and the EU15, the Republic of Moldova has the lowest number of hospitals with only 2.33 per 100 000 people. The number of hospital beds per 100 000 is moderate and higher than in the EU15. The number of physicians is moderate and comparable to the region. Bulgaria and the average EU15 countries have the highest number of physicians. However, the number of inpatient surgical procedures per year is two thirds the number in EU15 countries and Bulgaria.

The number of general practitioners (FDs) in the Republic of Moldova is relatively low, almost half the number of the countries of the EU15. Only Ukraine has fewer GPs per 100 000. The number of nurses is moderate compared to other countries in the region but lower than in the EU15. Compared to the surrounding countries, the Republic of Moldova has many pharmacists, almost equal to the EU15 countries. Moldovans have an average of 6.3 outpatient visits per person per year, which is comparable to the EU15.

Table 6. Selected health care resources and utilization indicators (2009; unless otherwise stated) *(22)*

Indicator	Republic of Moldova	Bulgaria	Romania	Ukraine	EU15
Hospitals (per 100 000)	2.3	4.6	2.5	5.4	2.7
Hospital beds (per 100 000)	615.3	659.7	662.3	865.8	531.6
Physicians (per 100 000)	313.0	369.0	225.8	315.5	346.1
General practitioners (per 100 000)	54.1	65.3	83.1	34.5	96.8
Nurses (per 100 000)	750.3	421.4	566.2	785.7	905.6
Dentists (per 100 0000)	45.5	85.6	58.0	42.2	68.7
Pharmacists (per 100 000)	80.4	n.a.	55.4	47.8*	84.5
Outpatient contacts (per person per year)	6.3	n.a.	4.7	10.7	6.5*
Inpatient surgical procedures per year (per 100 000)	4390.3	6892.9	n.a.	5209.2	6598.7

n.a. = not available *=2006 data

2.4 PHC

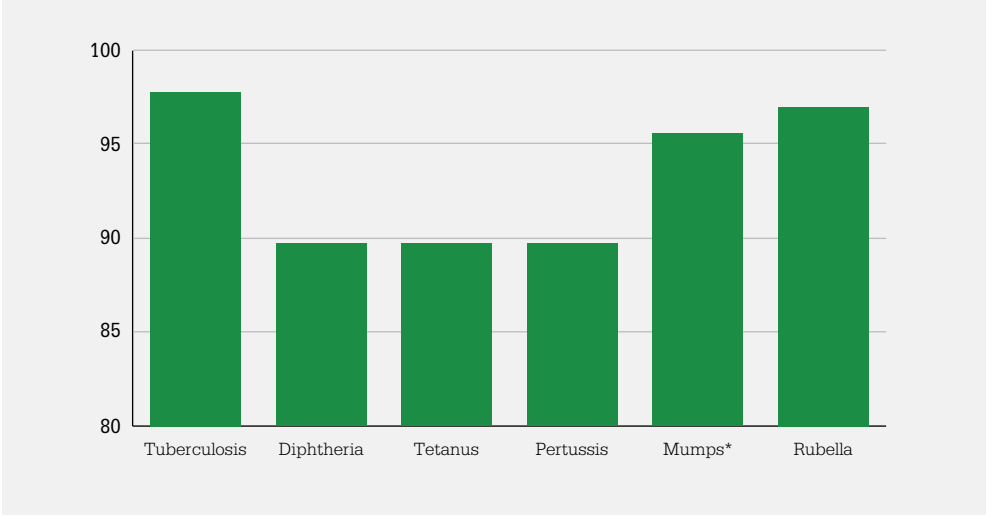
In 1997, the Governmental Decision 'On the approval of the Concept for the reform of the health care system in the Republic of Moldova under new economic conditions for the years 1997–2003' was approved. This Decision served as a basis for the structural and organizational changes in the PHC sector through the introduction of the function of FDs. It provided necessary regulation for the constitution of PHC.

The Governmental Decision 'Regarding the Development of Primary Health Care' has further contributed to the implementation of the FD function; the principle of free choice of FD by the population; the nursing function; information systems; and new financing mechanisms for PHC (per capita funding). Furthermore, FM became a speciality regulated by law and PHC was recognized as a priority in the health system. This resulted in the establishment of a Chair of Family Medicine at the State Medical and Pharmaceutical University "Nicolae Testemițanu".

Following the restructuring of the PHC system, the responsibility for the PHC management has been delegated to local public authorities. PHC services are defined by law for both the State Guaranteed Minimum Benefits Package and the Basic Benefits Package provided under mandatory SHI. The SHI basic package includes the delivery of free primary and urgent secondary (outpatient and inpatient) care without any preconditions. Free-of-charge services provided by the FD in both urban and rural areas include consultations, follow-up of pregnant women and children according to approved standards, immunization, chronic disease management and surveillance, nursing care, home care, services in case of acute communicable diseases and monitoring of outbreak areas, screening and early detection services, and health promotion and prevention *(22,32, 33)*. In 2009 there were 21.2 PHC units per 100 000 people *(22)*.

In the past, efforts have been made to increase the public trust in immunization. As can be seen in Fig. 7, the immunization rates for the major childhood illnesses, tuberculosis, mumps and rubella, are currently above 95 %. Immunization rates for diphtheria, tetanus and pertussis are lower; just below 90%. Today, the Republic of Moldova is free of polio *(31)*.

Fig. 7. Infant immunization levels in percentages (data from 2010, *2008) *(22)*



3. PHC IN THE REPUBLIC OF MOLDOVA: NATIONAL SITUATION AND CONTEXT[3]

This chapter addresses policies, regulation and structures relevant to PHC in the Republic of Moldova. This includes policy developments, aspects of financing, workforce and education of providers, quality assurance and the role of patients.

The information provided is primarily based on the answers formulated by a team of Moldovan experts on questions in the national level questionnaire. The description of results follows the structure of health system functions and dimensions used in the Primary Care Evaluation Scheme, as described in the previous chapter. This chapter serves as the context for the results of the surveys among FDs and their patients and the survey among PHC nurses, which will be described in Chapters 4, 5 and 6.

3.1 Stewardship / governance

Introduction

Reforms have dominated the Moldovan health care system during the past two decades. A major step was made in 2004 when a new financing model was established with the introduction of a mandatory health insurance system. The health service delivery system got a new basis with a PHC system centred around FDs and their gate-keeping role, while the extensive supply of beds in the hospital sector was reduced. Both primary and secondary care services have been decentralised and have become responsibilities of decentralised powers (the local authorities).

Central and de-centralized health governance

PHC within the MoH

Governance and regulation in the health care system are obviously strong central responsibilities primarily situated in the MoH. PHC has been organized within the Ministry at the Directorate of Integrated Services Management, which is responsible for integrated health care policy development, including PHC, and simultaneously, promotes the role and authority of PHC in the national health care system. A special focus nowadays is on the prevention of diseases.

Regional differences in PHC

Since 2008, PHC facilities in the Republic of Moldova, with FDs at the centre, operate independently from hospitals. They are managed by the district authorities and contracted by the National Health Insurance Company. PHC in the districts includes FM Centres, Health Centres, FD's Offices and Health Offices. In January 2012, nationwide, 35 FM Centres and 77 autonomous PHC centres were directly contracted with the National Health Insurance Company.

3 Results are based on information provided in response to the national level questionnaire unless other sources are mentioned.

In Chișinău, the PHC structure is represented by comprehensive TMAs that include departments of FDs and consulting and diagnostic centres staffed with medical specialists providing ambulatory care and, in addition, the capital has FM Centres, PHC centres, FD's Offices and Health Offices. Therefore, the structure of PHC in the capital differs from the structure elsewhere in the country as units are larger (a TMA can have up to 100 FDs) and more focused on specialist care. The package of medical services provided in PHC is stipulated in the 'Unique Programme of Mandatory Health Insurance'. PHC services are funded by the Mandatory Health Insurance Fund according to the per capita principle. Although some steps have been made towards a payment-per-service using performance indicators, this approach is still marginal.

Policy development

PHC relevant policy documents and measures are described below in chronological order, from the mid-1990s until today.

1995

- Law on Health Protection No. 411-XIII

  Main topics: Article 2- h): the state guarantees to protect the interests of the population in health care through a mandatory health insurance system; providing PHC by FDs; emergency medical assistance at pre-hospital stage; hospital care within the limits and volume set; Article 2- i): the patient's freedom to choose their FD and PHC institution.

1998

- Law on Mandatory Health Insurance No. 1585-XIII

  Main topics: Article 5. (4) Coverage of the uninsured: the costs of pre-hospital emergency health care, for PHC and specialized health care and outpatient and hospital care for socially conditioned diseases with major impact on public health, are covered from the mandatory health insurance funds.

2007

- National Health Policy GDRM No. 886

  Main points: paragraph 24-e) Policies, strategies and legislation related to health promotion and disease prevention will be based on PHC as the basic structure of the health care system.

  181. Health care will be re-directed from treatment towards health promotion and disease prevention policy. System efficiency will be ensured through priority development of PHC, nursing and reconfiguration of hospital care sector into a flexible and efficient network of providers, based on people's needs and resources available.

- Health Sector Development Strategy for 2008–2017, approved by GDRM No. 1471

  Main topics: Section 3, 65-c) To promote integrated health care and ensure health services continuity to solve health issues of the population. It stipulates: to increase the role and authority of the PHC, with a special focus on disease prevention measures.

- Government Activity Programme "European Integration: Freedom, Democracy, Welfare" for the years 2012–2015.

  Main topics: Reducing disparities between rural and urban areas by directing investments to rural areas through:

  » construction and reconstruction of rural PHC centres (providing them with medical equipment, and means of transport); and

  » finalizing institutional autonomy of PHC (including direct contracting of FDs' offices by the National Health Insurance Company).

2010

- Primary Health Care Development Strategy for 2010–2013, approved by the MoH Order No. 460

  Main topics: aim of the Strategy is to maintain and continuously improve the health of the population through continuous development and strengthening of FM; ensure an equitable access to quality and cost-efficient PHC, oriented towards basic health needs of the community; support and implement prevention measures, health promotion, treatment and monitoring of individual and family health conditions.

- Joint Order of MoH and National Health Insurance Company No. 627/163-A

  Main topic: Approval of the Regulation on population registration in institutions that provide PHC within the mandatory health insurance.

- Decree No. 695 of the MoH on "Primary Health Care in the Republic of Moldova"

  Main topics: stipulating approval of a number of regulations on the organization of PHC, namely: Regulations on PHC; FD's Professiogram; family nurse's Professiogram; Staff Regulations for PHC institutions, providing four chapters that include standards for management and administrative staff of Family Medical Centres and autonomous PHC centres, for doctors, nurses, lower rank medical staff and administrative and household staff.

- Order No. 816 of the MoH, (amending Order 404 of October, 30, 2007)

  Main topics: Approval of the Framework Regulation for the Public Medical-Sanitary institutions, FM Centres and PHC centres.

2011

- Order No. 861 of the MoH

  Main topic: Approval of the legal delimitation of PHC centres.

- Joint Order of the MoH and the Mandatory Health Insurance Company (MHIC) No. 1021/206-A "On the Approval of Methodological Norms of the Unique Mandatory Health Insurance Programme for 2012"

Main topics: Methodological norms stipulate conditions for providing all types of medical care; providing the list of paraclinical investigations, payment method and criteria for contracting providers eligible within the Mandatory Health Insurance System based on the financial parameters stipulated by the Law on Mandatory Health Insurance Funds for the respective year.

- Order nr. 861 On the approval of the "Programme for legal delineation of PHC centres"

  Main topics: Creation of "Medical and Sanitary Institutions" (PHC centres) in accordance with the approved Programme, with direct contracting by the National Health Insurance Company.

2012

- Joint Order of the MoH and MHIC No. 302/70-A "On the Approval of the Regulation on Validation of Performance Indicators"

  Main topics: Stipulates the performance indicators validation procedure for the providers involved in the Mandatory Health Insurance System.

- Order of the MoH No. 252 "On Intensification of the Preventive Measures in PHC"

  Main topics: Stipulates activities to prevent diseases through preventive medical examinations.

Monitoring professionals and services

Licensing and (re-)accreditation

The following formal requirements are in place for health care professionals to establish themselves in PHC: In accordance with Article 10 (2) of the Law on Health Protection No. 411 of 28.03.1995 and Article. 4 b) of the Law on Performing the Medical Profession No. 264 of 27.10.2005, to exercise their profession, doctors are required to follow postgraduate residency studies at universities and postgraduate educational institutions for medical specializations.

Re-certification

Physicians, and so FDs, but also nurses, must re-certify every five years. The following formal criteria are being applied: Practitioners are required to systematically improve their level of knowledge and skills and to earn a certain number of credits on continuing education. For doctors, the mandatory minimum is 325 credits, of which 250 credits are for CME and 75 for participation in scientific events, publications etc. Middle level health workers should earn 200 credits.

Furthermore, practitioners must pass a compulsory re-certification examination every five years by the Commission for the certification of FDs and by the Commission for the certification of nurses, respectively. The formal criteria for physicians' re-certification are stipulated in a Ministerial Order:

http://ms.gov.md/_files/8892Ordin%2520Atestare%2520medici%2520si%2520farmacisti%25202011%2520Usatii_20.06.pdf

Nurses are subject to the same re-certification procedure every 5 years as physicians:

http://ms.gov.md/_files/8891Ordin%2520atestare%2520lucratori%2520cu%2520studii%2520medii%25202011_final_20.06.pdf

Conditions for the care process

PC workforce norms

The official norm defining the number of patients per FD is 1500 patients. This is stipulated by Order No. 100 of 10.03.2008 of the MoH 'On the Norms of Medical Staff' and the Annex nr.4 to the Order of the MoH nr. 695 from 13.10.2010 "On the Primary Health Care in the Republic of Moldova".

Staff shortage in PHC

For all disciplines listed in Table 7, there are shortages either in some regions only or nationwide. Shortages among FDs, PHC nurses, and obstetrician-gynaecologists seem to be most severe. As norms do not exist for the availability of dentists and pharmacists, it is not possible to identify possible shortages of these professions.

Table 7. Shortage reported for a number of PHC professions

PHC professions	No shortage	Shortage in some regions	(Modest) shortage nationwide
• FDs	–	✔	✔
• PHC nurses	–	✔	✔
• Obstetrician - Gynaecologists	–	✔	✔
• Physiotherapists	–	✔	–

Mode of practice

The FD's team normally consists of an FD and a FM nurse. Details about the composition of teams, whether monodisciplinary (the number of physicians per team) or multidisciplinary (the number of workers of various disciplines on a team) were not available.

PHC gate keeping

According to the Unified Programme of the Mandatory Health Insurance, patients are formally required first to visit an FD before they can be treated by a medical specialist (except in cases of emergency). Otherwise they must pay for the specialized services, even if they are insured. In the 'Unified Programme of Mandatory Health Insurance', and the 'List of health conditions' the new conditions patients are allowed to refer directly to an ambulatory medical specialist for are listed.

Out of hours care

PHC services are available during office hours, although office hours can be extended sometimes, including on Saturday and partially on Sunday. During evenings, nights and weekends, emergency health care services are operational. At a national level, emergency services are subordinated to the MoH through the National Centre for Emergency Health Care. Universal access to emergency health care at the pre-hospital stage is covered by

Zonal Emergency Health Care Stations, Emergency Health Care Sub-stations (in rayon centres and municipalities) and Emergency Health Care Points (in rural localities). The emergency services are organized for populations living in a radius of up to 25 km. As with PHC services, providers of emergency care are contracted by the National Health Insurance Company. Spread all over the country, there are 242 emergency care teams, each serving around 15 000 inhabitants. They are located in the major settlements of all rayons.

Conditions for responsiveness

Within this dimension, the following topics will be presented: the role of stakeholder organizations; the organizations of patients; and the rights of patients (including patients' free choice of physician and complaint procedures for patients).

The role of stakeholders

The MoH's basic function is to develop long-, medium- and short-term public health development policies to develop the mid-term expenditure framework and to ensure their implementation. The Ministry plans and implements health sector reforms in order to ensure the compliance of the health system to adequately meet the population's needs, preferences and expectations. One of its priority tasks is to develop policies regarding the organization and regulation of integrated health care, including PHC, and to increase the role and authority of PHC in the health care system, with a priority focus on disease prevention measures.

To develop effective health policies, the MoH ensures the participation of citizens, institutions, associations, patient representatives and other stakeholders in the decision-taking process through:

- dissemination of information about the annual plans through official web sites and/or media;
- information on the organization of the decision-making process;
- institutionalization of cooperation and partnership with society; and
- recommendations and suggestions from citizens and stakeholders and taking their opinions into account in preparing decisions.

The National Health Insurance Company

The National Health Insurance Company is an autonomous state organization, which represents a legal entity and conducts not-for-profit activities in the field of mandatory health insurance. The Company participates in the drafting of policy documents, the implementation of which requires financial funding from the Mandatory Health Insurance Funds. The objectives of the Company relate to the organization, implementation and management of the overall process of mandatory health insurance. The Company applies acceptable procedures and mechanisms to create funds dedicated to cover the expenditure for the treatment and prevention of diseases and states included in the Unified Programme of mandatory health insurance. It controls the quality of health care provided and the implementation of the Legal framework related to mandatory health insurance.

Civil society

Civil society in the Republic of Moldova participates in the public debate about policy documents related to access to medical assistance and patients' rights.

The role of patient organizations

Patient organizations on a national level perform the following activities:

- human-rights protection and contributing to the realisation of the right to health care;
- training and information for the population on the right to health, disease prophylaxis, treatment and rehabilitation of health;
- providing social assistance to invalids, pensioners, children, and people with minimum income;
- fighting against corruption and fraud in health care; and
- protecting the rights and interests of patients; representing them in court and in front of authorities and administrative bodies.

Patient rights: Legislation and regulation

The Law on patients' rights and responsibilities No. 263-XVI of 27.10.2005 includes the following patients' rights to:

- free medical care in the volume established by law;
- humane and respectful attitude of the health care provider;
- security of private life, physical, mental and moral integrity, ensuring discretion while providing health services;
- reduction of suffering and relief of pain caused by disease and/or medical intervention by all means available, according to the state of the art and possibilities of the provider;
- second opinion and receiving recommendations from other specialists; on patients' request or the legal representative;
- medical insurance (compulsory and voluntary), in accordance with law;
- information on health services provider, specialization, volume, quality, cost and way of providing services;
- examination, treatment and care corresponding to proper health and hygienic norms;
- comprehensive information on one's health, diagnostics, treatment and rehabilitation methods; preventive and therapeutic methods; potential risk and effectiveness;
- complete information on environmental harmful factors;
- express voluntary consent to or refusal of medical interventions and participation in biomedical research (clinical trials);
- accept or refuse conducting religious rituals during hospitalization;
- assistance of a lawyer or any other representative in order to protect their interests;
- information on the results of complaints and requested examinations;
- take legal actions against health care providers and officials and related services in the amount provided by law;
- terminal care worthy of a human being; and
- compensation for health damage.

The patients' rights are protected by not-for-profit voluntary organizations, independent from public authorities, falling under the Law Nr. 837 (on Public Associations from 17.05.96).

Patients' choice

Patients in the Republic of Moldova can freely choose their PHC centre (MSIPHC) and FD. This is a basic principle of PHC as covered from the mandatory health insurance funds. To promote the free choice of a FD, a special regulation on the registration of the population at a PHC institute was adopted (Order of the MoH and National Health

Insurance Company No. 627 / 163-A of 09/09/2010). The regulation stipulates the possibility to change the MSIPHC once a year, during the months of September–October, with the exception of persons who changed their place of residence during the year, either in the territory of the Republic of Moldova or between sectors of the Chișinău municipality. The regulation allows people to register in only one single PHC centre and it is recommended to register with the one that is closest to you. If registered with a PHC centre outside one's territory of residence, transporting a doctor or nurse to the place of residence needs to be covered by the patient.

Patient complaints

Each PHC centre needs to comply with the general procedure on complaints. The procedure, set by the Law on Petitions as of 190/19.07.94, specifies the filing and examination of petitions from the citizens of the Republic of Moldova to any institutions, including the medical ones, in order to protect their legal rights and interests. Institutions should consider petitions within 30 days; those that do not require additional examination are examined without delay or within 15 days from registration.

3.2 Resource generation

PC human resources

With a total number of 1853 FDs, the average population per FD is 1920 inhabitants (Table 8). Almost 17% of all physicians in the Republic of Moldova are FDs. The number of PHC nurses is almost three times the number of FDs. Midwives are very scarce in PHC; they are only involved in the family planning offices.

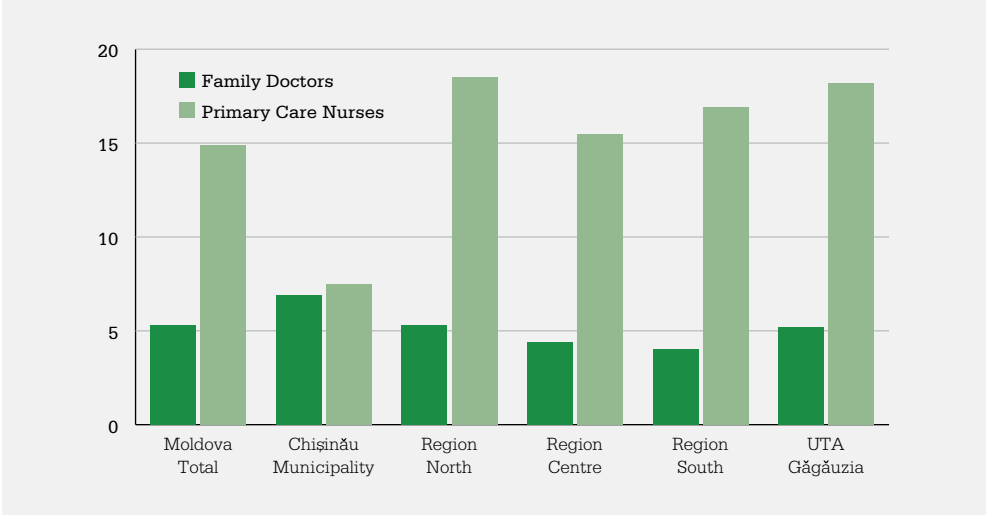
Table 8. Professionals working in PC (Jan. 2012)

Active PHC providers	Number	Number of pop. per worker	As a % of all physicians, nurses, midwives*)
FDs	1853 **)	1920	17%
PHC Nurses	5337	667	n.a.
PHC Midwives	94	37.872	n.a.

*) The total number of active physicians: 12 905 (2012; source MoH)
**) Data from the National Centre of Health Management (http://www.cnms.md/_files/10856-Indicatori%2520preliminari%2520%2520anii%25202010-2011.pdf)

Fig. 8 shows the regional distribution of FDs and PHC nurses over the country.

Fig. 8. Density of FDs and PHC nurses by region (per 10 000 population, 2010)



The distribution of the FDs and PHC nurses in the country is uneven (Fig. 8). In the southern region, the average population per FD is 2500 and in the central region it is 2275. In contrast, in the north, FDs have a quarter fewer patients (1900), which is almost equal to the number in the autonomous region of Găgăuzia (1925). By far the highest density of FDs, however, is in Chișinău, where the average is only 1450 inhabitants per FD. If an average of 1500 patients per FD is taken as the norm, it turns out that in all regions outside the capital this norm is strongly exceeded, which points to a severe shortage of FDs in the country.

The number of PHC nurses is 2.9 times the number of FDs. MoH norms for urban areas require two nurses per FD, while in rural areas there should be three nurses per FD. Most nurses are concentrated in CFDs, but some of them are working independently in remote areas in centres where FDs visit once per week or in health offices without FDs.

Professional development and education

Professional organizations and journals

FDs are organized in the Association of Family Doctors in the Republic of Moldova, which is a broad organization for the defence of material interests, professional development, education and scientific activities. The Association has 1800 members, which means that practically all FDs in the country are members. The Association doesn't participate in contract negotiations but rather has an educational function through the organization of monthly meetings on clinical issues related to FM. The Association also approves clinical standards and protocols. No journal specifically for FDs or for the PHC field generally is published in the Republic of Moldova. The Association is not involved in scientific activities. Furthermore, it should be noted that the speciality of FM is not included in the nomenclature of scientific specialities in the Republic of Moldova.

Table 9. Professional organizations and their activities

Name	Members	Financial / material interests	Professional development (e.g. guidelines)	Education	Scientific activities
Association of FDs in the Republic of Moldova	1800	–	✔	✔	–

Medical education

In the Republic of Moldova there is a single medical university and five medical colleges (in the Chișinău and Balti municipalities and in the rayon centres Orhei, Ungheni, and Cahul). These are listed in Table 10, including the availability of postgraduate specialization in the field of family practice.

The "Nicolae Testemitanu" State University of Medicine and Pharmacy in Chișinău is the only institute providing postgraduate studies in family practice through a three-year residency programme.

Table 10. Institutes offering specialization in the field of family practice and duration of the specialization programmes*

Name of medical university	Postgraduate education in family practice	Duration of specialization	Months spent in PC
State University of Medicine and Pharmacy, "Nicolae Testemitanu", Chișinău	Yes	3 years	(Not reported)
National College of Medicine and Pharmacy, Chișinău	No	n.a	n.a
College of Medicine, Orhei	No	n.a	n.a
College of Medicine, Balti	No	n.a	n.a
College of Medicine, Cahul	No	n.a	n.a
College of Medicine, Ungheni	No	n.a	n.a

*) The colleges are only responsible for middle-level medical education

The training of FDs is organized in two stages: six years of university studies in general medical practice with a training programme in FM in the fifth year (comprising 15 days and 142 hours) and three years of postgraduate residency studies in FM through residency, followed by a final examination. The Chair of Family Medicine, established in 1998, consists of 13 lecturers, 2 of these being university professors.

In 2011, out of all medical graduates, 17% chose to enrol in the postgraduate programme in family practice. The number of graduates in family practice is continuously decreasing from year to year. In 2009, the number of graduates was 66; in 2010 there were 45 graduates and in 2011 the number was further reduced to 30. In two years, the number has more than halved.

3.3 Quality assurance

General

Mechanisms to assess the quality of PC services

The following mechanisms are generally used to assess the quality of PC services: internal control within practices; practice inspection by supervisors or health authorities, such as the National Evaluation and Accreditation Council and the National Health Insurance Company; and obligatory periodic tests of professional knowledge and skills of physicians and nurses. External clinical auditing (using medical records) is reported to be used sometimes. No other procedures for PC assessment were reported.

Process and outcome measures

Indicators at the level of process and outcomes have been reported to exist for routine use by the MoH to monitor PHC services. These indicators are related to:

- accessibility - the number of visits to FDs per inhabitant;
- efficiency, including:
  - » monitoring pregnant women up to 12 weeks of gestation and their supervision in accordance with the standards;
  - » child supervision during the first year of life;
  - » infant mortality at home;
  - » registering and follow up of TB patients;
  - » registering and follow up of patients with hypertension; and
  - » providing preventive gynaecological examination with cytological sampling; and
- satisfaction - studies of the population's satisfaction with the services provided.

Evidence Based Medicine and clinical guidelines

Throughout the health care system, 164 National Clinical Protocols have been developed and approved by the Orders of the MoH, including all levels of health care. All protocols are placed at the Ministry's web site. With the support of the EU project "Strengthening PHC", 2300 copies of 47 standardized clinical protocols for FDs have been developed and distributed for free at all PHC institutions. Three of these protocols are on Hypertension in Adults, Uncomplicated Diabetes, and Community-Acquired Pneumonia in Adults.

Currently, the development of Clinical Protocols for FDs continues with the support of the World Bank, within the Health and Social Services Project. In this context, at least 60 standardized Clinical Protocols for common diseases in family practice are planned to be developed.

All protocols are developed and updated by a group of authors (specialists in Health Care and FM) established by Order of the MoH.

Furthermore, mention should be made of the following two publications:

- Family Doctor's Guide - produced by a working group (FDs and other specialists) and distributed by Order of the MoH to the medical institutions;

- Palliative Care Guide for Family Doctors - produced by a working group of the MoH consisting of FM and Palliative Care specialists; multiplied with support of the Soros Foundation and freely distributed among the PHC institutions.

3.4 Financing aspects

The health care benefit package is comprehensive, as will be explained in the next section. The population is covered for costs of PHC services; however, the cost of prescribed drugs is not fully covered.

PC financing and expenditures

Approximately 31% of the budget of the Mandatory Health Insurance Fund is spent on PHC, of which about 9% is spent on the supply of compensated medicines. PHC is financed mainly on a "per capita" basis; payments "per item of service" are a negligible part of the total amount.

Financial incentives

Payment mechanisms

Since 2004, activities of public medical institutions under the mandatory health insurance system are subject to non-profit self-financing. Accordingly, a Government Decision has established the method of calculating wages, based on the principles of employees' payment by financially autonomous units for each category of doctors, including coefficients for working experience and bonuses. The MoH, the National Health Insurance Company and the trade union for health workers, annually set the shares of salary funds for each sector (for PHC, 60%; for specialized services, 55%; and for the hospital sector, 50%).

Family physicians are eligible to receive bonuses to their basic salary for the following:

- qualification category (level) - bonus for the qualification category (level) is given monthly to doctors, including doctors in management, FDs and medical staff with specialized secondary education. It amounts to 50% for the higher category, 40% for 1st category and 30% for the 2nd category of the tariff (basic) salary of the employee;
- work experience in the field – a seniority bonus is paid monthly, calculated as a percentage (from 10 to 30%) of the basic salary of FDs and PHC nurses. Seniority bonuses are more generous for FDs and nurses in rural areas (40%) than in urban areas (30%);
- work day schedule divided into two - supplemental payment for the staff whose work day is divided into two according to the schedule, with an interruption of more than two hours, not included into the working time, amounts to 30% of the basic salary for the actual time worked on those days;
- scientific degree;
- honorary title bonus; and
- high work efficiency, work intensity - increase for a larger volume of work, and the execution of work of special importance or urgency.

Income

Table 11 provides an insight into the gross salaries of FDs and some medical specialists. The calculation has been based on a physician with 10–15 years of professional experi-

ence. Starting from the basic salary and taking the multiplication factor, the qualification category, the seniority and other supplements into account, it turns out that FDs have a higher salary than gynaecologists, internists and cardiologists. FDs in rural areas have a 23% higher salary than FDs working in urban practices.

Table 11. Gross monthly income of medical specialists and FDs (40 years old or with 10 to 15 years' professional experience)

Salary elements	Gynaecologist, Internists, Cardiologist	FD in urban areas	FD in rural areas
Multiplication factor (average)	3.0	3.0	3.5
Basic salary (according to the multiplication factor; in Lei)	2250	2250	2625
Qualification category (higher)	1125	1125	1313
Seniority	x	(30%) 675	(40%) 1050
For clinics (10%)	225	x	x
Primes / material support (8.3%)	300	337	415.45
Total monthly salary (in Lei)	3900	4387	5403

3.5 Aspects of service delivery in PHC

The services provided in PHC include: general and paediatric consultations and referrals; paediatric development checks and immunization; antenatal and postpartum care; nutrition clinics; chronic disease management (e.g. for diabetes, asthma, heart disease); family planning; hepatitis and TB care; acute respiratory illness care; infectious diseases and outbreak monitoring; home visits; nursing care; and health promotion and prevention clinics.

National data on utilization and provision of services

Available key data on services provided at the primary level can be seen in Table 12.

Table 12. Key indicators of utilization of PC services *)

Indicators	Rate
Number of patient contacts with FDs per 1000 population per year	2839
Number of referrals written out by FDs to medical specialists per 1000 patient contacts	n.a.
Number of hospital admissions from FDs per 1000 patient contacts	15.8
Number of drug prescriptions made by FDs per 1000 patient visits	n.a.

*) Source: MoH. The survey among FDs also asked about visit frequencies and the number of referrals. (These results have been reported in Chapter 4). n.a. = not available

The official contact rate with FDs is 2.84 times per patient per year. One hospitalisation per 63 patient contacts equals a hospitalisation rate of 1.6%. Data about important

production indicators like referrals to medical specialists and medicine prescriptions made by FDs were not available.

Current issues and plans related to PC

Major plans or policy intentions related to PHC in the Republic of Moldova are related to the completion of the plan for 'Primary Health Care reform during 2011–2014'. Plans include:

- providing financial and institutional autonomy to PHC centres according to the Legal Delimitation of PHC Centres Program during the years 2011–2014;
- providing financial and institutional autonomy to Chișinău FM Centre;
- de-concentration of PHC to offer services closer to people;
- generating and providing necessary resources for PHC by 'rational motivation mechanisms';
- strengthening the technical and material basis;
- performance-based remuneration;
- focus on disease prevention, health promotion and preventive examinations; and
- PHC monitoring.

4. FDS AND THEIR POSITION IN PHC

4.1 Results of the survey among FDs

This chapter contains the results of the survey among FDs in the Republic of Moldova. The survey covered the following topics: workload and use of time; access and availability of services to patients; various aspects of quality of care; use of clinical information; coordination and cooperation; available medical equipment; and several dimensions of clinical task profiles. Most FDs completed or are completing a postgraduate training or a retraining programme to become an FD and almost all are employed by a Family Doctor Centre. The results described are based on the answers of the FDs on the questions in the survey.

4.2 Respondents' characteristics

The survey had a total of 250 responding FDs, all but two with both male and female patients of all age groups. A distinction is made between FDs working in rural areas (N = 105) and those working in urban areas, including inner city/municipality, suburban areas and small towns (with less than 15 000 inhabitants) or rayon centres (N = 145 in total). Table 13 shows that the large majority of FDs are female. In total, 82.8% of the responding FDs were female, while 17.2% were male. The proportion of female physicians is larger in urban than in rural areas.

Table 13. Gender of urban and rural FDs

FDs	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Abs.	%	Abs.	%	Abs.	%
Male	15	10.3	28	26.7	43	17.2
Female	130	89.7	77	73.3	207	82.8
Total	145	100	105	100	250	100

Table 14 shows that most FDs (77.6%) completed a retraining programme. Three FDs (one urban and two rural) have not followed any FD training and one rural FD is still following post-graduate training (not in the table). The average age of the respondents is 49 years and rural FDs are slightly older than urban FDs. Less than half of the respondents (N=120, 48%) were under the age of 50 years, but from the 52 FDs who completed post-doctoral training, 51 fall within this age category. Almost all respondents (98.0%) are employed by a Family Doctor Centre, with only a few employed by an independent Family Health Centre. The number of years of experience as a FD is on average 12, ranging from 1 year to 34 years. The differences between urban and rural working FDs are small.

Table 14. Summary of characteristics of FDs by level of urbanization

FDs	Urban (N=145)			Rural (N=105)			Total (N=250)		
	Abs.	%	Valid N	Abs.	%	Valid N	Abs.	%	Valid N
FDs with post-graduate training	32	22.1	145	20	19.0	105	52	20.8	250
FDs who completed a retraining programme	112	77.2	145	82	78.1	105	194	77.6	250
Employed by an independent Family Health Centre	4	2.8	145	1	1.0	105	5	2.0	250
Employed by a FD Centre	141	97.2	145	104	99.0	105	245	98.0	250
FDs average age (years)	47.7		145	50.8		105	49.0		250
Average years working	12.5		145	11.9		105	12.2		250

4.3 Accessibility of care

4.3.1 Organizational access

Workload of the FD

Table 15 provides an overview of various aspects of workload by level of urbanisation. The size of the practice (the number of patients) is larger in rural areas compared to urban, but the average number of patient consultations per day and the number of home visits per week is similar in both areas. The number of working hours per week is larger in rural areas, but urban FDs spend more time reading professional journals or medical information and on training and following courses. The overall workload is therefore more or less equal. Reported staff shortages of FDs, nurses and support staff are higher in urban areas than in rural areas. Lack of FDs is most frequently reported. Almost half of the respondents (45.2%) reported there were shortages of FDs in their district. Approximately one fifth of the respondents mentioned shortage of nurses. Shortages were more frequently reported from urban practices than from rural practices.

Table 15. Urban and rural FDs' workload and use of time

Aspects of workload	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Mean	Valid N	Mean	Valid N	Mean	Valid N
List size (number of patients)	1619	145	2051	105	1800	250
Patient consultations per day	26.5	145	27.9	105	27.0	250
Home visits per week	12.5	145	11.9	105	12.2	250
Working hours per week	42.3	145	45.9	105	43.8	250
Hours reading per month	23.6	145	21.4	105	22.7	250
Hours following courses per month	8.3	145	6.4	105	7.5	250
	Abs.(%)	Valid N	Abs.(%)	Valid N	Abs.(%)	Valid N
Reporting staff shortages						
• shortage of FDs	75 (51.7)	145	38 (36.2)	105	113 (45.2)	250
• shortage of nurses	44 (30.3)	145	11 (10.5)	105	55 (22.0)	250
• shortage of support staff	24 (16.6)	145	6 (5.7)	105	30 (12.0)	250

Patients' access and availability of services

Patients can generally see the FD on the same day during office hours (see Table 16). The majority of the urban FDs reported opening hours in the evening at least once per week, while only 30% of rural FDs do. At least one weekend opening a month (normally a Saturday) is standard, as all FDs report this. If practices are closed, it is also standard that an emergency telephone number is provided to patients in case they get sick (99.6% on average). Group sessions or clinics for specific patient groups are very common in both urban and rural areas and none of the respondents reported not providing such sessions. Most frequently mentioned were clinics for pregnant women. The only exception was clinics for the elderly, which were on average reported by only 17% of FDs.

The last three rows of Table 16 show the practice proximity to a hospital or outpatient facility and the distance towards the most remote district the FD serves. Looking at the average, half of the FDs are working within five kilometres from a general hospital. The differences between urban and rural FDs, however, are great; only one in six urban practices are situated five or more kilometres from the nearest general hospital compared to nine out of ten rural practices. Slightly more rural FDs are situated within five kilometres of the nearest specialist outpatient facility, but again, the difference compared to urban FDs is large. On average, almost one third of the FDs serve patients from districts at a distance of five kilometres or more from their practice building. There is still almost a 10% difference between rural and urban FDs, but this is a much smaller difference than compared to the distance from a general hospital or a specialist outpatient facility.

Table 16. Indicators of access to the practice, by level of urbanization

Aspects of patients' access	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Same day visits are possible	100	145	98.1	105	99.2	250
Evening opening at least once per week	73.1	145	30.5	105	55.2	250
Weekend day opening at least once per month	100	145	100	105	100	250
Phone number available for patients when practice is closed	100	145	99.0	105	99.6	250
Clinics or sessions in use for special patient groups						
• for diabetes patients	95.9	145	82.9	105	90.4	250
• for hypertensive patients	97.9	145	91.4	105	95.2	250
• for family planning information	96.6	145	89.5	105	93.6	250
• for pregnant women	99.3	145	100	105	99.6	250
• for the elderly	23.4	145	8.6	105	17.2	250
• for other groups	-	145	-	105	-	250
No clinics or sessions for special patient groups	0	145	0	105	0	250
Practice situated 5 or more kilometres distance from nearest general hospital	15.8	145	88.6	105	46.4	250
Practice situated 5 or more kilometres distance from nearest specialist outpatient facility	6.9	145	90.5	105	42.0	250
Practice situated 5 or more kilometres distance from most remote district	25.5	145	35.2	105	29.6	250

4.3.2 Quality improvement

Clinical guidelines, expert directives and procedures for dealing with patient complaints are all tools to improve the quality of care. Evaluations can be used to assess patients' satisfaction and the satisfaction of the community representatives. Table 17 shows the utilization of the different methods of quality improvement. The use of complaints procedures are on average more frequently reported than the use of clinical guidelines or evaluative methods. There are hardly any differences between urban or rural FDs in the use of guidelines or complaint procedures. Evaluative methods are frequently used, but more often in urban than in rural practices. The most frequently applied method, in rural as well as in urban practices, is evaluation of patient satisfaction. Interviewing community representatives is the least frequent method, but still reported to be done by a majority of FDs. Interviews about the job satisfaction of the practice staff is applied in three quarters of the urban practices, but in less than half of the rural practices. Satisfaction with the topics currently offered as part of CME is high. Almost all FDs are satisfied about it.

Table 17. Use of clinical guidelines, complaints procedures, evaluation methods and CME by level of urbanization

Quality improvement	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Applying clinical guidelines						
• frequently	86.9	145	80.0	105	84.0	250
• occasionally or seldom/never	13.1	145	20.0	105	16.0	250
Having a procedure for dealing with complaints	100	115	98.1	105	99.2	250
Using evaluation methods:						
• investigation of patients' satisfaction	93.1	145	71.4	105	84.0	250
• interviewing community representatives about satisfaction with the practice	65.5	145	45.7	105	57.2	250
• Interviewing FDs and nurses about job satisfaction	75.2	145	41.9	105	61.2	250
Topics of CME						
• fit well	55.9	145	61.0	105	58.0	250
• fit reasonably	41.8	145	36.2	105	40.0	250
• fit poorly or not at all with topics you want to learn to improve your knowledge and skills	1.4	145	2.9	105	2.0	250

4.4 Continuity of care

4.4.1 Informational continuity

Routinely keeping a record of medical information of patients is a major condition for quality and continuity of care and this is the daily practice for almost two thirds of the FDs (see Table 18). The ability to retrieve and use this information is equally important. The identification of patient groups on the basis of a shared diagnosis, health risk or, for instance, age, may enable more efficient approaches of active monitoring and prevention. The practice information systems of FDs, however, do not seem tailored to generate such categorical lists, but urban FDs seem to do somewhat better than rural FDs. Computers are commonly used, especially in urban areas, where 91% of the FDs responded that they use a computer. In rural areas, however, as many as one in three FDs reported not using a computer. The computer is most often used for searching for information on the Internet. For rural FDs, this is the sole purpose for using the computer. In urban areas, booking appointments and, to a lesser degree, medicine prescriptions and referral letters are produced using a computer.

One of the core elements in effective cooperation between primary and secondary care is the information that accompanies patients who are hospitalised or referred to medical specialists and vice versa. Six out of ten respondents indicate using referral letters for all patients who are referred, with no difference between rural or urban doctors.

Table 18. Availability and use of clinical information and use of computers, by level of urbanization

Quality improvement	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Keeping patients' medical records routinely for **all** visits	63.4	145	63.8	105	63.6	250
Easy to generate a list of patients by diagnosis or health risk	39.3	145	13.3	105	28.4	250
Using referral letters for **all** referred patients	64.1	145	63.8	105	64.0	250
Using the computer for:						
• booking appointments	40.7	145	0.0	105	23.6	250
• writing bills / financial administration	14.5	145	1.0	105	8.8	250
• medicine prescriptions	17.2	145	1.0	105	10.4	250
• keeping patients' medical records	14.5	145	0.0	105	8.4	250
• writing referral letters	17.2	145	1.9	105	10.8	250
• searching medical information	91.0	145	67.6	105	81.2	250
Not using a computer	9.0	145	32.4	105	18.8	250

4.5 Coordination of care

4.5.1 Cohesion within PHC

Rural and urban practices differ in their staffing as can be seen in Table 19. In urban areas, practically all FDs work in mixed specialty practices where primary and secondary care physicians are working together. Physicians in rural practices are FDs only. More than one third of the rural FDs are working alone; well over one fifth is working with one other FD and in the remaining 39% of the practices there are three or more FDs.

Table 19. Practice type, by level of urbanization

Type of practice	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
One FD (solo)	0.7	145	37.1	105	16.0	250
Two FDs working in the same building	0.7	145	21.9	105	9.6	250
Three or more FDs working in the same building	0.7	145	39.0	105	16.8	250
Both FDs and medical specialists working in the same building	97.9	145	1.9	105	57.6	250
TOTAL	100	145	100	105	100	250

All the FDs are working in the same building with a practice nurse (see Table 20). Urban FDs more often share the building with midwives or pharmacists than rural FDs. Additional disciplines mentioned are laboratory staff, housekeepers and watchmen.

Table 20. Other disciplines working in the practice, by level of urbanization

Other disciplines	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Practice nurse	100	145	100	105	100	250
Midwife (FM nurse specialised in perinatal care)	97.9	145	76.2	105	88.8	250
Pharmacist	89.7	145	69.5	105	81.2	250
Other	86.9	145	63.8	105	77.2	250

Regular meetings with other FDs were reported by all respondents and almost all reported to have regular meetings with practice nurses (see Table 21). Additionally, midwives, pharmacists, social assistants and palliative care nurses are reported by a majority of the respondents. The differences between urban and rural FDs are moderate, although meetings with palliative care nurses and pharmacists occur considerably less frequently in rural practices.

Table 21. Face-to-face meeting with other PHC workers, by level of urbanization

Meeting face-to-face (at least 1x per month) with:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Other FDs	100	145	100	105	100	250
Practice nurse(s)	96.6	145	93.3	105	95.2	250
Midwife (FM nurse specialised in perinatal care)	89.7	145	74.3	105	83.2	250
Pharmacist(s)	75.2	145	61.9	105	69.6	250
Social assistant(s)	84.1	145	84.8	105	84.4	250
Palliative care nurse(s)	76.6	145	68.6	105	73.2	250

4.5.1 Contact with other care levels and the community

FDs have frequent contact with medical specialists (see Table 22). At least eight out of ten FDs ask for medical advice from gynaecologists or neurologists either frequently or

sometimes. With paediatricians, internists, surgeons and dermatologists, contact was less frequent, but still a majority of the respondents reported maintaining such contact. Rural FDs have more frequent contact with paediatricians, internists, surgeons and dermatologists than their urban colleagues.

Table 22. Consultation with and asking advice from medical specialists, by level of urbanization

'Frequently' or 'sometimes' consulting or asking advice from:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Paediatrician(s)	59.3	145	68.6	105	63.2	250
Internist(s)	53.1	145	70.5	105	60.4	250
Gynaecologist(s)	86.2	145	83.8	105	85.2	250
Surgeon(s)	69.7	145	75.2	105	72.0	250
Neurologist(s)	90.3	145	81.9	105	86.8	250
Dermatologist(s)	67.6	145	75.2	105	70.8	250

The reported number of patients referred to medical specialists, in the four weeks prior to filling in the questionnaire, is very high and shows a considerable variation in several respects (see Table 23). A quarter of all patient visits end up with a referral. Urban FDs have a quarter more referrals than their rural colleagues. Most referrals are made to gynaecologists and specialists of internal diseases. Relatively few referrals are made to dermatologists. Another important finding is the strong variation in the referral rates between individual FDs. It should be noted that self-referrals and other 'bypasses' of PHC are not included in these indicative figures. As it is unlikely that these result from different health needs in the practice populations only, differences in the quality of clinical practice between FDs seem to play a role.

Table 23. Number of patients referred by FDs to medical specialists during previous four weeks; indicative overall referral rates, by level of urbanization

Patients referred to:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Mean (range)	Valid N	Mean (range)	Valid N	Mean (range)	Valid N
Paediatricians (from specialized amb. care)	12.0 (0-50)	145	9.9 (0-30)	105	11.6 (0-50)	250
Specialists of internal diseases	26.9 (0-95)	145	23.3 (0-50)	105	25.4 (0-95)	250
Gynaecologists	32.9 (2-90)	145	24.7 (0-55)	105	29.5 (0-90)	250
Surgeons	12.2 (2-60)	145	10.5 (1-30)	105	11.5 (1-60)	250
Neurologists	18.3 (3-60)	145	14.7 (2-60)	105	16.7 (2-60)	250
Dermatologists	9.1 (2-50)	145	7.7 (1-30)	105	8.5 (1-50)	250
ENT-specialists	14.3 (2-60)	145	11.6 (0-40)	105	13.2 (0-60)	250
Ophthalmologists	24.0 (2-90)	145	18.5 (2-45)	105	21.7 (2-90)	250
Total number of referrals in the 4 week period	151(16-470)		121 (20-240)		138 (16-470)	
Reported number of referrals as % of all office visits and home visits	27.0%		20.5%		24.2%	

Table 24 probably gives an answer to the question raised in the previous table. It shows that more than 40% of all FDs tend to believe they could make fewer referrals if they were more competent through better training. Urban and rural FDs only modestly differ in this opinion. Furthermore, a majority of FDs say that they have, more or less frequently, difficulties getting a patient hospitalised. Almost 40% report not meeting any difficulties getting patients admitted to the hospital.

Table 24. Opinion of FDs regarding referrals, by level of urbanization

Opinion	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Would you make fewer referrals if you were more competent through better training?						
• yes, definitely	4.1	145	5.7	105	4.8	250
• yes, likely	14.5	145	8.6	105	12.0	250
• probably	22.8	145	29.5	105	25.6	250
• likely not	41.4	145	39.0	105	40.4	250
• definitely not	16.6	145	14.3	105	15.6	250
• I don't know	0,7	145	2.9	105	1.6	250
If you send in a patient for hospitalisation do you meet any difficulties?						
• usually not	37.2	145	41.9	105	39.2	250
• in a minority of cases	57.9	145	46.7	105	53.2	250
• in a majority of cases	4.8	145	11.4	105	7.6	250
• usually	0.0	145	0.0	105	0.0	250

The FDs reported that connections with the community were very strong. Regular meetings with local authorities were reported by over three quarters of respondents (see Table 25), (although on average one in seven FDs did not know whether such meetings took place). Regular meetings with community or social workers occur slightly more often in urban situations than in rural practices. Having community representatives on the board of a practice or PHC centre is not exceptional, as more than half of the rural and one third of the urban FDs indicate such community representation. However, knowledge among FDs about this is not widespread as more than a third of FDs indicated that they did not know about this.

Table 25. Connections with the community, by level of urbanization

Kind of connections:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Regular meetings with local authorities	80.0	145	77.1	105	78.0	250
Regular meetings with community / social workers	77.9	145	74.3	105	76.4	250
Community representative(s) on the board of your centre / practice	56.6	145	34.3	105	47.2	250

4.6 Comprehensiveness of care

4.6.1 Practice conditions

Most FDs report that a wide range of health education material, such as leaflets or posters, are displayed or made available in the waiting room of their practice (see Table 26). All urban FDs indicated the availability of patient information materials concerning cardiovascular disease (CVD), healthy diet and vaccinations, and most of the rural FDs as well. For rural FDs, health education materials were less often available, especially about the self-treatment of colds, the social services and obesity.

Table 26. Availability of health education material for patients in the waiting room, by level of urbanization

Subject of health education material	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
CVD risks	100	145	97.1	105	98.8	250
Healthy diet	100	145	97.0	105	98.9	250
Smoking cessation	94.5	145	81.9	105	89.2	250
Obesity	82.8	145	65.7	105	75.6	250
Diabetes	100	145	91.4	105	96.4	250
Sexually transmitted diseases (STD)	99.3	145	97.1	105	98.4	250
Vaccinations	100	145	97.1	105	98.8	250
Contraception	97.9	145	95.2	105	96.8	250
Self-treatment of colds / coughs	70.3	145	54.3	105	63.6	250
Social services	77.9	145	66.7	105	73.2	250
Average material available	92.3		84.4		89.0	

4.6.2 Medical equipment

FDs indicate that they have a wide variety of items of medical equipment at their disposal. In Fig. 9, the distribution of the items of equipment (from a list of 30) has been represented for both the urban and rural practices. The average number of items available was 25 from the list of 30 (which is 83%). The average availability in urban and rural practices was similar. Fourteen items were available in at least 90% of the FD practices. Twenty-three items were available according to at least three quarters of the respondents. The difference in availability between urban and rural practices is more than 20% for only two items: ultrasound and enema. An ultrasound for the abdomen is available for most (89%) urban FDs, but just 9% of the rural FDs. Availability also differs for an enema, which is available to just over half of the urban FDs, while more than three quarters of the rural FDs have an enema at their disposal. Although the availability of medical equipment is generally high, some room for improvement can be identified. For instance, most FDs had no aspirator or tuning fork available, and one third of FDs lacked urine test strips. This report of availability does not imply a quality statement on the equipment.

Table 27 shows only minor differences between urban and rural FDs in the available number of items of equipment. Urban FDs are slightly better equipped than their rural colleagues. Fourteen urban FDs (10%) had 16–20 items at their disposal (compared to 5% of rural FDs). The worst equipped FD, a rural FD, indicated only having 15 items at her disposal.

Table 27. Number of items of practice equipment available to FDs, by level of urbanization

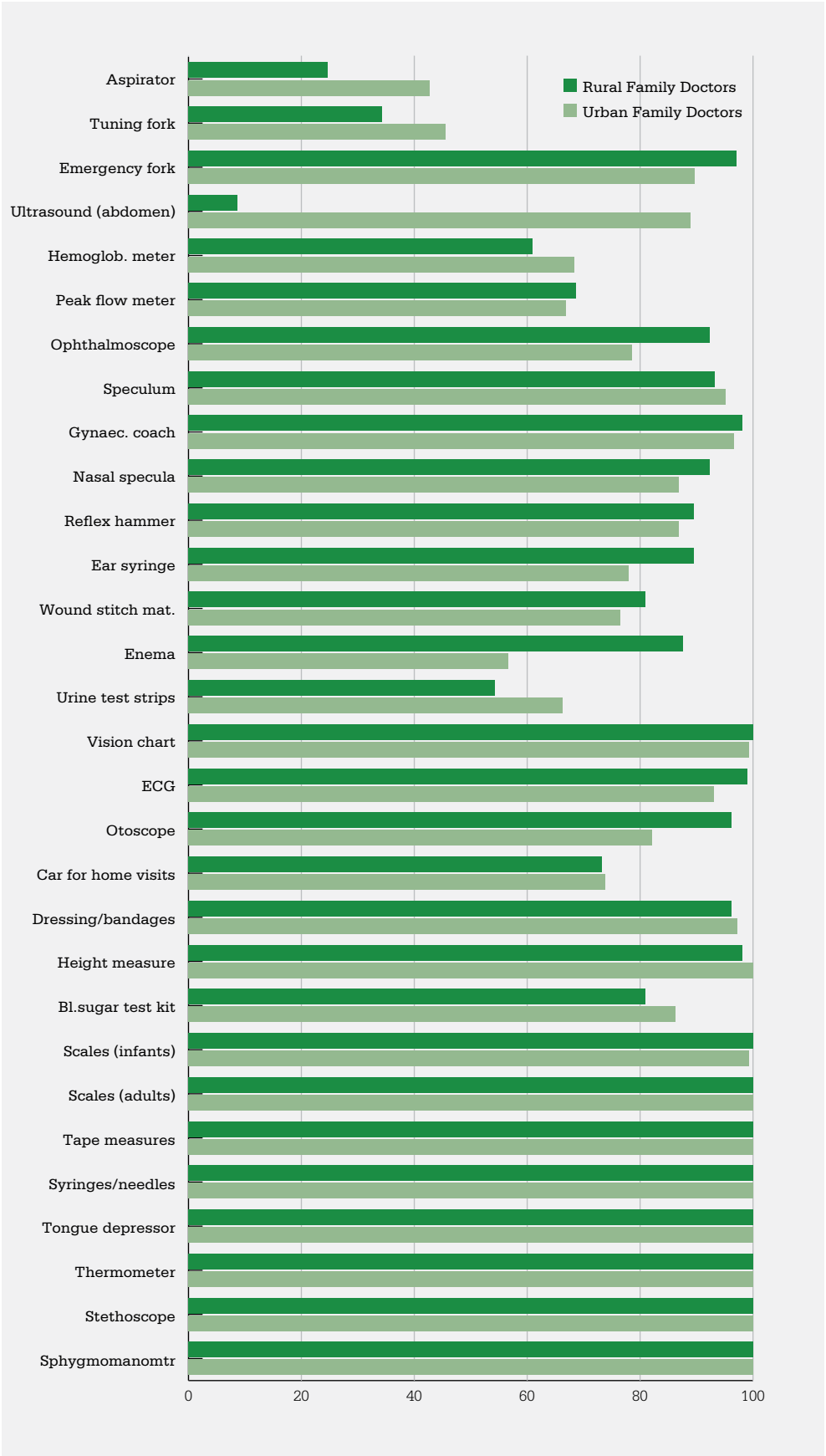
Number of items of equipment	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Abs.	%	Abs.	%	Abs.	%
15 or less	0	0.0	1	1.0	1	0.4
16 – 20	14	9.7	5	4.8	19	7.6
21 – 25	47	32.4	47	44.8	94	37.6
26 – 30	84	57.9	52	49.5	136	54.4
TOTAL	145	100	105	100	250	100
Average number of items per GP (from list of 30)	25.6		25.2		25.4	

Some of the items of equipment are never or rarely used by FDs (see Table 28). Differences between urban and rural FDs are considerable. Striking differences can be seen in the use of a gynaecological couch or a speculum. Most urban FDs never or rarely use them. Urban FDs make considerably more use of stitching instruments than their rural colleagues. The use of enema, Otoscope and ophthalmoscopes on the other hand is higher for rural FDs. Poor use of equipment may either point to the state of the equipment or to the inability of the FD to work with it properly (e.g. by lack of training). Otherwise, the presence of specialists in the same institution, especially in urban areas, may decrease the need for FDs to provide such types of services.

Table 28. Never or rarely used items of practice equipment, by level of urbanization

Never or rarely used items of equipment	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Abs.	%	Abs.	%	Abs.	%
Instrument for stitching wounds	90	62.1	35	33.3	125	50.0
Gynaecological couch	107	73.8	9	8.6	116	46.4
Speculum	106	73.1	7	6.7	113	45.2
Enema	54	37.2	49	64.7	103	41.2
Otoscope	35	24.1	43	41.0	78	31.2
Ophthalmoscope	32	22.1	45	42.9	77	30.8
Urine strips	37	25.5	30	28.6	67	26.8
Ear syringe	33	22.8	3	2.9	36	14.4

Fig. 9. Availability of medical equipment, by level of urbanization



Laboratory facilities (see Table 29) were available for most FDs. Urban FDs usually have a lab in their practice building while in rural areas labs are more often (15%) outside the practice. Fifteen per cent of rural FDs indicated that laboratory facilities were not available or were insufficiently available. For urban FDs, the situation is more or less the same for X-ray diagnostic facilities as for laboratory facilities. However, almost all rural FDs answered that they had no or insufficient access to X-ray diagnostic facilities. X-ray equipment is not part of the minimal list of equipment for rural PHC centres. Rural populations have to access X-ray investigations within PHC centres at the rayon level, upon referral by their FD.

Table 29. FDs' access to X-ray and laboratory facilities, by level of urbanization

Type of facility and mode of access	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%	Valid N	%	Valid N	%	Valid N
Availability of **laboratory facilities**						
• Fully available in practice or building	98.6	145	69.5	105	86.4	250
• Fully available outside practice or building	1.4	145	15.2	105	7.2	250
• Not or insufficiently available	0.0	145	15.2	105	6.4	250
Availability of **X-ray**						
• Fully available in practice or building	97.2	145	4.8	105	58.4	250
• Fully available outside practice or building	2.1	145	0.0	105	1.2	250
• Not or insufficiently available	0.7	145	95.2	105	40.4	250

4.6.3 Delivery of services

Clinical task profiles

Three elements have been distinguished concerning the FDs' clinical task profiles:

- the role of the FD in the first contact with patients' health problems
- the provision of medical technical procedures
- the treatment and follow up of diseases.

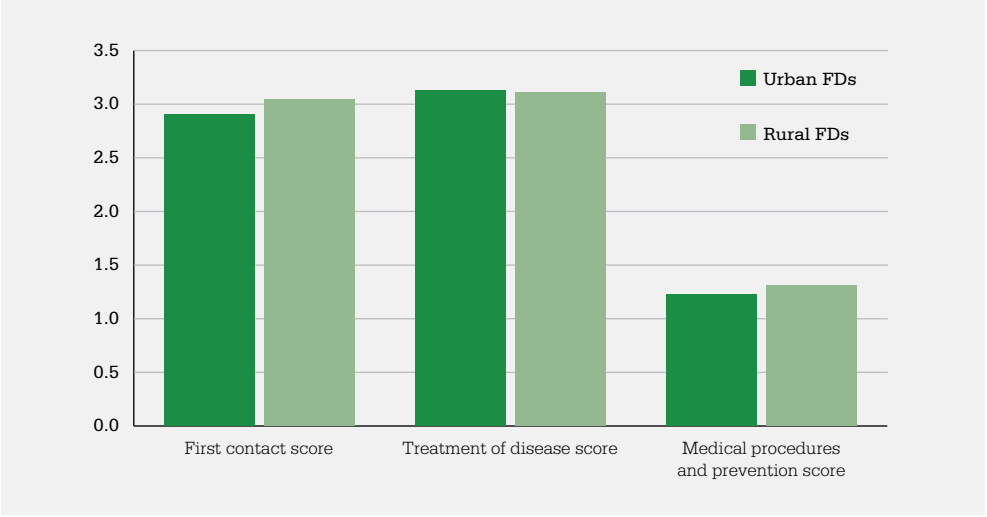
Each of these tasks has been measured by means of lists of items, which together indicate the degree of involvement of the FD. (For more details, see the description of the methodology of this study in Chapter 1.)

The role of FDs as the first contact for patients' health problems

The first contact role was measured with 18 items related to a variety of health/medical problems that can occur with men, women and children. FDs could indicate whether their patients addressed them with these problems '(almost) always'; 'usually'; 'occasionally'; 'seldom/never'; or if they did not know. The details of the answers can be found in Table A1 (provided in Annex 1 to this report). The percentages refer to FDs who answered they would always or usually be the doctor of first contact. The percentage in brackets refers to those who ticked the answer 'occasionally'. The results are summarised in Fig. 10, which shows (along with Table A1) that there is only a small difference between urban and rural FDs with regard to their role as the doctor of first contact. For eleven of the eighteen conditions mentioned, more than 70% of FDs answered that they are always

or usually the doctor of first contact. The consolidated first contact score is based on the 18 items (the score for maximum possible involvement equals four). Additionally, (not shown in the table) FDs were asked whether they were available to provide palliative care for patients with cancer. A large majority (86%) answered that this was '(almost) always' available. Urban FDs were practically all available for palliative care while only three quarters of rural FDs were.

Fig. 10. The role of FDs in the first contact, treatment and follow-up of disease and in medical-technical procedures



Involvement of FDs in the treatment of diseases

FDs are generally highly involved in the treatment of conditions such as chronic bronchitis, peptic ulcer, pneumonia, uncomplicated diabetes and follow-up care with TB, as specified in Table A2 (see Annex 1). Involvement in the treatment of hyperthyroidism, herniated disk lesion, acute cerebrovascular accident, salpingitis or Parkinson's disease is much lower (all below 50%). No large differences appear between urban and rural FDs. The treatment score (see Fig. 10) is based on 18 items and the maximum possible involvement score is four.

Medical-technical procedures and prevention provided by FDs

In contrast to both previously mentioned groups of services, Fig. 10 shows that the role of FDs in providing medical-technical procedures and preventive services is extremely limited (for details see Table A3 in Annex 1). The score for medical-technical procedures and prevention is based on 16 items and the maximum possible score equals four again. Only two procedures are reported to be performed in the FD practice, namely, setting up intravenous infusion and immunizations for flu or tetanus. Allergy vaccinations are provided by two thirds of FDs, but all other procedures are only rarely provided. Differences between urban and rural FDs in the provision of medical-technical procedures are small again. It seems that a number of procedural tasks and prevention, as listed in the table, are outside the domain of Moldovan FDs. Obviously, the provision of medical-technical procedures depends on the availability of medical equipment. However, FDs reported to have relatively many items of medical equipment at their disposal. For instance, more

than three quarters of FDs have wound stitching materials but urban FDs never provide the service and among their rural colleagues only one quarter does so.

Practically without exception, FDs, both in urban and rural areas, reported to be involved in screening and activities targeted at specific patient groups or health risks (see Table 30). So, the screening for infectious diseases (like STIs, HIV/AIDS and TB); vaccination of groups at risk for influenza; cancer screening; school health care; and rehabilitation are very much integrated in PHC in the Republic of Moldova.

Table 30. Involvement of FDs in activities for specific groups, by level of urbanization

GP involved in:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	% Yes	Valid N	% Yes	Valid N	% Yes	Valid N
Screening for sexually transmitted infections (STI)	100	145	100	105	100	250
Screening for HIV / AIDS	100	145	100	105	100	250
TB Screening	100	145	100	105	100	250
Influenza vaccination for high-risk groups	100	145	100	105	100	250
Rehabilitative care	99.3	145	100	105	99.6	250
Providing services in a school setting (e.g. health education)	99.3	145	100	105	99.6	250
Cervical cancer screening	100	145	98.1	105	99.2	250
Breast cancer screening	100	145	98.1	105	99.2	250
TOTAL coverage for 'Specific groups' (range 0–100%)	99.8	145	99.5	105	99.7	250

Mother and child care and reproductive health

In the Republic of Moldova, mother and child care, as well as reproductive health, are generally reported to be tasks for FDs. All but one respondent indicated they provided family planning and contraception services to women. Routine antenatal care, immunization and paediatric surveillance are also generally reported to be tasks of FDs, both in urban and rural practices (see Table 31).

Table 31. Services provided by FDs to all or most mothers and children, by level of urbanization

FD providing the following services to all or most:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	Abs.	%	Abs.	%	Abs.	%
Family planning and contraception	145	100	104	99.0	249	99.6
Routine antenatal care	145	100	105	100	250	100
Routine immunizations to children up to 18 years	145	100	105	100	250	100
Routine paediatric surveillance (up to 18 years)	145	100	105	100	250	100

5. PATIENTS ON PHC IN THE REPUBLIC OF MOLDOVA

5.1 Results of the survey among patients

In each of the practices of the 250 FDs who participated in the survey, patients were asked to answer a questionnaire dealing with their perspective. The number of patients included was 2102. The results described in this chapter are based on the experiences and opinions of these patients. To collect the data, fieldworkers visited the practices and systematically asked every attending patient for his or her cooperation, until the target of ten completed questionnaires was achieved (in rural areas the target was at least seven patients.) This method means that the information gained from the patient survey relates to the same practices as the information from the survey among the FDs. Further explanation of the methodology can be found in Chapter 1. In the description of the results, reference has been made to the health systems functions of the Framework explained in Chapter 1.

5.2 Respondents' characteristics

The patient survey had a response of 2102 patients. As Table 32 shows, almost two thirds of the completed questionnaires were filled in by women (63.3% overall). It is usual that women are overrepresented among visitors of health care facilities. About two thirds of the respondents were from urban practices and one third from rural practices. Compared to the FDs in the survey, urban patients are slightly overrepresented. This results from our methodology by which the response target in urban practices was higher than in rural practices (see Chapter 1).

Table 32. Gender distribution of patients, by level of urbanization

Characteristics		Urban (N=1335)		Rural (N=767)		Total (N=2102)	
		N	%	N	%	N	%
Gender	Male	493	36.9	279	36.4	772	36.7
	Female	842	63.1	488	63.6	1330	63.3
Total		1335	100	767	100	2102	100

Rural respondents are slightly older than those in urban practices (see Table 33). Forty-nine per cent of the rural respondents were older than 50 years. Of the urban respondents, 43% belonged to this age group. The average age of urban respondents was 46.7 years and of rural respondents it was 48.9 years.

Over one third of the patients who filled in the questionnaire were employed. Almost one quarter of respondents were older than 60 years and, related to this, one fifth report to be retired. Ten per cent of respondents were unemployed and six per cent unable to work. Among the urban patients, there were more school-going respondents (adolescents in the age group of 18–20 years). Among rural patients, more respondents answered that their occupation was to look after a family compared to urban respondents. Differences in the living situation of respondents were small. In urban areas, more respondents were living alone or with parents, while in rural areas more respondents lived in a family with children.

Table 33. Patients' age, occupational background and living situation, by level of urbanization

Patients' backgrounds	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Age						
• Up to 20 yrs.	15	1.1	4	0.5	19	0.9
• 21 - 30	230	17.2	87	11.3	317	15.1
• 31 – 40	243	18.2	128	16.7	371	17.6
• 41 – 50	269	20.1	174	22.7	443	21.1
• 51 – 60	287	21.5	198	25.8	485	23.1
• Over 60	291	21.8	176	22.9	467	22.2
Total	1335	100	767	100	2102	100
Occupation						
• in school / education	62	4.6	5	0.7	67	3.2
• unemployed	118	8.8	96	12.5	214	10.2
• unable to work (because of disability)	67	5.0	54	7.0	121	5.8
• looking after family / home	123	9.2	99	12.9	222	10.6
• employee	577	43.2	273	35.6	850	40.4
• self-employed	73	5.5	44	5.7	117	5.6
• pensioned / retired	264	19.8	164	21.4	428	20.4
• other	51	3.8	32	4.2	83	3.9
Total	1335	100	767	100	2102	100
Living situation						
• alone	188	14.1	72	9.4	260	12.4
• with parents	80	6.0	29	3.8	109	5.2
• with husband / wife	416	31.2	244	31.8	660	31.4
• with family (incl. children)	547	41.0	378	49.3	925	44.0
• other	104	7.8	44	5.7	148	7.0
Total	1335	100	767	100	2102	100

5.3 Accessibility of care

5.3.1 Financial access

Although a majority of patients answered that the services listed in Table 34 are available free of charge, there is a major exception; almost all respondents indicate they have to pay for medicines or injections prescribed by their FDs. The smaller percentages also point to possible financial barriers for access to care. Furthermore, it is important to note that three out of ten respondents report that they have to pay for a visit to a medical

specialist after referral by their FD. One fifth indicated that they have to pay for a home visit by the FD and one sixth for a regular check-up of a baby or young child. Finally, it turns out that even a regular visit to the FD is reported not to be free by some patients.

Table 34. Services for which (co)payment from patients is required, by level of urbanization

Type of service	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Visit to your FD	113	8.5	68	8.9	181	8.6
Medicines or injections prescribed by your FD	1268	95.0	725	94.5	1993	94.8
A visit to a specialist after referral by your FD	403	30.2	208	27.1	611	29.1
Home visit by your FD	285	21.3	164	21.4	449	21.4
Regular check-up of baby or young child	206	14.5	145	18.9	351	16.7

Table 35 indicates that payment for PHC services is a major obstacle to its utilization. Thirty per cent of patients report that private payment for medicines had made them decide in the past not to visit or to delay a visit to their FD and having to pay to visit the FD had this effect according to seven per cent of the respondents.

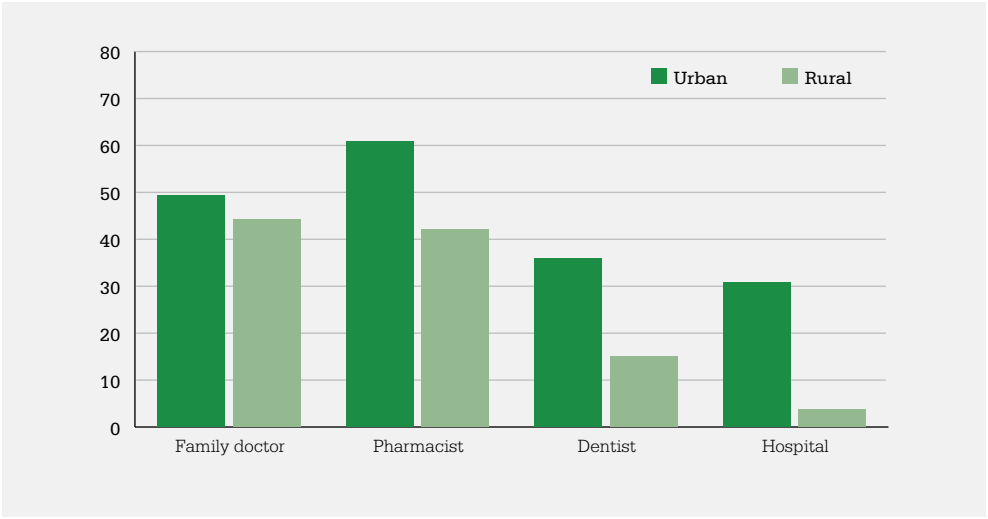
Table 35. Obstacles to use services related to co-payments, by level of urbanization as reported by patients

Decision taken in past year	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Not to visit or delay a visit because I could not pay for the visit	99	7.4	45	5.9	144	6.9
Not to visit or delay a visit because I could not pay for the medicines	414	31.0	213	27.8	627	29.8

5.3.2 Geographical access and responsiveness

Table 36 and Fig. 11 show the service aspects of the PHC practice. The following aspects have been considered: attainability and accessibility, opening hours and convenience and patient friendliness.

Fig. 11. Patients with travel time up to 20 minutes to health care facilities (%)



At least four in ten patients could reach their FD and their preferred pharmacist within a travelling time of 20 minutes. The preferred dentist is within 20 minutes reach for less than one in three of the respondents, the nearest hospital for one in five. As can be expected, travel times to all care providers are longer in rural areas compared to urban areas. Travel times of more than 40 minutes are common with regard to the preferred dentist (more than half of respondents in rural areas) and the nearest hospital (more than 70% in rural areas). For rural patients, it is rare to remain under the 20 minutes travel limit for a visit to a hospital.

Table 37 provides the results of a list of 15 items which, together, indicate the patients' experiences and opinions concerning service aspects of their FD's practice, such as accessibility and convenience of the premises, treatment by practice staff and opening hours and availability of service providers. Possible answers were: 'Yes, I agree', 'I agree somewhat', 'I do not agree', and 'I don't know'. Numbers and percentages in the table refer to the number of respondents answering 'Yes, I agree'.

On average, two thirds of all patients indicated that they could easily reach the practice or PHC centre by public transport, more so in urban than in rural areas. In terms of physical access to the premises for the handicapped or those using a wheelchair, one quarter of the patients answered that the FD's office was not very accessible for these groups. One third answered that the waiting room was not convenient. Urban waiting rooms seem to be more convenient than those in rural PHC centres.

Table 36. Patients' travel time to PHC providers, by level of urbanization

Provider and distance	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
FD						
• up to 20 minutes	659	49.4	340	44.3	999	47.5
• 20–40 minutes	648	48.5	352	45.9	1000	47.6
• 40–60 minutes	22	1.6	63	8.2	85	4.0
• more than 1 hour	6	0.4	12	1.6	18	0.9
• don't know	0	-	0	-	0	-
Total	1335	100	767	100	2102	100
Preferred pharmacist						
• up to 20 minutes	813	60.9	322	42.0	1135	54.0
• 20–40 minutes	498	37.3	360	46.9	858	40.8
• 40–60 minutes	20	1.5	67	8.7	87	4.1
• more than 1 hour	4	0.3	16	2.1	20	1.0
• don't know	0	-	2	0.3	2	0.1
Total	1335	100	767	100	2102	100
Preferred dentist						
• up to 20 minutes	479	35.9	116	15.1	595	28.3
• 20–40 minutes	659	49.4	175	22.8	834	39.7
• 40–60 minutes	123	9.2	206	26.9	329	15.7
• more than 1 hour	31	2.3	180	23.5	211	10.0
• don't know	43	3.2	90	11.7	133	6.3
Total	1335	100	767	100	2102	100
Nearest hospital						
• up to 20 minutes	411	30.8	29	3.8	440	20.9
• 20–40 minutes	823	61.6	154	20.1	977	46.5
• 40–60 minutes	74	5.5	275	35.9	349	16.6
• more than 1 hour	14	1.0	305	39.8	319	15.2
• don't know	13	1.0	4	0.5	17	0.8
Total	1335	100	767	100	2102	100

A web site as a service of the practice for the patients seems not to be relevant to most respondents. Over two thirds of the patients (71%) answered that they did not know whether such a web site existed, while one fifth answered that such a web site was not in place (not shown in table).

Fewer than half of the patients were aware of the existence of a complaint mail box in their practice or PHC centre.

Table 37. The experienced quality of the FD practice, by level of urbanization

Patients agreeing with following statements:	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
I can easily reach the practice by public transport	1051	78.7	330	43.0	1381	65.7
The practice/centre is accessible for disabled people and people with a wheelchair	969	72.6	547	71.3	1516	72.1
The waiting room for patients is convenient	952	71.3	443	57.8	1395	66.4
My FD's practice has a web site	109	8.2	19	2.5	128	6.1
In this practice or centre there is a complaint mail box that I can use to submit a complaint if I am not satisfied	629	47.1	357	46.5	986	46.9
When the practice is open and I want to visit a FD urgently it is possible to have the visit the same day	847	63.4	518	67.5	1365	64.9
During opening hours it is easy to get a doctor on the telephone for advice	740	55.4	443	57.8	1183	56.3
When I visit the practice there is always a doctor available	1012	75.8	550	71.7	1562	74.3
When the practice is closed there is a telephone number (other than 903) to call when I get sick	847	63.4	459	59.8	1306	62.1
In this practice it is possible to visit a FD on Saturdays or Sundays	692	51.8	384	50.1	1076	51.2
In this practice it is possible to visit a FD after 18:00 (at least once per week)	229	17.2	127	16.6	356	16.9
I am satisfied about current opening hours of the practice	1091	81.7	603	78.6	1694	80.6
Staff at the reception area are kind and helpful	987	73.9	561	73.1	1548	73.6
Making an appointment with my FD takes too much time	353	26.4	228	29.7	581	27.6
I need to wait a long time in the waiting room to see the FD	436	32.7	235	30.6	671	31.9
As there are often more patients at the same time in a consultation room, I sometimes refrain from telling certain information that the doctor should know	348	26.1	188	24.5	536	25.5

In general, rural respondents report slightly more positive experiences with the practice opening hours than urban respondents. But urban respondents are more positive about being able to get into contact with their doctors, either personally or via telephone. The majority of patients have experienced that, during opening hours, a FD is always available and that it is possible to visit a FD the same day if necessary. Well over 60% of the respondents answered that there is a telephone number for patients to use if they get sick outside opening hours.

Visiting a FD on a weekend day is possible according to half of all respondents. They reported that this is more difficult in the evenings; only 17% report this as a possibility. Despite these limitations, most patients are satisfied with current opening hours.

Three quarters of the respondents agree that staff at the reception desk are kind and helpful, which is highly appreciated. However, more than one quarter of the patients was not satisfied with the time it takes to make an appointment with the FD. Another possibility for improvement is the time spent in the waiting room; it is considered too long according to almost one third of the respondents. More than a quarter of the patients answered that making an appointment with the FD takes too long.

Finally, it seems that in many FD offices the situation of privacy leaves something to be desired. About one quarter of the patients reported that they sometimes refrain from telling the doctor information he or she should know, because other patients are present in the consultation room.

5.4 Continuity of care

5.4.1 Longitudinal and interpersonal continuity

Patients, both in urban and rural practices, visit their FD on average almost eight times a year (see Table 38). However, behind this average, a variation in the number of visits is strong. There are frequent visitors, which are the one third with 10 or more visits in the previous year, and there are the people who visit infrequently. One quarter of respondents made one to three visits to the FD in the previous year. None of the respondents report not seeing their doctor at all, while almost one fifth of the patients answered that they had visited their doctor 10–12 times during the past 12 months.

Patients on average indicate that they have visited a nurse almost six times during the past year. One quarter of patients had not visited a nurse in the previous year and the same proportion of respondents had visited a nurse 1–3 times during the same period. In rural areas, more patients reported visiting the nurse more than 12 times compared to urban areas.

Table 38. Patients' frequency of visits to their FD and nurse, during the previous 12 months, by level of urbanization

Visit frequency past 12 months	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Doctor						
• no visits	-	-	-	-	-	-
• 1–3 visits	332	24.9	189	24.6	521	24.8
• 4–6 visits	398	29.8	255	33.2	653	31.1
• 7–9 visit	136	10.2	75	9.8	211	10.0
• 10–12 visits	258	19.3	148	19.3	406	19.3
• 13 or more visits	211	15.8	100	13.0	311	14.8
Total (doctor)	1335	100	767	100	2102	100
Average annual visit frequency with physician	7.89		7.62		7.80	
Nurse						
• no visits	340	25.5	159	20.7	499	23.7
• 1–3 visits	353	26.4	206	26.9	559	26.6
• 4–6 visits	250	18.7	158	20.6	408	19.4
• 7–9 visit	64	4.8	42	5.5	106	5.0
• 10–12 visits	197	14.8	113	14.7	310	14.7
• 13 or more visits	131	9.8	89	11.6	220	10.5
Total (nurse)	1335	100	767	100	2102	100
Average annual visit frequency with nurse	5.43		5.89		5.60	

5.4.2 Patients' experiences with their FD

The focus of this section is on the perceived functioning of FDs in the personal relationship with the patients. Important aspects in this evaluation are communication between the doctor and the patient, how patients perceive the doctor's competence and the patients' trust and confidence in the doctor. Basic to this evaluation are the conditions for a relationship between doctor and patient; for instance in terms of personal continuity and time available to patients for consultations.

The conditions for a continuous doctor–patient relationship are good. Table 39 provides data on continuity, such as: how long patients have been registered with their current doctor; whether they normally see the same physician each time they visit the PHC centre; and the usual length of a consultation. Practice populations are relatively stable. A large majority (almost 80%) of all patients answered that they have been enlisted or registered with their FD for at least 3 years. Among both urban and rural respondents, 3% became registered with their current FD within the last year.

For the majority of patients, being registered with a specific FD means that they see this doctor at every visit to the PHC practice. Less than 10% of the patients reported that this is not always the case and that they occasionally see another FD working in the practice. The average duration of a consultation is reported to be almost 20 minutes. Consultations longer than 15 minutes are normal as over half of the respondents reported this. The possibility of making an appointment the same day is twice as high in rural areas than in urban areas. However, on average, the same number of patients (almost two thirds) reported being able to make an appointment within one day. Rural patients more often reported never making appointments than urban patients (28% versus 20% respectively).

Table 39. Patients' experiences with and statements about their doctor, by level of urbanization

Contact experiences and statements	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Length of time being a patient with this FD						
• less than one year	45	3.4	18	2.3	63	3.0
• 1–3 years	191	14.3	62	8.1	253	12.0
• more than 3 years	1045	78.3	635	82.8	1680	79.9
• I don't know	54	4.0	52	6.8	106	5.0
If I visit a FD in my practice I see the same doctor each visit	1241	93.0	677	88.3	1918	91.2
Estimated duration of a consultation						
• up to 5 minutes	2	0.1	5	0.7	7	0.3
• 6–10 minutes	148	11.1	95	12.4	243	11.6
• 11–15 minutes	380	28.5	193	25.2	573	27.3
• more than 15 minutes	805	60.3	474	61.8	1279	60.8
Average length of a consultation (in minutes)	19.20		19.29		19.23	
Estimated time between making an appointment and visiting the FD						
• the visit is the same day	226	19.9	340	44.3	606	28.8
• I have to wait 1 day	549	41.1	152	19.8	701	33.3
• 2–3 days	212	15.9	28	3.7	240	11.4
• more than 3 days	20	1.5	7	0.9	27	1.3
• I never make appointments	260	19.5	213	27.8	473	22.5
• I don't know	28	2.1	27	3.5	55	2.6
My FD knows my personal situation (e.g. work or home situation)	753	56.4	462	60.2	1215	57.8
My FD knows my problems & illnesses from the past (from my medical records)	894	67.0	550	71.7	1444	68.7
My FD takes sufficient time to talk to me	1009	75.6	535	69.8	1544	73.5
My FD listens well to me	1081	81.0	588	76.7	1669	79.4
My FD doesn't just deal with medical problems but can also help with personal problems and worries	476	35.7	353	46.0	829	39.4
My FD gives clear explanations about my illnesses and prescribed medicines	1085	81.3	578	75.4	1663	79.1
My FD would visit me at home if I asked for it	1012	75.8	555	72.4	1567	74.5
After a visit to my FD I feel able to cope better with my health problem / illness	761	57.0	470	61.3	1231	58.6
When I have a new health problem, I go to my FD before going to a medical specialist	952	71.3	601	78.4	1553	73.9
My FD is well trained and capable of treating a wide variety of conditions and diseases	1033	77.4	608	79.3	1641	78.1
My FD's practice has sufficient medical equipment	691	51.8	204	26.6	895	42.6

A large number of items in Table 39 summarise the patients' evaluation of their FD. The numbers and percentages in the table refer to the number of respondents answering 'Yes, I agree'. Almost three quarters of the patients answered that they visited their FD, rather than a medical specialist, when a new health problem presents. So, for one quarter the FD is not the obvious doctor for the first contact. Two thirds of the respondents assumed

that their FD was aware of their past problems and illnesses, based on medical records. Communication skills, such as listening and giving explanations, were well appreciated. On average, three quarters of the respondents agreed that their doctor would visit them at home if asked. The statement of feeling better able to cope with health problems or illness after a visit to their doctor is an overall judgement about the patients' perceived quality. Urban patients are more positive in this respect than rural patients: respectively 75% and 61% agreed with this statement. Roughly the same proportions of patients agree with the statement that their FD is well trained and capable of treating a wide variety of conditions and diseases (overall 78% agreement).

These patient responses point to some room for improvement. More than 40% of the respondents had doubts about their FD's knowledge of their personal situation, and a similar proportion answered that they did not feel better able to cope with their health problem or disease after the visit. Another point for attention is the patients' perception of the medical equipment in the FD's practice. The FDs themselves report that they are relatively well equipped. However, only a quarter of the patients in rural areas and slightly more than half of them in urban practices believe that equipment is sufficient. This may point to equipment that is perhaps not fully operational to FDs. Another issue is that one third of the rural respondents and less than half of those in urban areas believe that their FD doesn't just deal with medical problems, but can also help with personal problems and worries. This may point to unmet needs for psychosocial care.

Table 40 provides information on health promotion activities provided by FDs. A large majority of the patients reported that their FD talked with them about eating healthily. Talking about taking physical exercise and the use of alcohol and smoking behaviour occurs less often, according to the respondents. Advice about reducing or quitting smoking is reported to occur the least frequently, by two thirds of the patients. The differences between rural and urban respondents are small.

Table 40. Patients' assessment of involvement of physician in promoting healthy behaviour, by level of urbanization

	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
Topic	N	%	N	%	N	%
Eating healthily	1132	84.8	618	80.6	1750	83.3
Taking physical exercise	1077	80.7	567	73.9	1644	78.2
Use of alcohol	953	71.4	526	68.6	1479	70.4
Reduce or stop smoking	902	67.6	494	64.4	1396	66.4

5.5 Perceived coordination of care and choice of provider

Most respondents answered that they had been assigned to their current FD (see Table 41). Even in urban areas where choice of providers is greater than in rural areas, a majority indicated not to have chosen. However, most patients seem to be aware of the possibility to make a choice. Having said this, although most patients indicate that they are free to change to another FD, still almost one fifth believe that they cannot.

Table 41. Patients' freedom to choose and change their FD, by level of urbanization

Option	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
Patients reporting to be assigned to this doctor	765	57.3	504	65.7	1269	60.4
Patients reporting they cannot change to another doctor	227	17.0	163	21.3	390	18.6

Table 42 provides information about patients' experiences with the exchange of information and cooperation between health care providers. The numbers and percentages in the table refer to those answering 'Yes, I agree'. Patients generally have moderate positive views about the exchange of information between their own FD and other FDs. After treatment by a medical specialist more than half of respondents answered that they thought that their FD would know the result of the specialist treatment. Eight out of ten patients are aware of the referral procedure by which the FD should be visited before a medical specialist can be seen. It is generally agreed that the FD and nurse are working well together. Slightly more than half of the patients answered that nurses sometimes provide independent consultations, which make a visit to the FD unnecessary. The differences between urban and rural respondents were very small in these respects.

Table 42. Patients' experiences with information and cooperation, by level of urbanization

Statements	Urban (N=1335)		Rural (N=767)		Total (N=2102)	
	N	%	N	%	N	%
If I visit a doctor other than my own FD, he/she has all the necessary information about me	810	60.7	467	60.9	1277	60.8
When I am referred, my FD informs the medical specialist about my illness	727	54.5	402	52.4	1129	53.7
If I have been treated by a medical specialist, my FD knows the results of it	771	57.8	425	55.4	1196	56.9
To see a specialist, I first need to visit my FD for a referral	1075	80.5	611	79.7	1686	80.2
My FD and the practice nurse are working well together	1002	75.1	565	73.7	1567	74.5
Sometimes a nurse does the consultation, making it unnecessary to see my FD	711	53.3	448	58.4	1159	55.1

6. THE POSITION OF NURSES IN PHC CENTRES WITHOUT PERMANENT FDS

This chapter contains the results of the survey of nurses in the Republic of Moldova who work in PHC centres where no FD is working permanently. The results described are based on the experiences and opinions of these nurses. The survey deals with the following topics: workload and use of time; access and availability of services to patients; various aspects of quality of care; use of clinical information; coordination and cooperation; available nursing equipment; and continuity of care.

6.1 Respondents' characteristics

A total of 25 female nurses responded to the survey. The average age was 43 years (range: 24–61). On average, they had been a nurse for 19 years (range 2–42).

6.2 Accessibility of care

6.2.1 Organizational access

Workload

An overview of various aspects of the nurses' workload is provided in Table 43. On average, nurses work more than 42 hours per week, but differences are great. The number of patient visits in the PHC centre is 17 per day, while, in addition, 17 home visits are made in a normal week. So, altogether nurses have an average of 100 patient contacts per week. Most patients seen by the nurse, either in the centre or in the patients' homes, are also treated by a FD (almost 60%). PHC centres where no FDs are permanently working are usually visited by a FD once per week. The nurses spend on average 20 hours per month reading professional journals or nursing information and another 7 hours on training and following courses.

Compared to FDs working in rural practices, these nurses work slightly fewer hours per week and have considerably fewer patient contacts in the centre but see more of them at home and spend about the same time on activities for keeping up to date.

Table 43. Nurses' workload and use of time

Aspects of workload	Total (N=25)		
	Mean	Range	Valid N
Number of working hours per week	42.4	9–56	25
Number of patient visits in PHC centre per day	16.9	11–30	25
Number of home visits per week	17.1	5–30	25
Number of patients seen per day who are also treated by a FD	11.6	2–20	25
Number of hours reading professional journals per month	20.2	10–30	25
Number of hours following courses per month	6.7	2–15	25

Patients' access and availability of services

When patients want to see the nurse they can generally see her the same day during office hours (see Table 44). No opening hours in the evening are reported. All nurses indicate it is normal that patients have a telephone number at their disposal to call in case they get sick when the practice is closed, and 11 of the 25 nurses answered that they believed opening hours were not convenient for patients. Activities or 'patient schools' for specific patient groups are offered in all PHC centres where respondents are working. All centres provided activities for pregnant women. Activities for patients with diabetes are mentioned by more than half of the nurses. One third of the respondents said that they provide family planning 'schools' in the PHC centres. Activities for the elderly are rarer; only two nurses mention it. Activities for the overweight or for obesity, for chronic obstructive lung disease or for other categories of patients are not reported to be undertaken in any of the centres. The last row of the Table 44 shows that most nurses are working five or more kilometres away from the nearest FD practice.

Table 44. Indicators of access to the practice

Aspects of patients' access	Total (N=25)		
	N	%	Valid N
Same day visits are possible	25	100	25
Evening opening at least once per week	0	-	25
Phone number available for patients when practice is closed	25	100	25
Opening hours convenient for patients	14	56.0	25
Any activity ('patient school') offered in the PHC centre for special patient groups	25	100	25
Kind of activity reported:			
• for diabetes patients	14	56.0	25
• for patients with hypertension	10	40.0	25
• for family planning information	9	36.0	25
• for pregnant women	25	100	25
• for the elderly	2	8.0	25
• for overweight / obesity	0	-	25
• for chronic obstructive lung disease	0	-	25
• for other groups	0	-	25
Practice situated 5 or more kms distance from nearest practice building of a FD	23	92.0	25

Quality improvement

Clinical guidelines, expert directives and procedures for dealing with patient complaints are tools to improve the quality of care. Furthermore, evaluations can be used to assess the satisfaction of patients. Table 45 shows the utilization of the different methods of quality improvement. Clinical guidelines are frequently used by only a quarter of the nurses. Among FDs, 84% reported frequently using them. Complaints procedures are generally in place in all nurse centres, which was also the case with FDs. Half of the nurses reported that patient satisfaction is investigated in their PHC centre, which is less frequent than among FDs. Finally, job satisfaction interviews with nurses are reported to be held by a quarter of the nurses. More than 60% of the FDs reported such job interviews.

Table 45. Use of clinical guidelines, complaints procedures, evaluation methods and CME by level of urbanization

	Total (N=25)		
Quality improvement	**N**	**%**	**Valid N**
Applying clinical guidelines:			
• frequently	7	28.0	25
• occasionally or seldom/never	18	72.0	25
Having a procedure for dealing with complaints	25	100	25
Using evaluation methods:			
• investigating patients' satisfaction	13	52.0	25
• interviewing nurses about job satisfaction	7	28.0	25

6.3 Continuity of care

6.3.1 Informational continuity

Routinely keeping a record of medical information of patients is a major condition for quality and continuity of care and this is part of the daily practice for three quarters of the nurses (see Table 46). Although this is slightly better than the record keeping among FDs, still one quarter of the nurses could improve. The identification of categories of patients may enable more efficient approaches of active monitoring and prevention. The practice information systems that the nurses use do not seem tailored to identify patient groups on the basis of a shared diagnosis, health risk or, for example, age. Only one quarter of the nurses report that such lists can easily be generated. This may be explained by the fact that only 20% of the nurses have a computer at their disposal (compared to 68% of the rural FDs). When computers are available in the nurse centres, these not used for keeping patients records but instead only for searching medical information on the Internet.

Effective cooperation within and between primary and secondary care largely depends on the availability of information from other health care workers if patients are referred. Most nurses indicate to always or usually inform the FD or medical specialist about the referred patients. This information is usually provided by telephone or letter.

Table 46. Availability and use of clinical information and use of computers, by level of urbanization

Quality improvement	Total (N=25)		
	N	%	Valid N
Keeping patients' medical records routinely for all visits	19	76.0	25
Generate a list of patients by diagnosis or health risk:			
• easy	6	24.0	25
• somewhat difficult	10	40.0	25
• very difficult	7	28.0	25
• I don't know	2	8.0	25
Always or usually informing FDs or medical specialists about referred patients	22	88.0	25
Use the computer for:			
• keeping nursing records	0	-	25
• searching medical information	5	20.0	25
Not using a computer	20	80.0	250

6.4 Coordination of care

6.4.1 Cohesion within PHC

All nurses work with one other nurse (or more) or auxiliaries in the PHC centre (see Table 47). One respondent worked in the centre with a midwife. In the second part of the table, an overview of other disciplines working in the PHC centres is provided. All nurses answered that they also work with a community nurse in the centre. In one of the centres, the nurse works with a social worker. Working in a PHC centre with other disciplines, such as family workers, dieticians and dentists has not been reported.

Table 47. Other health professionals working in the PHC centre

Working in the same PHC centre	Total (N=25)		
	Mean number	Range	Valid N
Nurses	1.7	1-4	25
Auxiliaries	1.5	1-2	25
Midwives	1	1	1
Working in the same PHC centre	**N**	**%**	**Valid N**
Community nurse	25	100	25
Social workers	1	4.0	25
Family workers	0	0.0	25
Dietician	0	0.0	25
Dentist	0	0.0	25
Other	0	0.0	25

In order to improve data exchange and communication about patients, for instance on risk factors or preventive activities, it is helpful if different health care professionals can share patient records (see Table 48). The nurses indicated that they almost always use the same patient records as the FDs. The respondents stated that this is also the case for nurses working in other settings. According to the nurses, only a minority of midwives uses these same patient records, but more than half of the respondents did not know this.

Table 48. The use of patient records by other health care workers

Use of patient records by other health care workers	Total (N=25)		
	N	%	Valid N
FDs	23	92.0	25
Other nurses	19	76.0	25
Midwife	4	16.0	25

Regular meetings with FDs and with other nurses are reported by all respondents (see Table 49). Regular meetings with social workers are reported by a majority, while only two thirds of the respondents report such meetings to occur with midwives.

Table 49. Face-to-face meetings with other professionals

Meeting face-to-face at least 1x per month with:	Total (N=25)	
	%	Valid N
FDs	100	25
Other nurse(s)	100	25
Midwife	64.0	25
Social worker	92.0	25

6.4.2 Contact with other care levels and with the community

Contacts with medical specialists are generally frequent. All or almost all of the nurses frequently or sometimes ask for medical advice from paediatricians, internists, gynaecologists, surgeons or ophthalmologists, as can be seen in Table 50. The level of contact with neurologists, dermatologists and emergency services is only slightly less frequent.

Table 50. Consultation with and asking advice from medical specialists,

'Frequently' or 'sometimes' asking advice from:	Total (N=25)	
	%	Valid N
Paediatrician(s)	100	25
Internist(s)	96.0	25
Gynaecologist(s)	100	25
Surgeon(s)	92.0	25
Neurologist(s)	88.0	25
Dermatologist(s)	80.0	25
Ophthalmologist(s)	92.0	25
Emergency services	84.0	25

As can be seen in Table 51, the reported number of patients referred to these and other specialists or services in a period of one week prior to filling in the questionnaire vary moderately. The highest average referral rates are to FDs followed by referrals to social workers. Relatively few referrals are made to mental health care.

Table 51. Number of patients referred by nurses to medical specialists and other services during a one week period

Patients referred to:	Total (N=25)		
	Mean	Range	Valid N
FD	10.04	1-20	25
Secondary specialist	2.68	0-10	25
Emergency service	2.36	0-5	25
Mental health service	0.52	0-2	25
Social worker	3.64	0-10	25

The connections of the PHC centre where the respondents are working with the community vary. Half of the nurses reported having regular meetings with local authorities (see Table 52). Contacts with community workers or social workers are strong as almost all nurses reported regularly having such contacts.

Table 52. Connections with the community, by someone in the PHC centre

Type of connections:	Total (N=25)	
	%	Valid N
Regular meetings with local authorities	52.0	25
Regular meetings with community / social workers	80.0	25

6.5 Comprehensiveness of care

6.5.1 Medical equipment

Nurses indicated which items of equipment, from a list of 20 items, they had at their disposal in their PHC centre. In Fig. 12, the availability of all items of equipment has been represented. Eleven items were available to (almost) all nurses and an additional three items were available to at least three quarters of them. Of the basic items, 4 out of 20 were not available to over half of the nurses. These four items were aspirators, peak flow meters, urine test strips and a car for making home visits. All but one nurse lacked a car for home visits and on average nurses make 17 home visits a week.

Fig. 12. Available equipment (% of nurses)

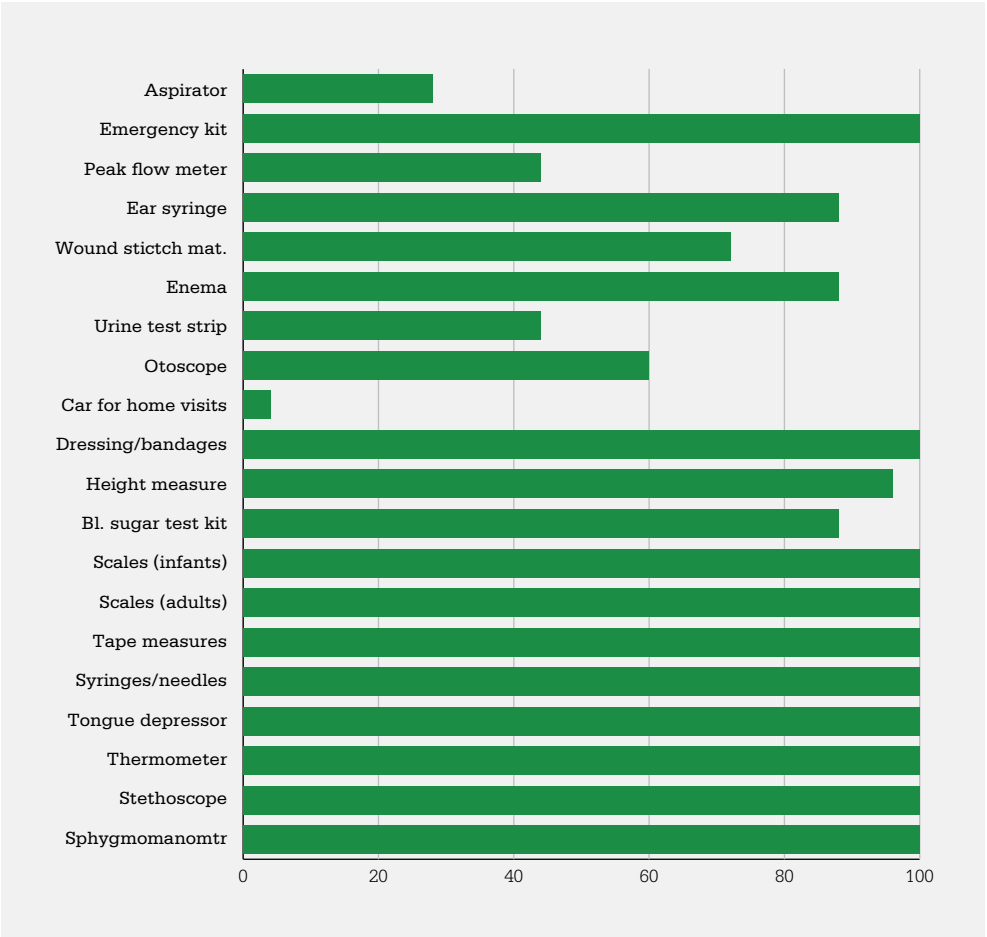


Table 53 shows that, overall, nurses have 16 items of medical equipment available. The variation in this availability is small. Out of the 25 nurses, 10 nurses (40%) had between 11 and 15 items at their disposal, and 15 nurses (60%) had between 15 and 20 items.

Table 53. Number of items of equipment available to nurses

Number of items of equipment	Total (N=25)	
	Abs.	%
5 or less	0	0.0
6–10	0	0.0
11–15	10	40.0
16–20	15	60.0
TOTAL	25	100
Average number of items per nurse (from a list of 20 items)	16.1	

6.5.2 Service delivery

Table 54 shows a list of professional activities and to what extent these are provided by the nurses. Out of the 13 activities, 7 are reported by all nurses to be standard practice. Among these are educational activities, vaccinations, tobacco cessation and parenteral treatment. Most nurses additionally report to be frequently involved in screening and assessment.

Table 54. Involvement of nurses in activities for specific groups

Nurse is often or sometimes involved in:	Total (N=25)		
	N	%	Valid N
Patient assessment for nursing home	22	88.0	25
Suturing of wounds	18	72.0	25
Screening / monitoring of overweight patients and obesity	22	88.0	25
Screening / monitoring of patients with hypertension	24	96.0	25
Educating patients to use inhalers	25	100	25
Monitoring tobacco cessation	25	100	25
Screening on problematic alcohol / drug consumption	22	88.0	25
Geriatric / cognitive assessment	24	96.0	25
Parenteral treatments	25	100	25
Routine surveillance of young children (including vaccination)	25	100	25
Surveillance of frail elderly people	25	100	25
Routine flu vaccination	25	100	25
Health education in schools	25	100	25
TOTAL coverage for 'Specific groups' (range 0–100%)		94.5	

7. STRUCTURED SUMMARY

The overview of the results presented in Table 55 has been structured according to the health system functions, selected dimensions and proxy indicators, as outlined in the Primary Care Evaluation Scheme in Chapter 1.

Table 55. Summary of findings from the PCET in the Republic of Moldova

Selected dimension	Selected information items		Background of findings	Source
Stewardship				
Policy development	PHC as priority area	• specific legislation developed concerning PHC: yes • department at the MoH exclusively dealing with PHC: no	The introduction of a mandatory health insurance system, in 2004, placed PHC (including gatekeeping FDs) in a more central position in the health care system. Other highlights: in 2007 the role of PHC was further strengthened, including PHC-based health promotion and disease prevention. The 2010 PHC Development strategy for the years until 2013 had a focus on further improvement of access, quality and cost-effectiveness and health promotion and disease prevention in PHC. Also in 2010, regulation meant that people could register with a PHC institution of their choice. In 2012 performance criteria and indicators were introduced for PHC providers. Within the MoH the Directorate of Integrated Service Management is in charge of PHC	National level questionnaire
	Regional variation	Regional differences in the organization of PHC exist between the capital and other parts of the country	In Chişinău, PHC is organized in larger units and is more oriented towards specialist care than elsewhere. Since 2008, PHC is managed at a district level. Differences between districts may develop in the future.	National level questionnaire
Conditions for the care process	Recent PHC policy development	Plans for the near future include: • providing financial and institutional autonomy to PHC centres; • providing financial and institutional autonomy to Chişinău FM Centre; • de-concentration of PHC to offer services closer to people; • generating and providing necessary resources for PHC by performance-based incentives; • strengthening the technical and material basis of PHC; • increased focus on disease prevention, health promotion and preventive examination; and • monitoring PHC services.	Current plans and policy intentions on PHC result from the completion of the governmental programme 'Primary Health Care reform during 2011–2014'	National level questionnaire

Selected dimension	Selected information items		Background of findings	Source
Conditions for responsiveness	Involvement of professionals and patients in policy process	Professionals: No structured role in the policy process was reported. Patient organizations: No structured role in the policy process was reported.	The Association of FDs organizes most FDs in the country. It does not participate in contract negotiations but rather has an educational function. Patient associations lobby for the protection of the right to health care and represent patients at Courts and in front of authorities.	National level questionnaire
	Patient rights	Patient rights are protected by: • the Law on patients' rights and responsibilities of 27.10.2005 Complaint procedure: • PHC centre must comply to a general procedure on complaints as set by the Law on Petitions (1994)	Among other things this Law stipulates details on: free medical care as indicated by law; respectful attitude of providers; security, integrity and discretion; second opinion; medical insurance (compulsory and voluntary); information; care corresponding to proper health and hygienic norms; voluntary consent to or refusal of medical interventions; information on the results of complaints; human terminal care. The Law specifies how petitions of citizens need to be dealt with and sets maximum terms for response.	National level questionnaire
Financing				
Incentives for providers		Employment status of FDs: 100% employed	FDs' wages are calculated on the basis of the level of qualification, work experience and bonuses for the quantity and quality of their work.	National level questionnaire; FD survey
Financial access for patients		• co-payments apply to prescribed drugs • 95% of patients reported co-payments for drugs prescribed in PHC • 29% of patients reported payments for a visit to a medical specialist after FD referral • 30% of patients reported to have abstained from a doctor visit for financial reasons	Despite the existence of co-payments, the benefit package of health services is considered to be comprehensive.	National level questionnaire; Patient survey
Resource generation				
Professional development	Workforce	• 17% of all active physicians in the Republic of Moldova are working in PHC • reported average list of urban physicians: 1619 patients • reported average list of rural physicians: 2051 patients	On average, this is equal to 1 FD per 1920 patients. The list size reported by both urban and rural FDs is above the national norm of 1500 patients.	National level questionnaire; FD survey

Selected dimension	Selected information items		Background of findings	Source
	Staff shortages	FDs reported staff shortages: • among FDs: 45% • among PHC nurses: 22%	At the national level, shortages of FDs and PHC nurses were reported. It should be noted that the distribution of FDs and PHC nurses in the country is unequal. FDs are relatively scarce in the Southern Region.	National level questionnaire; FD survey
	Quality improvement	In general, PHC quality maintenance mechanisms are: • internal control within practices; • practice inspection by supervisors, health authorities and health insurers; and • obligatory periodic tests of professional knowledge and skills of FDs and nurses. FDs' number of hours per month spent on: • professional reading: around 23 hrs. • training/courses: 7.5 hrs. FDs reporting that CME topics fit (reasonably) well with their needs: 98% PHC nurses' number of hours per month spent on: • professional reading: around 20 hrs. • training/courses: 6.7 hrs.	No data on referrals and drug prescriptions by FDs are available. Criteria used for QA are related to access (visit frequency to FDs); efficiency (related to specific services) and patient satisfaction. Formal requirements exist for the 5-yearly recertification (including CME credits and examination). More performance-based elements in FD wages should promote quality of care.	National level questionnaire; FD survey; Nurses survey
	Human-resources planning	Supply of FDs is below national norm (which is 1500 patients per FD). FDs are unevenly distributed. Population per FD: • Southern Region: 2500 • Central Region: 2275 • Northern Region: 1900 • Chișinău: 1450 Proportion of medical graduates choosing to enrol in FM is 17%.	45% of FDs reported shortages. The number of graduates in FM is continuously decreasing: 2009: 66 2010: 45 2011: 30	National level questionnaire; FD survey
	Professional organization	FM has not been recognized as a speciality. Postgraduate programme in FM (3 yrs.) is offered at the State University of Medicine and Pharmacy, "Nicolae Testemitanu". Number of professors in FM: 2	The position of FM is still weak. It has not been included in the nomenclature of scientific specialities in the Republic of Moldova.	National level questionnaire

Selected dimension	Selected information items		Background of findings	Source
Medical equipment		Computer available: • 81% of FDs • 20% of PHC nurses Medical equipment available: • FDs: 25 items (from a list of 30) • Nurses: 16 items (from a list of 20) Laboratory facilities available: • Within practice: 87% • Outside practice: 7% • None/insufficient : 6% X-ray facilities available: • Within practice: 59% • Outside practice: 1% • None/insufficient : 40%	The most frequently mentioned use of computers was for searching information and booking appointments; rarely for keeping medical records. X-ray facilities are not available in almost all rural PHC facilities (patients need to be referred to district level).	FD survey; Nurses survey
		Patients finding FD equipment sufficient: 43%	Most patients are dissatisfied with their FD's medical equipment.	Patient survey
Delivery of care				
- Accessibility				
Geographical access		Patients travelling up to 20 minutes to FD practice: 48%	Only few patients travel more than 40 minutes to their FD-practice and pharmacist. Hospital and dentists were farther away from home; almost one-third travel more than 40 minutes.	Patient Survey
Organizational access	Practice population	Reported number of patients per FD: • Urban: 1619 • Rural: 2051	Rural practices are considerably larger than urban practices	FD survey
	Workload	FDs: • Consultations in PHC centre per day: 27 • Home visits per week: 12 • Working hours per week: 44 PHC nurses: • Patient visits in PHC centre per day: 17 • Home visits per week: 17 • Working hours per week: 42	Differences in workload between urban and rural FDs are small. PHC nurses showed strong differences around averages related to workload	FD survey Nurses survey

Selected dimension	Selected information items		Background of findings	Source
	Patients' access and availability of services	• Reported visiting frequency during previous 12 months: » to their FD: 7.8 visits » to PHC nurse: 5.6	Annual visit frequencies only marginally differed between urban and rural areas.	Patient survey
		• Average length of an FD patient consultation reported by patients: 19.2 minutes		Patient survey
		• Reporting to offer same day consultation: » FDs: 99% » Nurses:100%		FD survey; Nurses survey
		• Patients reporting same day FD consultations possible if demanded: 65%	Patients are less positive about the possibility of same day visits than FDs.	Patient survey
		• Offering evening opening at least once per week: » FDs: 55% » Nurses: 0%		FD survey; Nurses survey
		• Patients reporting evening opening at the FD available at least once per week:17%	Nevertheless, 81% of patients reported to be satisfied with current FD opening hours.	Patient survey
- Coordination				
Cohesion	Practice management	FDs type of practice: • solo practice: urban: 1%; rural 37% • group practice: urban 1%; rural: 61% • with medical specialists in the same building: urban: 98%; rural: 2%		FD survey
	Collaboration	FDs reporting they have regular face-to-face meetings with: • other FDs: 100% • PHC nurse: 95% • nurses for perinatal care: 83% • pharmacists:70% • social assistant: 84% • palliative care nurse: 73%	Many FDs are working in an interdisciplinary network	FD survey
		Nurses reporting to have regular face-to-face meetings with: • FDs: 100% • other PHC nurses: 100% • nurses for perinatal care: 64% • social worker: 92%		Nurses survey

Selected dimension	Selected information items		Background of findings	Source
Coordination with other care levels	Referral system	Most (74%) of patients indicate visiting their FD with a new health problem before seeking specialist care. Reported referral rate (% of all office and home care contacts): • rural FDs: 20.5% • urban FDs: 27%	Most referrals were reportedly made to gynaecologists, internists, ophthalmologists and neurologists.	Patient survey FD survey
	Collaboration with secondary level	FDs consulting/asking advice from: • paediatricians: 63% • internists: 60% • gynaecologists: 85% • surgeons: 72% • neurologists: 87% • dermatologists: 71% PHC nurses consulting/asking advice from: • paediatricians: 100% • internists: 96% • gynaecologists: 100% • surgeons: 92% • neurologists: 88% • dermatologists: 80% • ophthalmologists: 92%		FD survey Nurses survey
- Continuity				
Informational continuity		Reported medical records being routinely kept for all patient contacts: • FDs: 64% • Nurses: 76% FDs reporting routine use of referral letters: 64%	Computers are rarely used for keeping medical records.	FD survey; Nurses survey
Longitudinal continuity		Patients reporting having been with their FD for more than 3 years: 85% Patients reporting seeing the same doctor each visit: 91%	This indicates favourable conditions for a continued doctor-patient relationship.	Patient survey
Interpersonal continuity		• Patients reporting their FD knows their personal situation: 58% • Patients reporting FD gives clear explanations: 79% • Patients indicating their FD would deal with personal problems and worries as well: 39%		Patient survey

Selected dimension	Selected information items		Background of findings	Source
- Comprehensiveness				
Practice conditions	Convenience	Patients reporting the FD practice was accessible for disabled people and people in wheelchairs: 72% Patients reporting the waiting room was convenient: 66%		Patient survey
	Information material	FDs reported on the information in the waiting room. Most available: • cardiovascular disease risks: 99% • healthy diet: 99% • vaccinations: 99% • sexually transmitted diseases: 98% • contraception: 97% Least available: • social services: 73% • self-treatment: 64%		FD survey
Services delivery	Population groups served	Consolidated scores for: • FD as doctor of first contact (based on 18 items; range of score 1–4): 3.0	Only small differences exist between FDs in urban and rural PHC centres. Most FDs are not the first point of contact for patients with social, relational and sexual problems.	FD survey
	FD involvement in treatment of diseases	Consolidated scores for: • involvement of FD in the treatment of 19 diseases (based on 18 items; range of score 1–4): 3.1	Only minor differences exist between FDs in urban and rural PHC centres.	FD survey
	FD provision of preventive and medical technical procedures	Consolidated score for: • provision of medical procedures and prevention by FDs: (based on 16 items; range of score 1–4): 1.3 • Coverage of public health activities by FDs (based on 8 items = 100%): 100% • Patients' assessment of involvement of FD in promoting: » healthy eating: 83% » physical exercise: 78% » modest alcohol use: 70% » stop smoking: 66%	The role of FDs in medical procedures is extremely limited.	FD survey Patient survey
	PHC nurses providing services for specific groups	Involvement of PHC nurses in 13 specific services: 95%		Nurses survey
	Mother/ child and reproductive health care	• FDs providing routine antenatal care: 100% • FDs generally providing family planning and contraception: 100%		FD survey
Community orientation		Reporting regular meetings with local authorities: • FDs: 78% • PHC nurses: 52%		FD survey; Nurses survey

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ANNEX 1

Tables A1–A3 belonging to Chapter 4

The three tables in this annex provide the detailed scores at the items level on three major dimensions of the service profile of FDs, as presented in Chapter 4. These dimensions are: the role of FDs in the first contact with health problems of their patients (Table A1); the involvement of FDs in treatment and follow up of (chronic) diseases (Tables A2); and the involvement of FDs in the provision of medical-technical procedures and preventive services (Table A3).

Table A1. FDs' role in the first contact with patients' health problems, by level of urbanization

FD estimated to be the first contact in case of:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%*)	Valid N	%*)	Valid N	%*)	Valid N
Child with rash	86.2 *(11.0)*	145	98.1 *(1.9)*	105	91.2 *(7.2)*	250
Child with severe cough	100 *(0.0)*	145	97.1 *(2.9)*	105	98.8 *(1.2)*	250
Child aged 7 with enuresis	86.9 *(9.0)*	145	89.5 *(6.7)*	105	88.0 *(8.0)*	250
Child aged 8 with hearing problem	86.9 *(8.3)*	145	81.0 *(14.3)*	105	84.4 *(10.8)*	250
Woman aged 18 asking for oral contraception	80.0 *(19.3)*	145	76.2 *(19.0)*	105	78.4 *(19.2)*	250
Woman aged 20 for confirmation of pregnancy	94.5 *(5.5)*	145	91.4 *(7.6)*	105	93.2 *(6.4)*	250
Woman aged 35 with irregular menstruation	80.0 *(18.6)*	145	86.7 *(13.3)*	105	82.8 *(16.4)*	250
Woman aged 50 with lump in the breast	92.4 *(7.6)*	145	98.1 *(1.9)*	105	94.8 *(5.2)*	250
Woman aged 60 with polyuria	86.9 *(8.3)*	145	90.5 *(9.5)*	105	88.4 *(8.8)*	250
Anxious man aged 45	68.3 *(23.4)*	145	81.9 *(15.2)*	105	74.0 *(20.0)*	250
Man aged 28 with a first convulsion	40.7 *(35.2)*	145	45.7 *(42.9)*	105	42.8 *(38.4)*	250
Physically abused child	9.7 *(22.8)*	145	11.4 *(25.7)*	105	10.4 *(24.0)*	250
Couple with relationship problems	11.7 *(38.6)*	145	9.5 *(43.8)*	105	10.8 *(40.8)*	250
Man with suicidal inclination	12.4 *(35.2)*	145	10.5 *(48.6)*	105	11.6 *(40.8)*	250
Woman aged 35 with psychosocial probl. related to work	23.4 *(66.9)*	145	34.3 *(45.7)*	105	28.0 *(58.0)*	250
Man aged 32 with sexual problems	21.4 *(51.0)*	145	34.3 *(42.9)*	105	26.8 *(47.6)*	250
Man aged 52 with alcohol addiction problems	59.3 *(33.8)*	145	69.5 *(25.7)*	105	63.6 *(30.4)*	250
Man with symptoms of TB	91.7 *(7.6)*	145	94.3 *(2.9)*	105	92.8 *(5.6)*	250
TOTAL SCORE 'First contact')**	**2.90**		**3.05**		**2.96**	

*) Note: percentages are sum of the answers '(almost) always' and 'usually'; percentages in brackets refer to the answers 'occasionally' being the doctor of first contact.
**) For the calculation of the score, answers have been weighted as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

Table A2. FDs' involvement in treatment and follow up of diseases, by level of urbanization

FDs' involvement in treatment of:	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%*)	Valid N	%*)	Valid N	%*)	Valid N
Hyperthyroidism	41.4 *(49.7)*	145	33.3 *(51.4)*	105	38.0 *(50.4)*	250
Chronic bronchitis	99.3 *(0.7)*	145	100 *(0.0)*	105	99.6 *(0.4)*	250
Hordeolum (stye)	75.9 *(23.4)*	145	81.9 *(15,2)*	105	78.4 *(20.0)*	250
Peptic ulcer	97.2 *(2.8)*	145	89.5 *(8.6)*	105	94.0 *(5.2)*	250
Herniated disc lesion	53.1 *(45.5)*	145	42.9 *(49.5)*	105	48.8 *(47.2)*	250
Acute cerebrovascular accident	47.6 *(17.9)*	145	45.7 *(27.6)*	105	46.8 *(22.0)*	250
Congestive heart failure	57.2 *(35.9)*	145	56.2 *(37.1)*	105	56.8 *(36.4)*	250
Pneumonia	97.9 *(1.4)*	145	95.2 *(4.8)*	105	96.8 *(2.8)*	250
Peritonsilar abscess	66.2 *(31.7)*	145	64.8 *(27.6)*	105	65.6 *(30.0)*	250
Ulcerative colitis	84.1 *(12.4)*	145	80.0 *(14.3)*	105	82.4 *(13.2)*	250
Salpingitis	46.9 *(47.6)*	145	47.6 *(42.9)*	105	47.2 *(45.6)*	250
Concussion of brain	51.0 *(44.8)*	145	60.0 *(28.6)*	105	54.8 *(38.0)*	250
Parkinson's disease	44.8 *(41.4)*	145	41.0 *(35.2)*	105	43.2 *(38.8)*	250
Uncomplicated diabetes (type II)	97.2 *(2.8)*	145	93.3 *(4.8)*	105	95.6 *(3.6)*	250
Rheumatoid arthritis	81.4 *(17.9)*	145	80.0 *(20.0)*	105	80.8 *(18.8)*	250
Depression	66.2 *(33.8)*	145	78.1 *(21.0)*	105	71.2 *(28.4)*	250
Myocardial infarction	76.6 *(22.1)*	145	84.8 *(8.6)*	105	80.0 *(16.4)*	250
Follow up TB care	97.9 *(2.1)*	145	95.2 *(3.8)*	105	96.8 *(2.8)*	250
TOTAL SCORE 'Treatment tasks')**	**3.13**		**3.11**		**3.12**	

*) Note: percentages are sum of the answers '(almost) always' and 'usually'; percentages in brackets refer to the answers 'occasionally' being involved in this treatment.
**) For the calculation of the score, answers have been weighted as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

Table A3. Involvement of FDs in the provision of medical-technical procedures and preventive services, by level of urbanization

Procedure usually provided by FD or practice staff	Urban (N=145)		Rural (N=105)		Total (N=250)	
	%*)	Valid N	%*)	Valid N	%*)	Valid N
Wedge resection of ingrown toenail	0.7	145	21.0	105	9.2	250
Removal of sebaceous cyst from hairy scalp	0.0	145	2.9	105	1.2	250
Wound suturing	0.0	145	24.8	105	10.4	250
Excision of warts	0.0	145	1.0	105	0.4	250
IUD insertion	0.0	145	1.0	105	0.4	250
Removal of rusty spot from cornea	0.0	145	1.0	105	0.4	250
Fundoscopy	28.3	145	16.2	105	23.2	250
Joint injection	0.0	145	1.0	105	0.4	250
Maxillary (sinus) puncture	0.0	145	1.0	105	0.4	250
Myringotomy of eardrum (paracentesis)	0.0	145	1.0	105	0.4	250
Applying plaster cast	0.0	145	4.8	105	2.0	250
Strapping an ankle	2.8	145	33.3	105	15.6	250
Cryotherapy (warts)	0.0	145	0.0	105	0.0	250
Setting up intravenous infusion	100	145	99.0	105	99.6	250
Immunizations for flu or tetanus	97.9	145	98.1	105	98.0	250
Allergy vaccinations	63.4	146	68.6	105	65.6	250
TOTAL SCORE 'Medical procedures /prevention' ** (range 1–3)	**1.23**		**1.31**		**1.26**	

*) Note: percentages are sum of the answers 'Usually done by myself' and 'Usually done by practice staff'.
**) For the calculation of the score, answers have been weighted as follows: Usually done by medical specialist = 1; Usually done by practice staff = 2; Usually done by myself = 3.

ANNEX 2

Glossary of terms relevant to PHC

Accessibility: the patients' ability to receive care where and when it is needed, given possible physical, financial or psychological barriers *(11)*.

Comprehensiveness: the extent to which services provided comprise curative, rehabilitative and supportive care, as well as health promotion and disease prevention *(17)*.

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

Continuity: the ability of relevant services to offer interventions that are either coherent over the short term both within and among teams (cross-sectional continuity), or are an uninterrupted series of visits over the long term (longitudinal continuity) *(11)*.

Coordination: a service characteristic resulting in coherent treatment plans for individual patients. Each plan should have clear goals and necessary and effective interventions, no more and no less. Cross-sectional coordination means the coordination of information and services within an episode of care. Longitudinal coordination means the interlinkages among staff members and agencies over a longer period of treatment *(11)*.

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 *(9)*.

Family Medicine teams: FM teams can vary from country to country and in size. The core team usually encompasses the general practitioner and a nurse, but can consist of a multidisciplinary team of up to 30 professionals, including community nurses, midwifes, feldshers (medical attendants), dentists, physiotherapists, social workers, psychiatrists, speech therapists, dieticians/diabetologists, pharmacists, administrative staff and managers, etc. *(21)*. In 2003, WHO used the description that a PC team is a group of "fellow professionals with complementary contributions to make in patient care. This would be part of a broader social trend away from deference and hierarchy and towards mutual respect and shared responsibility and cooperation," *(22)*. By definition, FM teams are patient-centred and therefore their composition and organizational model cannot but change over time: it is a flexible construct.

General practice: General practice is a term now often used loosely to cover the general practitioner and other personnel as well, and is therefore synonymous with PC and FM. Originally, it was meant to describe the concept and model around the most significant single player in PC: the general practitioner or PC physician, while FM originally encompassed more the notion of a team approach. Whenever the notion of a solo practitioner (general practice) versus team-based approach (FM) is relevant, the distinction should be made. According to Atun, the specificity of the general practitioner is that he/she is "the only clinician who operates in the nine levels of care: prevention, pre-symptomatic detection of disease, early diagnosis, diagnosis of established disease, management

of disease, management of disease complications, rehabilitation, palliative care and counselling" *(23).*

Primary health care (PHC): This term should be used when it is intended to refer to the broad concept elaborated on in the Declaration of Alma Ata (1978) with its principles of equity, participation, intersectoral action and appropriate technology and its central place in the health system *(24).*

Primary care (PC): is more than just the level of care or the gate-keeping – it is a key process in the health system. It is the first contact, accessible, continued, comprehensive and co-ordinated care: first contact care is accessible at the time of need; ongoing care focuses on the long-term health of a person, rather than the short duration of the disease; comprehensive care is a range of services appropriate to the common problems in the respective population and coordination is the role by which PC acts to coordinate other specialists that the patient may need *(23).* PC is a subset of PHC.

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

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

Responsiveness: is 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 non-personal services (not a measure of how the system responds to health needs, which shows up in health outcomes). Enhancing responsiveness to the expectations of the population, includes: (a) respect for people (including dignity, confidentiality [of information] and autonomy of individuals and families to decide about their own health); and (b) client orientation (including prompt attention, access to social support networks during care, providing quality of basic amenities and choice of provider) *(1).*

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

SUMMARY

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

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

This report evaluates primary health care developments in the Republic of Moldova based on a methodology that characterizes a good primary health care system as comprehensive, accessible, coordinated and integrated, and one that ensures continuity. The methodology recognizes that in order to improve the overall health system, all health system functions outlined in the WHO Framework need to be taken into consideration equally: the financing, the service delivery, and the human resources and other resources, such as appropriate facilities, equipment and drugs. Finally, all necessary legal frameworks and regulations need to be in place and the system must be steered by the right "leader". Therefore, for interested policy-makers and stakeholders, this report offers a structured overview of the strengths and weaknesses of the Republic of Moldova's organization of primary health care services, and includes the voice of the professionals and patients concerned.

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